

Men's 400m Split Times - by time

LAST UPDATE: 5-Mar-25

Runner	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
van Niekerc, Wayde (RSA) (1992)																				
FINAL - 2016 Olympic Games (Rio de Janeiro, BRA)																				
date	26-Aug-16	time	6.01	10.77	16.63	21.22	26.42	31.06	36.77	43.03	43.03	8 / 1								
reaction time	0.181	interval		4.76	4.86	4.95	5.13	5.35	5.71	6.26	WR	# of strides	10.77	9.81	10.48	11.97	20.58	22.45	1.87	
		velocity	8.32	10.50	10.29	10.10	9.75	9.35	8.76	7.99	9.30		163.0	9.29	10.19	9.54	8.35	9.72	8.91	
Johnson, Michael (USA) (1967)																				
FINAL - 1999 IAAF World Championships (Sevilla, ESP)																				
date	26-Aug-99	time	6.14	11.10	16.10	21.22	26.42	31.66	37.18	43.18	43.18	5 / 1								
reaction time	0.150	interval		4.96	5.00	5.12	5.20	5.24	5.52	6.00	WR	# of strides	11.10	10.12	10.44	11.52	21.22	21.96	0.74	
		velocity	8.14	10.08	10.00	9.77	9.62	9.54	9.06	8.33	9.26		180.5	9.01	9.88	9.58	8.68	9.43	9.11	
Reynolds, Harry (Butch) (USA) (1964)																				
FINAL - 1988 Weltklasse (Zurich, SUI)																				
date	17-Aug-88	time	6.3	11.3	16.3	21.4	26.7	32.1	37.6	43.3	43.29	/ 1								
reaction time		interval		5.00	5.00	5.10	5.30	5.40	5.50	5.70	WR	# of strides	11.30	10.10	10.70	11.20	21.40	21.90	0.50	
		velocity	7.94	4.42	3.07	2.34	1.87	1.56	1.33	1.15	9.24		159.7	8.85	9.90	9.35	8.93	9.35	9.13	
Johnson, Michael (USA) (1967)																				
FINAL - 1995 IAAF World Championships (Göteborg, SWE)																				
date	09-Aug-95	time		11.13		21.26		31.55		43.39	43.39	5 / 1								
reaction time		interval				10.13		10.29		11.84	CR / PB	# of strides	11.13	10.13	10.29	11.84	21.26	22.13	0.87	
		velocity		8.98		9.87		9.72		8.45	9.22		182.0	8.98	9.87	9.72	8.45	9.41	9.04	
Hall, Quincy (USA) (1998)																				
FINAL - 2024 Olympic Games (Paris, FRA)																				
date	07-Aug-24	time	6.16	11.01	15.89	21.00	26.34	31.81	37.46	43.40	43.40	8 / 1								
reaction time	0.168	interval		4.85	4.88	5.11	5.34	5.47	5.65	5.94	PB	# of strides	11.01	9.99	10.81	11.59	21.00	22.40	1.40	
		velocity	8.12	10.31	10.25	9.78	9.36	9.14	8.85	8.42	9.22		157.7	9.08	10.01	9.25	8.63	9.52	8.93	
Johnson, Michael (USA) (1967)																				
FINAL - 1996 USA Olympic Trials (Atlanta, GA)																				
date	19-Jun-96	time		11.02		21.27		31.64		37.34	43.44	43.44	5 / 1							
reaction time		interval				10.25		10.37		5.70	6.10		# of strides	11.02	10.25	10.37	11.80	21.27	22.17	0.90
		velocity		9.07		9.76		9.64		8.77	8.20		9.21	9.07	9.76	9.64	8.47	9.40	9.02	
Hudson-Smith, Matthew (GBR) (1994)																				
FINAL - 2024 Olympic Games (Paris, FRA)																				
date	07-Aug-24	time	6.01	10.81	15.65	20.62	25.86	31.35	37.19	43.44	43.44	6 / 2								
reaction time	0.149	interval		4.80	4.84	4.97	5.24	5.49	5.84	6.25	AR	# of strides	10.81	9.81	10.73	12.09	20.62	22.82	2.20	
		velocity	8.32	10.42	10.33	10.06	9.54	9.11	8.56	8.00	9.21		161.0	9.25	10.19	9.32	8.27	9.70	8.76	
Wariner, Jeremy (USA) (1984)																				
FINAL - 2007 IAAF World Championships (Osaka, JPN)																				
date	31-Aug-07	time	6.01	10.80	15.77	20.97	26.27	31.60	37.24	43.45	43.45	6 / 1								
reaction time	0.182	interval		4.79	4.97	5.20	5.30	5.33	5.64	6.21	PB	# of strides	10.80	10.17	10.63	11.85	20.97	22.48	1.51	
		velocity	8.32	10.44	10.06	9.62	9.43	9.38	8.87	8.05	9.21		168.7	9.26	9.83	9.41	8.44	9.54	8.90	
van Niekerc, Wayde (RSA) (1992)																				
FINAL - 2015 IAAF World Championships (Beijing, CHN)																				
date	26-Aug-15	time	6.02	10.73	15.65	20.76	25.95	31.36	37.17	43.48	43.48	6 / 1								
reaction time	0.156	interval		4.71	4.92	5.11	5.19	5.41	5.81	6.31	AR	# of strides	10.73	10.03	10.60	12.12	20.76	22.72	1.96	
		velocity	8.31	10.62	10.16	9.78	9.63	9.24	8.61	7.92	9.20		162.5	9.32	9.97	9.43	8.25	9.63	8.80	
Gardiner, Steven (BAH) (1995)																				
FINAL - 2019 IAAF World Championships (Doha, QAT)																				
date	04-Oct-19	time	6.22	11.00	15.92	20.96	26.15	31.59	37.32	43.48	43.48	4 / 1								
reaction time	0.164	interval		4.78	4.92	5.04	5.19	5.44	5.73	6.16	NR PB	# of strides	11.00	9.96	10.63	11.89	20.96	22.52	1.56	
		velocity	8.04	10.46	10.16	9.92	9.63	9.19	8.73	8.12	9.20		158.5	9.09	10.04	9.41	8.41	9.54	8.88	
Johnson, Michael (USA) (1967)																				
FINAL - 1996 Olympic Games (Atlanta, GA)																				
date	29-Jul-96	time				21.22		31.80		43.49	43.49	4 / 1								
reaction time	0.254	interval						10.58		11.69	OR	# of strides		21.22	10.58	11.69	21.22	22.27	1.05	
		velocity				9.43		9.45		8.55	9.20		180.7	9.43	9.45	8.55	9.43	8.98		
Watts, Quincy (USA) (1970)																				
FINAL - 1992 Olympic Games (Barcelona, ESP)																				
date	05-Aug-92	time				20.8		31.4		43.50	43.50	4 / 1								
reaction time		interval						10.60		12.1	OR	# of strides		20.80	10.60	12.10	20.80	22.70	1.90	
		velocity				9.62		9.43		8.26	9.20		170.2	9.62	9.43	8.26	9.62	8.81		
Norman, Michael (USA) (1997)																				
FINAL - 2022 Prefontaine Classic (Eugene, OR)																				
date	28-May-22	time	6.02	11.00	16.00	21.33	26.67	32.09	37.67	43.60	43.60	4 / 1								
reaction time	0.130	interval		4.98	5.00	5.33	5.34	5.42	5.58	5.93		# of strides	11.00	10.33	10.76	11.51	21.33	22.27	0.94	
		velocity	8.31	10.04	10.00	9.38	9.36	9.23	8.96	8.43	9.17		172.5	9.09	9.68	9.29	8.69	9.38	8.98	
van Niekerc, Wayde (RSA) (1992)																				
FINAL - 2017 Athletissima (Lausanne, SUI)																				
date	06-Jul-17	time		10.9		20.9		31.7		43.62	43.62	5 / 1								
reaction time		interval				10.00		10.80		11.92		# of strides	10.90	10.00	10.80	11.92	20.90	22.72	1.82	
		velocity		9.17		10.00		9.26		8.39	9.17		162.1	9.17	10.00	9.26	8.39	9.57	8.80	
Johnson, Michael (USA) (1967)																				

WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation

velocity	8.31	10.71	10.55	9.94	9.33	8.93	8.47	7.74	9.14	172.5	9.35	10.24	9.12	8.09	9.78	8.58
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		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
James, Kirani (GRN) (1992)																			
Semi-Final 2 - 2024 Olympic Games (Paris, FRA)																			
date	06-Aug-24	time	6.00	10.84	15.77	20.84	26.13	31.79	37.67	43.78	43.78	8 / 1							
reaction time	0.147	interval	4.84	4.93	5.07	5.29	5.66	5.88	6.11			# of strides	10.84	10.00	10.95	11.99	20.84	22.94	2.10
		velocity	8.33	10.33	10.14	9.86	9.45	8.83	8.50	8.18	9.14	161.7	9.23	10.00	9.13	8.34	9.60	8.72	
Hall, Quincy (USA) (1998)																			
FINAL - 2024 Herculis Meeting International d'Athlétisme (Monaco, MON)																			
date	12-Jul-24	time	6.26	11.14	16.09	21.19	26.59	32.15	37.83	43.80	43.80	5 / 1							
reaction time	0.185	interval	4.88	4.95	5.10	5.40	5.56	5.68	5.97			# of strides	11.14	10.05	10.96	11.65	21.19	22.61	1.42
		velocity	7.99	10.25	10.10	9.80	9.26	8.99	8.80	8.38	9.13	158.0	8.98	9.95	9.12	8.58	9.44	8.85	
Samukonga, Muzala (ZAM) (2002)																			
Semi-Final 2 - 2024 Olympic Games (Paris, FRA)																			
date	06-Aug-24	time	6.06	10.77	15.72	20.88	26.26	31.91	37.76	43.81	43.81	5 / 2							
reaction time	0.162	interval	4.71	4.95	5.16	5.38	5.65	5.85	6.05			# of strides	10.77	10.11	11.03	11.90	20.88	22.93	2.05
		velocity	8.25	10.62	10.10	9.69	9.29	8.85	8.55	8.26	9.13	177.0	9.29	9.89	9.07	8.40	9.58	8.72	
Johnson, Michael (USA) (1967)																			
FINAL - 2000 Olympic Games (Sydney, AUS)																			
date	25-Sep-00	time		11.4		21.6		32.1		43.8	43.84	6 / 1							
reaction time		interval				10.20		10.50		11.70		# of strides	11.40	10.20	10.50	11.70	21.60	22.20	0.60
		velocity		8.77		9.80		9.52		8.55	9.12	8.77	9.80	9.52	8.55	9.26	9.01		
Makwala, Isaac (BOT) (1986)																			
FINAL - 2017 Herculis Meeting International d'Athlétisme (Monaco, MON)																			
date	21-Jul-17	time		11.02		21.29		31.95		43.84	43.84	6 / 2							
reaction time		interval				10.27		10.66		11.89		# of strides	11.02	10.27	10.66	11.89	21.29	22.55	1.26
		velocity		9.07		9.74		9.38		8.41	9.12	9.07	9.74	9.38	8.41	9.39	8.87		
Merritt, LaShawn (USA) (1986)																			
FINAL - 2016 Olympic Games (Rio de Janeiro, BRA)																			
date	14-Aug-16	time	6.11	10.82	15.57	20.47	25.69	31.23	37.18	43.85	43.85	5 / 3							
reaction time	0.204	interval	4.71	4.75	4.90	5.22	5.54	5.95	6.67			# of strides	10.82	9.65	10.76	12.62	20.47	23.38	2.91
		velocity	8.18	10.62	10.53	10.20	9.58	9.03	8.40	7.50	9.12	171.9	9.24	10.36	9.29	7.92	9.77	8.55	
Gardiner, Steven (BAH) (1995)																			
FINAL - 2020 Olympic Games (Tokyo, JPN)																			
date	05-Aug-21	time	6.33	11.15	15.96	21.00	26.30	31.83	37.62	43.85	43.85	7 / 1							
reaction time	0.179	interval	4.82	4.81	5.04	5.30	5.53	5.79	6.23			# of strides	11.15	9.85	10.83	12.02	21.00	22.85	1.85
		velocity	7.90	10.37	10.40	9.92	9.43	9.04	8.64	8.03	9.12	157.0	8.97	10.15	9.23	8.32	9.52	8.75	
Evans, Lee (USA) (1947)																			
FINAL - 1968 Olympic Games (Mexico City, MEX) (Altitude)																			
date	18-Oct-68	time		10.7		21.1		32.2		43.8	43.86	6 / 1							
reaction time		interval				10.40		11.10		11.60		# of strides	10.70	10.40	11.10	11.60	21.10	22.70	1.60
		velocity		9.35		9.62		9.01		8.62	9.12	168.0	9.35	9.62	9.01	8.62	9.48	8.81	
Lewis, Steve (USA) (1969)																			
FINAL - 1988 Olympic Games (Seoul, KOR)																			
date	28-Sep-88	time		11.26		21.41		32.13		43.87	43.87	6 / 1							
reaction time	0.181	interval				10.15		10.72		11.74		# of strides	11.26	10.15	10.72	11.74	21.41	22.46	1.05
		velocity		8.88		9.85		9.33		8.52	9.12	8.88	9.85	9.33	8.52	9.34	8.90		
James, Kirani (GRN) (1992)																			
FINAL - 2024 Olympic Games (Paris, FRA)																			
date	07-Aug-24	time	5.96	10.75	15.61	20.63	25.90	31.50	37.46	43.87	43.87	5 / 5							
reaction time	0.147	interval	4.79	4.86	5.02	5.27	5.60	5.96	6.41			# of strides	10.75	9.88	10.87	12.37	20.63	23.24	2.61
		velocity	8.39	10.44	10.29	9.96	9.49	8.93	8.39	7.80	9.12	162.5	9.30	10.12	9.20	8.08	9.69	8.61	
Gardiner, Steven (BAH) (1995)																			
Semi-Final 1 - 2017 IAAF World Championships (London, GBR)																			
date	06-Aug-17	time		10.74		20.59		31.47		37.43	43.70	43.89							
reaction time	0.186	interval				9.85		10.88		5.96	6.27								
		velocity		9.31		10.15		9.19		8.39	7.97	9.11	160.7	9.31	10.15	9.19	8.18	9.71	8.65
Reynolds, Harry (Butch) (USA) (1964)																			
FINAL - 1996 USA Olympic Trials (Atlanta, GA)																			
date	19-Jun-96	time		11.12		21.36		32.12		37.79	43.91	43.91							
reaction time		interval				10.24		10.76		5.67	6.12								
		velocity		8.99		9.77		9.29		8.82	8.17	9.11	8.99	9.77	9.29	8.48	9.36	8.87	1.19
Reynolds, Harry (Butch) (USA) (1964)																			
FINAL - 1988 USA Olympic Trials (Indianapolis, IN)																			
date	20-Jul-88	time		10.6		21.2		32.0		43.93	43.93	6 / 1							
reaction time		interval				10.6		11.9				# of strides	10.60	10.60	10.80	11.93	21.20	22.73	1.53
		velocity		9.43		9.43		9.26		8.38	9.11	9.43	9.43	9.26	8.38	9.43	8.80		
Reynolds, Harry (Butch) (USA) (1964)																			
FINAL - 1988 Olympic Games (Seoul, KOR)																			
date	28-Sep-88	time		11.29		21.68		32.58		43.93	43.93	3 / 2							
reaction time	0.160	interval				10.39		10.90		11.35		# of strides	11.29	10.39	10.90	11.35	21.68	22.25	0.57
		velocity		8.86		9.62		9.17		8.81	9.11	8.86	9.62	9.17	8.81	9.23	8.99		
Wariner, Jeremy (USA) (1984)																			

FINAL - 2006 IAAF World Athletics Final (Stuttgart, GER) (TV Analysis)															Graubner (2009) - http://www.fgs.uni-halle.de				
date	09-Sep-06	time	11.07	21.22	32.24	44.10	44.10	44.10	4 / 2										
reaction time	0.163	interval		10.15	11.02	11.86	AR	# of strides	11.07	10.15	11.02	11.86	21.22	22.88	1.66				
		velocity	9.03	9.85	9.07	8.43	9.07		9.03	9.85	9.07	8.43	9.43	8.74					
Kerley, Fred (USA) (1995)																			
FINAL - 2017 NCAA Championships (Eugene, OR)																			
date	09-Jun-17	time		21.4	32.1	44.1	44.10	4 / 1											
reaction time		interval			10.70	12.00		# of strides			10.70	12.00	21.40	22.70	1.30				
		velocity		9.35	9.35	8.33	9.07	170.2			9.35	8.33	9.35	8.81					
Norwood, Vernon (USA) (1992)																			
FINAL - 2024 London Athletics Meet (London, GBR)																			
date	20-Jul-24	time	6.17	11.09	16.11	21.31	26.67	32.18	37.89	44.10	44.10	4 / 2							
reaction time	0.168	interval		4.92	5.02	5.20	5.36	5.51	5.71	6.21	PB	# of strides	11.09	10.22	10.87	11.92	21.31	22.79	1.48
		velocity	8.10	10.16	9.96	9.62	9.33	9.07	8.76	8.05	9.07		9.02	9.78	9.20	8.39	9.39	8.78	
Norman, Michael (USA) (1997)																			
Heat 2 - 2024 Olympic Games (Paris, FRA)																			
date	04-Aug-24	time	6.11	11.16	16.17	21.37	26.66	32.18	37.97	44.10	44.10	6 / 1							
reaction time	0.161	interval		5.05	5.01	5.20	5.29	5.52	5.79	6.13		# of strides	11.16	10.21	10.81	11.92	21.37	22.73	1.36
		velocity	8.18	9.90	9.98	9.62	9.45	9.06	8.64	8.16	9.07	171.0	8.96	9.79	9.25	8.39	9.36	8.80	
Lewis, Steve (USA) (1969)																			
Semi-Final 2 - 1988 USA Olympic Trials (Indianapolis, IN)																			
date	18-Jul-88	time		20.8				44.11	44.11	44.11	44.11	1 / 1							
reaction time		interval						23.3	WJR	# of strides		20.80	44.11	20.80	23.31	2.51			
		velocity		9.62				8.58	9.07			4.81	2.27	9.62	8.58				
Makwala, Isaac (BOT) (1986)																			
Semi-Final 2 - 2015 IAAF World Championships (Beijing, CHN)																			
date	24-Aug-15	time	5.98	10.79	15.68	20.83	26.19	31.63	37.51	44.11	44.11	9 / 1							
reaction time	0.212	interval		4.81	4.89	5.15	5.36	5.44	5.88	6.60		# of strides	10.79	10.04	10.80	12.48	20.83	23.28	2.45
		velocity	8.36	10.40	10.22	9.71	9.33	9.19	8.50	7.58	9.07	179.0	9.27	9.96	9.26	8.01	9.60	8.59	
Santos, Luguélin (DOM) (1993)																			
FINAL - 2015 IAAF World Championships (Beijing, CHN)																			
date	26-Aug-15	time	6.36	11.23	16.23	21.32	26.56	32.05	37.89	44.11	44.11	7 / 4							
reaction time	0.188	interval		4.87	5.00	5.09	5.24	5.49	5.84	6.22	NR	# of strides	11.23	10.09	10.73	12.06	21.32	22.79	1.47
		velocity	7.86	10.27	10.00	9.82	9.54	9.11	8.56	8.04	9.07	187.2	8.90	9.91	9.32	8.29	9.38	8.78	
Norman, Michael (USA) (1997)																			
FINAL - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL)																			
date	06-Aug-22	time	5.96	10.89	15.92	21.20	26.64	32.23	38.01	44.11	44.11	5 / 1							
reaction time	0.145	interval		4.93	5.03	5.28	5.44	5.59	5.78	6.10		# of strides	10.89	10.31	11.03	11.88	21.20	22.91	1.71
		velocity	8.39	10.14	9.94	9.47	9.19	8.94	8.65	8.20	9.07	172.7	9.18	9.70	9.07	8.42	9.43	8.73	
Johnson, Michael (USA) (1967)																			
FINAL - 1997 IAAF World Championships (Athens, GRE)																			
date	05-Aug-97	time	6.01	10.99	16.19	21.47	26.75	32.15	37.81	43.95	44.12	4 / 1							
reaction time	0.167	interval		4.98	5.20	5.28	5.28	5.40	5.66	6.14		# of strides	10.99	10.48	10.68	11.80	21.47	22.48	1.01
		velocity	8.32	10.04	9.62	9.47	9.47	9.26	8.83	8.14	9.07		9.10	9.54	9.36	8.47	9.32	8.90	
Merritt, LaShawn (USA) (1986)																			
FINAL - 2012 USA Olympic Trials (Eugene, OR)																			
date	24-Jun-12	time		21.8	32.4	44.12	44.12	44.12	6 / 1										
reaction time	0.264	interval			10.60	11.72		# of strides			21.80	10.60	11.72	21.80	22.32	0.52			
		velocity		9.17	9.43	8.53	9.07				4.59	9.43	8.53	9.17	8.96				
Reynolds, Harry (Butch) (USA) (1964)																			
FINAL - 1993 IAAF World Championships (Stuttgart, GER)																			
date	17-Aug-93	time	11.18	21.39	32.22	44.13	44.13	44.13	7 / 2										
reaction time		interval		10.21	10.83	11.91		# of strides	11.18	10.21	10.83	11.91	21.39	22.74	1.35				
		velocity	8.94	9.79	9.23	8.40	9.06		8.94	9.79	9.23	8.40	9.35	8.80					
Gardiner, Steven (BAH) (1995)																			
Semi-Final 2 - 2019 IAAF World Championships (Doha, QAT)																			
date	02-Oct-19	time	6.09	10.98	15.91	21.09	26.40	32.00	37.88	44.13	44.13	6 / 1							
reaction time	0.154	interval		4.89	4.93	5.18	5.31	5.60	5.88	6.25		# of strides	10.98	10.11	10.91	12.13	21.09	23.04	1.95
		velocity	8.21	10.22	10.14	9.65	9.42	8.93	8.50	8.00	9.06	157.5	9.11	9.89	9.17	8.24	9.48	8.68	
Watson, Antonio (JAM) (2001)																			
Semi-Final 1 - 2023 World Athletics Championships (Budapest, HUN)																			
date	22-Aug-23	time	6.16	11.00	15.89	20.97	26.33	31.96	37.87	44.13	44.13	5 / 1							
reaction time	0.158	interval		4.84	4.89	5.08	5.36	5.63	5.91	6.26	PB	# of strides	11.00	9.97	10.99	12.17	20.97	23.16	2.19
		velocity	8.12	10.33	10.22	9.84	9.33	8.88	8.46	7.99	9.06	169.5	9.09	10.03	9.10	8.22	9.54	8.64	
Evans, Lee (USA) (1947)																			
FINAL - 1968 USA Olympic Trials (Echo Summit, CA) (Altitude)																			
date	14-Sep-68	time		21.2				44.0	44.0	44.0	44.0	6 / 1							
reaction time		interval						22.8	WR	# of strides	illegal spikes		21.20	22.80	1.60				
		velocity		9.43				8.77	9.09				9.43	8.77					
Merritt, LaShawn (USA) (1986)																			
FINAL - 2006 IAAF World Athletics Final (Stuttgart, GER) (TV Analysis)																			
date	09-Sep-06	time	11.00	21.25	32.26	44.14	44.14	44.14	6 / 3										
reaction time	0.188	interval		10.25	11.01	11.88		# of strides	11.00	10.25	11.01	11.88	21.25	22.89	1.64				

		velocity	9.09	9.76	9.08	8.42	9.06	9.09	9.76	9.08	8.42	9.41	8.74						
Zambrano, Anthony (COL) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2019 IAAF World Championships (Doha, QAT)																			
<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>																			
date	04-Oct-19	time	6.08	10.98	15.98	21.13	26.54	32.10	37.91	44.15	44.15	8 / 2							
reaction time	0.182	interval	4.90	5.00	5.15	5.41	5.56	5.81	6.24	AR PB	# of strides	10.98	10.15	10.97	12.05	21.13	23.02	1.89	
		velocity	8.22	10.20	10.00	9.71	9.24	8.99	8.61	8.01	9.06	174.7	9.11	9.85	9.12	8.30	9.47	8.69	
Harris, Otis (USA) (1982)																			
FINAL - 2004 Olympic Games (Athens, GRE)																			
<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																			
date	23-Aug-04	time			21.4		32.1		44.2	44.16	5 / 2								
reaction time	0.259	interval					10.7		12.1	PB	# of strides		21.40	10.70	12.10	21.40	22.80	1.40	
		velocity			9.35		9.35		8.26	9.06			4.67	9.35	8.26	9.35	8.77		
James, Kirani (GRN) (1992)																			
Semi-Final 1 - 2015 IAAF World Championships (Beijing, CHN)																			
<i>Yamamoto (2015) - race analysis of 15th World Championships 400m- focusing on men's semis and women's prelims</i>																			
date	24-Aug-15	time	6.18	11.04	16.03	21.21	26.60	32.18	38.00	44.16	7 / 1								
reaction time	0.143	interval	4.86	4.99	5.18	5.39	5.58	5.82	6.16		# of strides	11.04	10.17	10.97	11.98	21.21	22.95	1.74	
		velocity	8.09	10.29	10.02	9.65	9.28	8.96	8.59	8.12	9.06	158.0	9.06	9.83	9.12	8.35	9.43	8.71	
Kerley, Fred (USA) (1995)																			
FINAL - 2019 IAAF World Championships (Doha, QAT)																			
<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>																			
date	04-Oct-19	time	6.03	10.87	15.78	20.87	26.16	31.79	37.74	44.17	44.17	5 / 3							
reaction time	0.144	interval	4.84	4.91	5.09	5.29	5.63	5.95	6.43		# of strides	10.87	10.00	10.92	12.38	20.87	23.30	2.43	
		velocity	8.29	10.33	10.18	9.82	9.45	8.88	8.40	7.78	9.06	170.0	9.20	10.00	9.16	8.08	9.58	8.58	
Hall, Quincy (USA) (1998)																			
FINAL - 2024 USA Olympic Trials (Eugene, OR)																			
<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>																			
date	24-Jun-24	time	11.25		21.52		32.59		44.17	44.17	8 / 1								
reaction time		interval			10.27		11.07		11.58	PB	# of strides	11.25	10.27	11.07	11.58	21.52	22.65	1.13	
		velocity	8.89		9.74		9.03		8.64	9.06		8.89	9.74	9.03	8.64	9.29	8.83		
Richards, Jereem (TTO) (1994)																			
FINAL - 2024 London Athletics Meet (London, GBR)																			
<i>Omega Timing (2024) - diamond league race analysis</i>																			
date	20-Jul-24	time	6.12	10.91	15.87	21.08	26.48	32.02	37.82	44.18	44.18	8 / 3							
reaction time	0.182	interval	4.79	4.96	5.21	5.40	5.54	5.80	6.36	PB	# of strides	10.91	10.17	10.94	12.16	21.08	23.10	2.02	
		velocity	8.17	10.44	10.08	9.60	9.26	9.03	8.62	7.86	9.05	9.17	9.83	9.14	8.22	9.49	8.66		
Allen, Nathon (JAM) (1995)																			
Semi-Final 1 - 2017 IAAF World Championships (London, GBR)																			
<i>Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Men's 400m</i>																			
date	06-Aug-17	time	10.84		20.85		31.83		37.66	44.04	44.19	6 / 2							
reaction time	0.161	interval			10.01		10.98		5.83	6.38	PB	# of strides	10.84	10.01	10.98	12.21	20.85	23.19	2.34
		velocity	9.23		9.99		9.11		8.58	7.84	9.05	165.3	9.23	9.99	9.11	8.19	9.59	8.62	
James, Kirani (GRN) (1992)																			
FINAL - 2020 Olympic Games (Tokyo, JPN)																			
<i>Omega Timing (2022) - Tokyo 2020 - race analysis - men's 400m final</i>																			
date	05-Aug-21	time	6.01	10.74	15.63	20.72	26.07	31.78	37.80	44.19	44.19	4 / 3							
reaction time	0.157	interval	4.73	4.89	5.09	5.35	5.71	6.02	6.39		# of strides	10.74	9.98	11.06	12.41	20.72	23.47	2.75	
		velocity	8.32	10.57	10.22	9.82	9.35	8.76	8.31	7.82	9.05	161.2	9.31	10.02	9.04	8.06	9.65	8.52	
Wariner, Jeremy (USA) (1984)																			
FINAL - 2005 USATF National Championships (Carson, CA)																			
<i>USATF Women's Sprint Development (2005)</i>																			
date	25-Jun-05	time	11.45	16.53	21.72	27.13	32.42	38.12	44.20	44.20	5 / 1								
reaction time		interval		5.08	5.19	5.41	5.29	5.70	6.08		# of strides	11.45	10.27	10.70	11.78	21.72	22.48	0.76	
		velocity	8.73	9.84	9.63	9.24	9.45	8.77	8.22	9.05		8.73	9.74	9.35	8.49	9.21	8.90		
Wariner, Jeremy (USA) (1984)																			
FINAL - 2008 USA Olympic Trials (Eugene, OR)																			
<i>USATF Women's Sprint Development with HPC (2008)</i>																			
date	03-Jul-08	time	11.06	15.78	21.67	27.01	32.51	38.02	44.20	44.20	5 / 2								
reaction time		interval		4.72	5.89	5.34	5.50	5.51	6.18		# of strides	11.06	10.61	10.84	11.69	21.67	22.53	0.86	
		velocity	9.04	10.59	8.49	9.36	9.09	9.07	8.09	9.05		9.04	9.43	9.23	8.55	9.23	8.88		
Lewis, Steve (USA) (1969)																			
FINAL - 1992 Olympic Games (Barcelona, ESP)																			
<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																			
date	05-Aug-92	time			21.1		31.8		44.3	44.21	7 / 2								
reaction time		interval					10.70		12.50		# of strides		21.10	10.70	12.50	21.10	23.20	2.10	
		velocity			9.48		9.35		8.00	9.05			9.48	9.35	8.00	9.48	8.62		
Merritt, LaShawn (USA) (1986)																			
Semi-Final 1 - 2016 Olympic Games (Rio de Janeiro, BRA)																			
<i>(2016.08.15) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en</i>																			
date	13-Aug-16	time	11.18		21.42		32.28		44.21	44.21	6 / 2								
reaction time	0.271	interval			10.24		10.86		11.93		# of strides	11.18	10.24	10.86	11.93	21.42	22.79	1.37	
		velocity	8.94		9.77		9.21		8.38	9.05		8.94	9.77	9.21	8.38	9.34	8.78		
Cherry, Michael (USA) (1995)																			
FINAL - 2020 Olympic Games (Tokyo, JPN)																			
<i>Omega Timing (2022) - Tokyo 2020 - race analysis - men's 400m final</i>																			
date	05-Aug-21	time	6.03	10.92	16.02	21.23	26.59	32.18	37.97	44.21	44.21	6 / 4							
reaction time	0.179	interval	4.89	5.10	5.21	5.36	5.59	5.79	6.24	PB	# of strides	10.92	10.31	10.95	12.03	21.23	22.98	1.75	
		velocity	8.29	10.22	9.80	9.60	9.33	8.94	8.64	8.01	9.05	157.5	9.16	9.70	9.13	8.31	9.42	8.70	
Gardiner, Steven (BAH) (1995)																			
FINAL - 2022 Meeting de Paris (Paris, FRA)																			
<i>Omega Timing (2022) - diamond league race analysis</i>																			
date	16-Jun-22	time	6.25	11.17	16.19	21.33	26.55	32.07	37.94	44.21	44.21	5 / 1							
reaction time	0.160	interval	4.92	5.02	5.14	5.22	5.52	5.87	6.27		# of strides	11.17	10.16	10.74	12.14	21.33	22.88	1.55	
		velocity	8.00	10.16	9.96	9.73	9.58	9.06	8.52	7.97	9.05	158.2	8.95	9.84	9.31	8.24	9.38	8.74	
Roberts, Gil (USA) (1989)																			

FINAL - 2017 USATF National Championships (Sacramento, CA)															<i>Lee (& Ferrara) (2017) - speedendurance.com/2017/07/13/400m-splits-from-usa-national-championships/</i>	
date	24-Jun-17	time	10.98	20.86	31.92	44.22	44.22	44.22	6 / 2	10.98	9.88	11.06	12.30	20.86	23.36	2.50
reaction time		interval		9.88	11.06	12.30	PB	# of strides		9.11	10.12	9.04	8.13	9.59	8.56	
		velocity	9.11	10.12	9.04	8.13	9.05									

van Niekerk, Wayde (RSA) (1992) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																
Semi-Final 2 - 2017 IAAF World Championships (London, GBR)															<i>Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Men's 400m</i>	
date	06-Aug-17	time	10.74	20.82	29.20	34.97	44.05	44.22	6 / 1	10.74	10.08	8.38	14.85	20.82	23.23	2.41
reaction time	0.168	interval		10.08	8.38	5.77	9.08		# of strides	10.74	10.08	8.38	14.85	20.82	23.23	2.41
		velocity	9.31	9.92	11.93	8.67	5.51	9.05	163.0	9.31	9.92	11.93	6.73	9.61	8.61	

Watson, Antonio (JAM) (2001) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2023 World Athletics Championships (Budapest, HUN)															<i>Yamanaka (2024) - analysis of men's and women's 400m and 300m runs in the 2023 season</i>		
date	24-Aug-23	time	6.26	11.18	16.15	21.28	26.63	32.23	38.03	44.22	44.22	7 / 1					
reaction time	0.165	interval		4.92	4.97	5.13	5.35	5.60	5.80	6.19		# of strides	11.18	10.10		21.28	
		velocity	7.99	10.16	10.06	9.75	9.35	8.93	8.62	8.08	9.05	167.0	8.94	9.90		9.40	8.72

Kebinatshipi, Collen (BOT) (2004) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																		
FINAL - 2024 Athletissima (Lausanne, SUI)															<i>Omega Timing (2024) - diamond league race analysis</i>			
date	22-Aug-24	time	6.04	10.85	15.86	21.10	26.56	32.22	38.01	44.22	44.22	3 / 3						
reaction time	0.151	interval		4.81	5.01	5.24	5.46	5.66	5.79	6.21		# of strides	10.85	10.25	11.12	12.00		
		velocity	8.28	10.40	9.98	9.54	9.16	8.83	8.64	8.05	9.05	167.0	9.22	9.76	8.99	8.33	9.48	8.65

James, Kirani (GRN) (1992) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																		
Semi-Final 2 - 2019 IAAF World Championships (Doha, QAT)															<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>			
date	02-Oct-19	time	6.02	10.89	15.84	21.02	26.40	32.02	37.93	44.23	44.23	5 / 2						
reaction time	0.119	interval		4.87	4.95	5.18	5.38	5.62	5.91	6.30		# of strides	10.89	10.13	11.00	12.21		
		velocity	8.31	10.27	10.10	9.65	9.29	8.90	8.46	7.94	9.04	161.0	9.18	9.87	9.09	8.19	9.51	8.62

Dobson, Charles (GBR) (1999) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																		
FINAL - 2024 London Athletics Meet (London, GBR)															<i>Omega Timing (2024) - diamond league race analysis</i>			
date	20-Jul-24	time	6.10	11.14	16.33	21.65	27.05	32.60	38.30	44.23	44.23	3 / 4						
reaction time	0.142	interval		5.04	5.19	5.32	5.40	5.55	5.70	5.93		# of strides	11.14	10.51	10.95	11.63		
		velocity	8.20	9.92	9.63	9.40	9.26	9.01	8.77	8.43	9.04	167.0	8.98	9.51	9.13	8.60	9.24	8.86

James, Larry (USA) (1947) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 1968 USA Olympic Trials (Echo Summit, CA) (Altitude)															<i>Hymans (2008) - history of the US olympic trials - track and field</i>		
date	14-Sep-68	time			21.2					44.1	44.1	3 / 2					
reaction time		interval								22.9		# of strides				21.20	
		velocity			9.43					8.73	9.07	(44.19)				9.43	8.73

Collett, Wayne (USA) (1949) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 1972 USA Olympic Trials (Eugene, OR)															<i>Hymans (2008) - history of the US olympic trials - track and field</i>		
date	09-Jul-72	time			21.2					44.1	44.1	8 / 1					
reaction time		interval								22.9		# of strides				21.20	
		velocity			9.43					8.73	9.07					9.43	8.73

Kitur, Samson (KEN) (1966) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																		
FINAL - 1992 Olympic Games (Barcelona, ESP)															<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>			
date	05-Aug-92	time			21.5		32.3			44.3	44.24	5 / 3						
reaction time		interval					10.80			12.00		# of strides		21.50	10.80	12.00		
		velocity			9.30		9.26			8.33	9.04			9.30	9.26	8.33	9.30	8.77

Morris, Ian (TTO) (1961) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																		
FINAL - 1992 Olympic Games (Barcelona, ESP)															<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>			
date	05-Aug-92	time			21.7		32.5			44.3	44.25	6 / 4						
reaction time		interval					10.80			11.80		# of strides		21.70	10.80	11.80		
		velocity			9.22		9.26			8.47	9.04			9.22	9.26	8.47	9.22	8.85

Sibanda, Karabo (BOT) (1998) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																		
FINAL - 2016 Olympic Games (Rio de Janeiro, BRA)															<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>			
date	14-Aug-16	time	6.25	11.22	16.35	21.67	27.11	32.62	38.25	44.25	44.25	1 / 5						
reaction time	0.164	interval		4.97	5.13	5.32	5.44	5.51	5.63	6.00		# of strides	11.22	10.45	10.95	11.63		
		velocity	8.00	10.06	9.75	9.40	9.19	9.07	8.88	8.33	9.04	165.2	8.91	9.57	9.13	8.60	9.23	8.86

Kerley, Fred (USA) (1995) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																		
Semi-Final 1 - 2019 IAAF World Championships (Doha, QAT)															<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>			
date	02-Oct-19	time	6.06	10.83	15.73	20.81	26.16	31.81	37.77	44.25	44.25	4 / 1						
reaction time	0.152	interval		4.77	4.90	5.08	5.35	5.65	5.96	6.48		# of strides	10.83	9.98	11.00	12.44		
		velocity	8.25	10.48	10.20	9.84	9.35	8.85	8.39	7.72	9.04	170.7	9.23	10.02	9.09	8.04	9.61	8.53

Juantorena, Alberto (CUB) (1950) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																		
FINAL - 1976 Olympic Games (Montreal, CAN)															<i>Lamare (1976) - les jeux de la XXI olympia, Montreal 1976</i>			
date	29-Jul-76	time	11.29	21.24			32.03			44.26	44.26	2 / 1						
reaction time		interval		9.95			10.79			12.23		# of strides	11.29	9.95	10.79	12.23		
		velocity		8.86			9.27			8.18	9.04	158.2	8.86	10.05	9.27	8.18	9.42	8.69

Egbunike, Innocent (NGR) (1961) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																		
Semi-Final 1 - 1987 IAAF World Championship (Rome, ITA)															<i>Moravec (1990) - time analysis of the sprints - Rome 1987 Scientific Report (2nd ed)</i>			
date	01-Sep-87	time	10.87	20.97			32.10			44.26	44.26	4 / 1						
reaction time		interval		10.10			11.13			12.16		# of strides	10.87	10.10	11.13	12.16		
		velocity		9.20			8.98			8.22	9.04	162.5	9.20	9.90	8.98	8.22	9.54	8.59

Santos, Luguelin (DOM) (1993) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																		
Semi-Final 1 - 2015 IAAF World Championships (Beijing, CHN)															<i>Yamamoto (2015) - race analysis of 15th World Championships 400m- focusing on men's semis and women's prelims</i>			
date	24-Aug-15	time	6.31	11.37	16.48	21.65	26.93	32.38	38.12	44.26	44.26	6 / 2						
reaction time	0.175	interval		5.06	5.11	5.17	5.28	5.45	5.74	6.14		# of strides	11.37	10.28	10.73	11.88		
		velocity														21.65	22.61	0.96

WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation

velocity	7.92	9.88	9.78	9.67	9.47	9.17	8.71	8.14	9.04	186.0	8.80	9.73	9.32	8.42	9.24	8.85
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Norman, Michael (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2019 Memorial van Damme (Brussels, BEL)																			
date	06-Sep-19	time	6.0	10.8	15.7	21.0	26.4	32.1	38.1	44.26	44.26	5 / 1							
reaction time	0.155	interval	4.8	4.9	5.3	5.4	5.7	6.0	6.2		# of strides	10.80	10.20	11.10	12.16	21.00	23.26	2.26	
velocity	8.33	10.42	10.20	9.43	9.26	8.77	8.33	8.12	9.04	171.0	9.26	9.80	9.01	8.22	9.52	8.60			
James, Kirani (GRN) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2022 Weltklasse (Zürich, SUI)																			
date	08-Sep-22	time	6.15	10.97	15.93	21.01	26.28	31.90	37.90	44.26	44.26	4 / 1							
reaction time	0.169	interval	4.82	4.96	5.08	5.27	5.62	6.00	6.36		# of strides	10.97	10.04	10.89	12.36	21.01	23.25	2.24	
velocity	8.13	10.37	10.08	9.84	9.49	8.90	8.33	7.86	9.04	161.0	9.12	9.96	9.18	8.09	9.52	8.60			
Norwood, Vernon (USA) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 1 - 2023 World Athletics Championships (Budapest, HUN)																			
date	22-Aug-23	time	6.11	11.12	16.22	21.45	26.85	32.43	38.15	44.26	44.26	7 / 2							
reaction time	0.181	interval	5.01	5.10	5.23	5.40	5.58	5.72	6.11	PB	# of strides	11.12	10.33	10.98	11.83	21.45	22.81	1.36	
velocity	8.18	9.98	9.80	9.56	9.26	8.96	8.74	8.18	9.04	170.0	8.99	9.68	9.11	8.45	9.32	8.77			
Hudson-Smith, Matthew (GBR) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 2 - 2023 World Athletics Championships (Budapest, HUN)																			
date	22-Aug-23	time	6.04	10.92	15.87	21.02	26.38	31.98	37.86	44.26	44.26	7 / 1							
reaction time	0.167	interval	4.88	4.95	5.15	5.36	5.60	5.88	6.40	AR PB	# of strides	10.92	10.10	10.96	12.28	21.02	23.24	2.22	
velocity	8.28	10.25	10.10	9.71	9.33	8.93	8.50	7.81	9.04	163.0	9.16	9.90	9.12	8.14	9.51	8.61			
Norman, Michael (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 3 - 2024 Olympic Games (Paris, FRA)																			
date	06-Aug-24	time	6.07	11.01	15.96	21.14	26.54	32.16	38.01	44.26	44.26	6 / 2							
reaction time	0.146	interval	4.94	4.95	5.18	5.40	5.62	5.85	6.25		# of strides	11.01	10.13	11.02	12.10	21.14	23.12	1.98	
velocity	8.24	10.12	10.10	9.65	9.26	8.90	8.55	8.00	9.04	171.0	9.08	9.87	9.07	8.26	9.46	8.65			
Babers, Alonzo (USA) (1961)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1984 Olympic Games (Los Angeles, CA)																			
date	08-Aug-84	time			21.7		32.5		44.3	44.27	4 / 1								
reaction time	0.175	interval					10.80		11.80	PB	# of strides		21.70	10.80	11.80	21.70	22.60	0.90	
velocity				9.22		9.26		8.47	9.04	9.04		9.22	9.26	8.47	9.22	8.85			
Haroun, Abdalelah (QAT) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2015 Résisprint International (La Chaux-de-Fonds, SUI)																			
date	05-Jul-15	time		11.3		21.4		32.2		44.27	44.27	1 / 2							
reaction time		interval		10.10		10.80		12.07		12.07	AR / AJR	# of strides	11.30	10.10	10.80	12.07	21.40	22.87	1.47
velocity			8.85	9.90		9.26		8.29	9.04	9.04		8.85	9.90	9.26	8.29	9.35	8.75		
Norman, Michael (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2021 Doha Diamond League (Doha, QAT)																			
date	28-May-21	time	6.0	10.8	15.9	21.2	26.6	32.3	38.1	44.27	44.27	5 / 1							
reaction time	0.165	interval	4.80	5.10	5.30	5.40	5.70	5.80	6.17		# of strides	10.80	10.40	11.10	11.97	21.20	23.07	1.87	
velocity	8.33	10.42	9.80	9.43	9.26	8.77	8.62	8.10	9.04	170.5	9.26	9.62	9.01	8.35	9.43	8.67			
Hall, Quincy (USA) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 4 - 2024 Olympic Games (Paris, FRA)																			
date	04-Aug-24	time	6.30	11.20	16.14	21.29	26.66	32.26	38.07	44.28	44.28	7 / 1							
reaction time	0.209	interval	4.90	4.94	5.15	5.37	5.60	5.81	6.21		# of strides	11.20	10.09	10.97	12.02	21.29	22.99	1.70	
velocity	7.94	10.20	10.12	9.71	9.31	8.93	8.61	8.05	9.03	159.0	8.93	9.91	9.12	8.32	9.39	8.70			
Parrela, Sanderlei Claro (BRA) (1974)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1999 IAAF World Championships (Sevilla, ESP)																			
date	26-Aug-99	time	6.22	11.12	16.03	21.13	26.54	32.10	37.93	44.29	44.29	7 / 2							
reaction time	0.169	interval	4.90	4.91	5.10	5.41	5.56	5.83	6.36	AR	# of strides	11.12	10.01	10.97	12.19	21.13	23.16	2.03	
velocity	8.04	10.20	10.18	9.80	9.24	8.99	8.58	7.86	9.03	9.03		8.99	9.99	9.12	8.20	9.47	8.64		
Norman, Michael (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2022 World Athletics Championships (Eugene, OR)																			
date	22-Jul-22	time		10.83		21.12		32.04		44.29	44.29	4 / 1							
reaction time	0.140	interval		10.29		10.92		12.25		12.25	# of strides	10.83	10.29	10.92	12.25	21.12	23.17	2.05	
velocity			9.23	9.72		9.16		8.16	9.03	9.03		9.23	9.72	9.16	8.16	9.47	8.63		
Smith, LaMont (USA) (1972)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1996 USA Olympic Trials (Atlanta, GA)																			
date	19-Jun-96	time		11.08		21.38		32.18	37.92	44.30	44.30	3 / 4							
reaction time		interval		10.30		10.80		5.74	6.38	PB	# of strides	11.08	10.30	10.80	12.12	21.38	22.92	1.54	
velocity			9.03		9.71		9.26	8.71	7.84	9.03		9.03	9.71	9.26	8.25	9.35	8.73		
Makwala, Isaac (BOT) (1986)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 3 - 2017 IAAF World Championships (London, GBR)																			
date	06-Aug-17	time		10.66		20.60		31.39	37.37	44.05	44.30	5 / 1							
reaction time	0.248	interval		9.94		10.79		5.98	6.68		# of strides	10.66	9.94	10.79	12.66	20.60	23.45	2.85	
velocity			9.38	10.06		9.27	8.36	7.49	9.03	9.03		9.38	10.06	9.27	7.90	9.71	8.53		
Norman, Michael (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 1 - 2022 World Athletics Championships (Eugene, OR)																			
date	20-Jul-22	time		10.85		21.16		32.19		44.30	44.30	6 / 1							
reaction time	0.127	interval		10.31		11.03		12.11		12.11	# of strides	10.85	10.31	11.03	12.11	21.16	23.14	1.98	
velocity			9.22	9.70		9.07		8.26	9.03	9.03		9.22	9.70	9.07	8.26	9.45	8.64		
James, Kirani (GRN) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		

FINAL - 2023 Prefontaine Classic (Eugene, OR)																	Omega Timing (2023) - diamond league race analysis																
date	time	6.24	11.36	16.57	21.82	27.03	32.47	38.15	44.30	44.30	6 / 1	# of strides	11.36	10.46	10.65	11.83	21.82	22.48	0.66														
reaction time	interval	velocity	8.01	9.77	9.60	9.52	9.60	9.19	8.80	8.13	9.03	158.5	8.80	9.56	9.39	8.45	9.17	8.90															
James, Kirani (GRN) (1992)																	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																
FINAL - 2024 Golden Gala Pietro Mennea (Roma, ITA)																	Omega Timing (2024) - diamond league race analysis																
date	time	6.11	11.09	16.30	21.61	27.01	32.53	38.24	44.30	44.30	5 / 2	# of strides	11.09	10.52	10.92	11.77	21.61	22.69	1.08														
reaction time	interval	velocity	8.18	10.04	9.60	9.42	9.26	9.06	8.76	8.25	9.03	161.5	9.02	9.51	9.16	8.50	9.25	8.81															
Cárdenas, Alejandro (MEX) (1974)																	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																
FINAL - 1999 IAAF World Championships (Sevilla, ESP)																	Ferro (2001) - biomechanical analysis of the 7th world championships in athletics seville 1999																
date	time	6.00	10.99	16.01	21.19	26.58	32.11	37.97	44.31	44.31	4 / 3	# of strides	10.99	10.20	10.92	12.20	21.19	23.12	1.93														
reaction time	interval	velocity	8.33	10.02	9.96	9.65	9.28	9.04	8.53	7.89	9.03	163.7	9.10	9.80	9.16	8.20	9.44	8.65															
van Niekerk, Wayde (RSA) (1992)																	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																
Semi-Final 3 - 2015 IAAF World Championships (Beijing, CHN)																	Yamamoto (2015) - race analysis of 15th World Championships 400m- focusing on men's semis and women's prelims																
date	time	6.04	10.89	15.97	21.36	26.93	32.38	38.15	44.31	44.31	7 / 1	# of strides	10.89	10.47	11.02	11.93	21.36	22.95	1.59														
reaction time	interval	velocity	8.28	10.31	9.84	9.28	8.98	9.17	8.67	8.12	9.03	163.7	9.18	9.55	9.07	8.38	9.36	8.71															
Norman, Michael (USA) (1997)																	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																
FINAL - 2020 Olympic Games (Tokyo, JPN)																	Omega Timing (2022) - Tokyo 2020 - race analysis - men's 400m final																
date	time	5.92	10.68	15.59	20.81	26.27	31.95	37.89	44.31	44.31	8 / 5	# of strides	10.68	10.13	11.14	12.36	20.81	23.50	2.69														
reaction time	interval	velocity	8.45	10.50	10.18	9.58	9.16	8.80	8.42	7.79	9.03	171.2	9.36	9.87	8.98	8.09	9.61	8.51															
Hudson-Smith, Matthew (GBR) (1994)																	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																
FINAL - 2023 World Athletics Championships (Budapest, HUN)																	Yamanaka (2024) - analysis of men's and women's 400m and 300m runs in the 2023 season																
date	time	5.98	10.93	15.96	21.08	26.36	31.96	37.90	44.31	44.31	5 / 2	# of strides	10.93	10.15	10.88	12.35	21.08	23.23	2.15														
reaction time	interval	velocity	8.36	10.10	9.94	9.77	9.47	8.93	8.42	7.80	9.03	163.5	9.15	9.85	9.19	8.10	9.49	8.61															
Richards, Jereem (TTO) (1994)																	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																
Heat 2 - 2024 Olympic Games (Paris, FRA)																	Paris 2024 Olympic Games - Results Book (2024)																
date	time	6.15	11.01	15.94	21.05	26.43	32.07	37.95	44.31	44.31	9 / 2	# of strides	11.01	10.04	11.02	12.24	21.05	23.26	2.21														
reaction time	interval	velocity	8.13	10.29	10.14	9.78	9.29	8.87	8.50	7.86	9.03	171.0	9.08	9.96	9.07	8.17	9.50	8.60															
Bailey, Chris (USA) (2000)																	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																
Semi-Final 2 - 2024 Olympic Games (Paris, FRA)																	Paris 2024 Olympic Games - Results Book (2024)																
date	time	6.19	11.09	16.06	21.21	26.50	32.07	37.98	44.31	44.31	6 / 3	# of strides	11.09	10.12	10.86	12.24	21.21	23.10	1.89														
reaction time	interval	velocity	8.08	10.20	10.06	9.71	9.45	8.98	8.46	7.90	9.03	183.0	9.02	9.88	9.21	8.17	9.43	8.66															
Taylor, Angelo (USA) (1978)																	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																
FINAL - 2007 IAAF World Championships (Osaka, JPN)																	Mochida (2008) - biomechanical analysis of the 400m final race at the 2007 world championships in athletics																
date	time	6.06	10.93	15.78	20.94	26.38	31.90	37.90	44.32	44.32	4 / 3	# of strides	10.93	10.01	10.96	12.42	20.94	23.38	2.44														
reaction time	interval	velocity	8.25	10.27	10.31	9.69	9.19	9.06	8.33	7.79	9.03	168.0	9.15	9.99	9.12	8.05	9.55	8.55															
Schönlebe, Thomas (GDR) (1965)																	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																
FINAL - 1987 IAAF World Championships (Rome, ITA)																	Moravec (1990) - time analysis of the sprints - Rome 1987 Scientific Report (2nd ed)																
date	time	11.11			21.40		32.44		44.33	44.33	8 / 1	# of strides	11.11	10.29	11.04	11.89	21.40	22.93	1.53														
reaction time	interval	velocity	9.00		9.72		9.06		8.41	9.02	9.02	9.00	9.72	9.06	8.41	9.35	8.72																
Reynolds, Harry (Butch) (USA) (1964)																	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																
Semi-Final 2 - 1988 Olympic Games (Seoul, KOR)																	Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988																
date	time	11.39			21.80		32.78		44.33	44.33	6 / 1	# of strides	11.39	10.41	10.98	11.55	21.80	22.53	0.73														
reaction time	interval	velocity	8.78		9.61		9.11		8.66	9.02	9.02	8.78	9.61	9.11	8.66	9.17	8.88																
Washington, Tyree (USA) (1976)																	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																
FINAL - 2003 USATF National Championships (Palo Alto, CA)																	USATF Women's Sprint Development (2003)																
date	time				21.66		32.63	38.27	44.33	44.33	5 / 1	# of strides			10.97	11.70	21.66	22.67	1.01														
reaction time	interval	velocity			9.23		9.12	8.87	8.25	9.02	9.02			9.12	8.55	9.23	8.82																
Roberts, Gil (USA) (1989)																	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																
Semi-Final 1 - 2017 USATF National Championships (Sacramento, CA)																	Lee (& Ferrara) (2017) - speedendurance.com/2017/07/13/400m-splits-from-usa-national-championships/																
date	time	11.24			21.52		32.40		44.33	44.33	1 / 2	# of strides	11.24	10.28	10.88	11.93	21.52	22.81	1.29														
reaction time	interval	velocity	8.90		9.73		9.19		8.38	9.02	9.02	8.90	9.73	9.19	8.38	9.29	8.77																
Thebe, Baboloki (BOT) (1997)																	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																
Semi-Final 2 - 2017 IAAF World Championships (London, GBR)																	Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Men's 400m																
date	time	10.85			21.02		31.82	37.68	44.15	44.33	5 / 2	# of strides	10.85	10.17	10.80	12.33	21.02	23.13	2.11														
reaction time	interval	velocity	9.22		9.83		9.26	8.53	7.73	9.02	9.02	179.0	9.22	9.83	9.26	8.11	9.51	8.65															
Richards, Jereem (TTO) (1994)																	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																
Semi-Final 1 - 2024 Olympic Games (Paris, FRA)																	Paris 2024 Olympic Games - Results Book (2024)																
date	time	6.03	10.85	15.86	21.08	26.56	32.22	38.09	44.33	44.33	7 / 2	# of strides	10.85	10.23	11.14	12.11	21.08	23.25	2.17														
reaction time	interval	velocity	8.42	5.01	5.22	5.48	5.66	5.87	6.24																								

velocity	8.29	10.37	9.98	9.58	9.12	8.83	8.52	8.01	9.02	172.7	9.22	9.78	8.98	8.26	9.49	8.60
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		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Smith, John (USA) (1950)		<i>Hymans (2015) - progression of IAAF world records - 2015 edition</i>																
FINAL - 1971 USA National Championships (Eugene, OR)		<i>(yards)</i>																
date	26-Jun-71	time			22.0				44.2		2 / 1							
reaction time		interval							22.2	WR yards	# of strides					22.00	22.20	0.20
		velocity			9.09				9.01	9.05	(44.5/440y)					9.09	9.01	
Merritt, LaShawn (USA) (1986)		<i>Yamamoto (2015) - race analysis of 15th World Championships 400m- focusing on men's semis and women's prelims</i>																
Semi-Final 3 - 2015 IAAF World Championships (Beijing, CHN)																		
date	24-Aug-15	time	6.17	11.02	16.05	21.37	26.92	32.44	38.22	44.34	44.34	6 / 2						
reaction time	0.187	interval	4.85	5.03	5.32	5.55	5.52	5.78	6.12		# of strides	11.02	10.35	11.07	11.90	21.37	22.97	1.60
		velocity	8.10	10.31	9.94	9.40	9.01	9.06	8.65	8.17	9.02	171.0	9.07	9.66	9.03	8.40	9.36	8.71
Norwood, Vernon (USA) (1992)		<i>Omega Timing (2024) - diamond league race analysis</i>																
FINAL - 2024 Herculis Meeting International d'Athlétisme (Monaco, MON)																		
date	12-Jul-24	time	6.13	10.96	15.98	21.21	26.69	32.36	38.13	44.34	44.34	7 / 2						
reaction time	0.174	interval	4.83	5.02	5.23	5.48	5.67	5.77	6.21		# of strides	10.96	10.25	11.15	11.98	21.21	23.13	1.92
		velocity	8.16	10.35	9.96	9.56	9.12	8.82	8.67	8.05	9.02	172.0	9.12	9.76	8.97	8.35	9.43	8.65
Lewis, Steve (USA) (1969)		<i>Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988</i>																
Semi-Final 1 - 1988 Olympic Games (Seoul, KOR)																		
date	26-Sep-88	time		11.16		21.54		32.53		44.35	44.35	3 / 1						
reaction time	0.199	interval			10.38		10.99		11.82		# of strides	11.16	10.38	10.99	11.82	21.54	22.81	1.27
		velocity		8.96		9.63		9.10		8.46	9.02	8.96	9.63	9.10	8.46	9.29	8.77	
Hudson-Smith, Matthew (GBR) (1994)		<i>Omega Timing (2022) - diamond league race analysis</i>																
FINAL - 2022 Prefontaine Classic (Eugene, OR)																		
date	28-May-22	time	6.08	11.00	16.16	21.46	26.80	32.19	38.05	44.35	44.35	8 / 3						
reaction time	0.138	interval	4.92	5.16	5.30	5.34	5.39	5.86	6.30	NR PB	# of strides	11.00	10.46	10.73	12.16	21.46	22.89	1.43
		velocity	8.22	10.16	9.69	9.43	9.36	9.28	8.53	7.94	9.02	164.0	9.09	9.56	9.32	8.22	9.32	8.74
Everett, Danny (USA) (1966)		<i>Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988</i>																
Semi-Final 1 - 1988 Olympic Games (Seoul, KOR)																		
date	26-Sep-88	time		11.43		22.03		32.87		44.36	44.36	5 / 2						
reaction time		interval			10.60		10.84		11.49		# of strides	11.43	10.60	10.84	11.49	22.03	22.33	0.30
		velocity		8.75		9.43		9.23		8.70	9.02	8.75	9.43	9.23	8.70	9.08	8.96	
Young, Jerome (USA) (1976)		<i>Ferro (2001) - biomechanical analysis of the 7th world championships in athletics seville 1999</i>																
FINAL - 1999 IAAF World Championships (Sevilla, ESP)																		
date	26-Aug-99	time	6.15	11.16	16.16	21.33	26.59	31.95	37.77	44.36	44.36	6 / 4						
reaction time	0.171	interval	5.01	5.00	5.17	5.26	5.36	5.82	6.59	DV	# of strides	11.16	10.17	10.62	12.41	21.33	23.03	1.70
		velocity	8.13	9.08	10.00	9.67	9.51	9.33	8.59	7.59	9.02	8.96	9.83	9.42	8.06	9.38	8.68	
Abbas, Ali Khamis (BRN) (1995)		<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>																
FINAL - 2016 Olympic Games (Rio de Janeiro, BRA)																		
date	14-Aug-16	time	6.17	11.05	16.08	21.29	26.62	32.15	38.02	44.36	44.36	2 / 6						
reaction time	0.148	interval	4.88	5.03	5.21	5.33	5.53	5.87	6.34	NR	# of strides	11.05	10.24	10.86	12.21	21.29	23.07	1.78
		velocity	8.10	10.25	9.94	9.60	9.38	9.04	8.52	7.89	9.02	169.5	9.05	9.77	9.21	8.19	9.39	8.67
van Niekerk, Wayde (RSA) (1992)		<i>Omega Timing (2023) - diamond league race analysis</i>																
FINAL - 2023 London Athletics Meet (London, GBR)																		
date	23-Jul-23	time	6.06	10.91	15.93	21.15	26.70	32.30	38.06	44.36	44.36	5 / 1						
reaction time	0.167	interval	4.85	5.02	5.22	5.55	5.60	5.76	6.30		# of strides	10.91	10.24	11.15	12.06	21.15	23.21	2.06
		velocity	8.25	10.31	9.96	9.58	9.01	8.93	8.68	7.94	9.02	165.2	9.17	9.77	8.97	8.29	9.46	8.62
Lewis, Steve (USA) (1969)		<i>Hymans (2008) - history of the US olympic trials - track and field</i>																
FINAL - 1988 USA Olympic Trials (Indianapolis, IN)																		
date	20-Jul-88	time		10.5		21.1		31.9		44.37	44.37	7 / 3						
reaction time		interval			10.6		10.8		12.5		# of strides	10.50	10.60	10.80	12.47	21.10	23.27	2.17
		velocity		9.52		9.43		9.26		8.02	9.02	9.52	9.43	9.26	8.02	9.48	8.59	
Johnson, Michael (USA) (1967)		<i>Bondarchuk (2007) - transfer of training in sports</i>																
Semi-Final 2 - 1997 IAAF World Championships (Athens, GRE)																		
date	04-Aug-97	time		11.09		21.75		32.50		44.37	44.37	2 / 1						
reaction time	0.160	interval			10.66		10.75		11.87		# of strides	11.09	10.66	10.75	11.87	21.75	22.62	0.87
		velocity		9.02		9.38		9.30		8.42	9.02	9.02	9.38	9.30	8.42	9.20	8.84	
Kamoga, Davis (UGA) (1968)		<i>Ritzdorf (1997) - biomechanical research project at the VI th world championships in athletics, Athens 1997</i>																
FINAL - 1997 IAAF World Championships (Athens, GRE)																		
date	05-Aug-97	time	6.23	11.27	16.31	21.33	26.57	32.03	37.81	44.15	44.37	7 / 2						
reaction time	0.216	interval	5.04	5.04	5.02	5.24	5.46	5.78	6.34	NR	# of strides	11.27	10.06	10.70	12.12	21.33	22.82	1.49
		velocity	8.03	9.92	9.92	9.96	9.54	9.16	8.65	7.89	9.02	8.87	9.94	9.35	8.25	9.38	8.76	
Wariner, Jeremy (USA) (1984)		<i>USATF Women's Sprint Development (2004)</i>																
FINAL - 2004 USA Olympic Trials (Sacramento, CA)																		
date	15-Jul-04	time		11.08		21.46		26.84		32.33	38.09	44.37	44.37	5 / 1				
reaction time		interval			10.38		5.38		5.49		5.76	6.28	NR	# of strides	11.08	10.38	10.87	12.04
		velocity		9.03		9.63		9.29		9.11	8.68	7.96	9.02	171.2	9.03	9.63	9.20	8.31
Merritt, LaShawn (USA) (1986)		<i>Graubner (2009) - biomechanical analyses at the 12th IAAF world championships</i>																
Semi-Final 2 - 2009 IAAF World Championships (Berlin, GER)																		
date	19-Aug-09	time		10.94		21.51		32.50		44.37	44.37	3 / 1						
reaction time	0.163	interval			10.57		10.99		11.87		# of strides	10.94	10.57	10.99	11.87	21.51	22.86	1.35
		velocity		9.14		9.46		9.10		8.42	9.02	9.14	9.46	9.10	8.42	9.30	8.75	
Korir, Emmanuel (KEN) (1995)																		

Semi-Final 1 - 2019 IAAF World Championships (Doha, QAT)																	Yamanaka (2019) - race analysis of men and women 400m competition																						
date	time	6.28	11.15	16.07	21.24	26.63	32.25	38.13	44.37	44.37	5 / 2	# of strides	11.15	10.09	11.01	12.12	21.24	23.13	1.89	reaction time	interval	velocity	7.96	10.27	10.16	9.67	9.28	8.90	8.50	8.01	9.02	176.5	8.97	9.91	9.08	8.25	9.42	8.65	
Hall, Quincy (USA) (1998)																	FINAL - 2023 World Athletics Championships (Budapest, HUN)																						
Yamanaka (2024) - analysis of men's and women's 400m and 300m runs in the 2023 season																	Omega Timing (2024) - diamond league race analysis																						
date	time	6.25	11.25	16.37	21.60	26.96	32.48	38.23	44.37	44.37	6 / 3	# of strides	11.25	10.35	10.88	11.89	21.60	22.77	1.17	reaction time	interval	velocity	8.00	10.00	9.77	9.56	9.33	9.06	8.70	8.14	9.02	160.0	8.89	9.66	9.19	8.41	9.26	8.78	
Deadmon, Bryce (USA) (1997)																	FINAL - 2024 Athletissima (Lausanne, SUI)																						
Omega Timing (2024) - diamond league race analysis																	Omega Timing (2024) - diamond league race analysis																						
date	time	6.12	11.10	16.10	21.36	26.85	32.44	38.15	44.37	44.37	8 / 4	# of strides	11.10	10.26	11.08	11.93	21.36	23.01	1.65	reaction time	interval	velocity	8.17	10.04	10.00	9.51	9.11	8.94	8.76	8.04	9.02	9.01	9.75	9.03	8.38	9.36	8.69		
Clark, Darren (AUS) (1965)																	Semi-Final 1 - 1988 Olympic Games (Seoul, KOR)																						
Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988																	Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988																						
date	time	11.15	21.58	32.55	44.38	44.38	44.38	44.38	44.38	44.38	6 / 3	# of strides	11.15	10.43	10.97	11.83	21.58	22.80	1.22	reaction time	interval	velocity	8.97	9.59	9.12	8.45	9.01	9.01	8.97	9.59	9.12	8.45	9.27	8.77					
van Niekerk, Wayde (RSA) (1992)																	FINAL - 2014 adidas (New York, NY)																						
Vazel (2016) - How van Niekerk broke the 400m world record																	Vazel (2016) - How van Niekerk broke the 400m world record																						
date	time	10.8	20.7	31.4	43.5	44.38	44.38	44.38	44.38	44.38	1 / 2	# of strides	10.80	9.90	10.70	12.10	20.70	22.80	2.10	reaction time	interval	velocity	9.26	10.10	9.35	8.26	9.01	9.01	9.26	10.10	9.35	8.26	9.66	8.77					
Hudson-Smith, Matthew (GBR) (1994)																	Semi-Final 1 - 2022 World Athletics Championships (Eugene, OR)																						
Timing by Seiko (2022) - world athletics championships race analysis																	Timing by Seiko (2022) - world athletics championships race analysis																						
date	time	10.95	21.06	32.02	44.38	44.38	44.38	44.38	44.38	44.38	5 / 2	# of strides	10.95	10.11	10.96	12.36	21.06	23.32	2.26	reaction time	interval	velocity	9.13	9.89	9.12	8.09	9.01	9.01	9.13	9.89	9.12	8.09	9.50	8.58					
James, Kirani (GRN) (1992)																	FINAL - 2023 Xiamen Diamond League (Xiamen, CHN)																						
Omega Timing (2023) - diamond league race analysis																	Omega Timing (2023) - diamond league race analysis																						
date	time	6.20	11.20	16.40	21.60	27.00	32.60	38.40	44.38	44.38	4 / 1	# of strides	11.20	10.40	11.00	11.78	21.60	22.78	1.18	reaction time	interval	velocity	8.06	10.00	9.62	9.26	8.93	8.62	8.36	9.01	158.7	8.93	9.62	9.09	8.49	9.26	8.78		
Hall, Quincy (USA) (1998)																	FINAL - 2023 Xiamen Diamond League (Xiamen, CHN)																						
Omega Timing (2023) - diamond league race analysis																	Omega Timing (2023) - diamond league race analysis																						
date	time	6.20	11.30	16.40	21.70	27.10	32.70	38.40	44.38	44.38	5 / 2	# of strides	11.30	10.40	11.00	11.68	21.70	22.68	0.98	reaction time	interval	velocity	8.06	9.80	9.80	9.43	9.26	8.93	8.77	8.36	9.01	159.5	8.85	9.62	9.09	8.56	9.22	8.82	
Dobson, Charles (GBR) (1999)																	FINAL - 2024 European Athletics Championships (Roma, ITA)																						
European Athletics (2024) - 2024 european athletics championships - results book																	European Athletics (2024) - 2024 european athletics championships - results book																						
date	time	11.13	21.52	32.38	44.38	44.38	44.38	44.38	44.38	44.38	6 / 2	# of strides	11.13	10.39	10.86	12.00	21.52	22.86	1.34	reaction time	interval	velocity	8.98	9.62	9.21	8.33	9.01	9.01	9.01	9.62	9.21	8.33	9.29	8.75					
James, Kirani (GRN) (1992)																	FINAL - 2024 London Athletics Meet (London, GBR)																						
Omega Timing (2024) - diamond league race analysis																	Omega Timing (2024) - diamond league race analysis																						
date	time	6.17	11.03	16.08	21.28	26.61	32.18	38.05	44.38	44.38	7 / 5	# of strides	11.03	10.25	10.90	12.20	21.28	23.10	1.82	reaction time	interval	velocity	8.10	10.29	9.90	9.62	9.38	8.98	8.52	7.90	9.01	159.2	9.07	9.76	9.17	8.20	9.40	8.66	
Maybank, Anthuan (USA) (1969)																	FINAL - 1996 USA Olympic Trials (Atlanta, GA)																						
USATF Women's Sprint Development (1996)																	USATF Women's Sprint Development (1996)																						
date	time	11.02	21.27	32.22	44.39	44.39	44.39	44.39	44.39	44.39	8 / 5	# of strides	11.02	10.25	10.95	12.17	21.27	23.12	1.85	reaction time	interval	velocity	9.07	9.76	9.13	8.50	7.95	9.01	9.07	9.76	9.13	8.22	9.40	8.65					
Washington, Tyree (USA) (1976)																	FINAL - 1997 IAAF World Championships (Athens, GRE)																						
Ritzdorf (1997) - biomechanical research project at the VI th world championships in athletics, Athens 1997																	Ritzdorf (1997) - biomechanical research project at the VI th world championships in athletics, Athens 1997																						
date	time	6.07	11.07	16.17	21.47	26.93	32.33	38.13	44.23	44.39	3 / 3	# of strides	11.07	10.40	10.86	11.90	21.47	22.76	1.29	reaction time	interval	velocity	8.24	10.00	9.80	9.43	9.16	9.26	8.62	8.20	9.01	9.03	9.62	9.21	8.40	9.32	8.79		
van Niekerk, Wayde (RSA) (1992)																	National FINAL - 2022 Weltklasse (Zürich, SUI)																						
Omega Timing (2022) - diamond league race analysis																	Omega Timing (2022) - diamond league race analysis																						
date	time	6.12	10.98	16.01	21.31	26.88	32.55	38.30	44.39	44.39	5 / 1	# of strides	10.98	10.33	11.24	11.84	21.31	23.08	1.77	reaction time	interval	velocity	8.17	10.29	9.94	9.43	8.98	8.82	8.70	8.21	9.01	162.7	9.11	9.68	8.90	8.45	9.39	8.67	
Ingvalsen, Håvard Bentsdal (NOR) (20K)																	Heat 3 - 2023 World Athletics Championships (Budapest, HUN)																						
Seiko Timing (2023) - world championship race analysis																	Seiko Timing (2023) - world championship race analysis																						
date	time	11.37	21.46	32.39	44.39	44.39	44.39	44.39	44.39	44.39	8 / 1	# of strides	11.37	10.09	10.93	12.00	21.46	22.93	1.47	reaction time	interval	velocity	8.80	9.91	9.15	8.33	9.01	9.01	9.01	9.77	8.80	9.91	9.15	8.33	9.32	8.72			
Norwood, Vernon (USA) (1992)																	FINAL - 2023 World Athletics Championships (Budapest, HUN)																						
Yamanaka (2024) - analysis of men's and women's 400m and 300m runs in the 2023 season																	Yamanaka (2024) - analysis of men's and women's 400m and 300m runs in the 2023 season																						
date	time	6.00	11.01	16.10	21.33	26.72	32.30	38.12	44.39	44.39	8 / 4	# of strides	11.01	10.32	10.97	12.09	21.33	23.06	1.73	reaction time	interval	velocity	5.01	5.09	5.23	5.39	5.58	5.82	6.27	9.01	9.01	9.01	9.01	9.01	9.01	9.01	9.01	9.01	9.01

		velocity	8.33	9.98	9.82	9.56	9.28	8.96	8.59	7.97	9.01	175.0	9.08	9.69	9.12	8.27	9.38	8.67	
Newhouse, Fred (USA) (1948)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1976 Olympic Games (Montreal, CAN)																			
date	29-Jul-76	time			21.4			32.4	44.4	44.40	4 / 2								
reaction time		interval						11.00	12.00		# of strides		21.40	11.00	12.00	21.40	23.00	1.60	
		velocity			9.35			9.09	8.33	9.01		168.2	9.35	9.09	8.33	9.35	8.70		
Harrison, Alvin (USA) (1974)																			
FINAL - 2000 Olympic Games (Sydney, AUS)																			
date	25-Sep-00	time		11.5	21.8			32.6	44.4	44.40	4 / 2								
reaction time		interval			10.30			10.80	11.80		# of strides		11.50	10.30	10.80	11.80	21.80	22.60	0.80
		velocity		8.70	9.71			9.26	8.47	9.01		8.70	9.71	9.26	8.47	9.17	8.85		
McQuay, Tony (USA) (1990)																			
FINAL - 2013 IAAF World Championships (Moscow, RUS)																			
date	13-Aug-13	time		11.1	21.7			32.7	44.4	44.40	4 / 2								
reaction time	0.155	interval			10.6			11.0	11.7	PB	# of strides		11.10	10.60	11.00	11.70	21.70	22.70	1.00
		velocity		9.01	9.43			9.09	8.55	9.01		9.01	9.43	9.09	8.55	9.22	8.81		
Al-Masrahi, Youssef (KSA) (1987)																			
Semi-Final 2 - 2015 IAAF World Championships (Beijing, CHN)																			
date	24-Aug-15	time	6.15	11.09	16.17	21.44	26.82	32.35	38.19	44.40	44.40	7 / 2							
reaction time	0.144	interval	4.94	5.08	5.27	5.38	5.53	5.84	6.21		# of strides		11.09	10.35	10.91	12.05	21.44	22.96	1.52
		velocity	8.13	10.12	9.84	9.49	9.29	9.04	8.56	8.05	9.01	166.7	9.02	9.66	9.17	8.30	9.33	8.71	
Bloomfield, Akeem (JAM) (1997)																			
FINAL - 2019 Müller Anniversary Games (London, GBR)																			
date	21-Jul-19	time		11.1	21.0			32.1	44.40	44.40	5 / 1								
reaction time	0.184	interval			9.9			11.1	12.3		# of strides		11.10	9.90	11.10	12.30	21.00	23.40	2.40
		velocity		9.01	10.10			9.01	8.13	9.01	163.7	9.01	10.10	9.01	8.13	9.52	8.55		
Deadmon, Bryce (USA) (1997)																			
FINAL - 2023 London Athletics Meet (London, GBR)																			
date	23-Jul-23	time	6.03	10.97	15.97	21.15	26.70	32.40	38.17	44.40	44.40	4 / 2							
reaction time	0.160	interval	4.94	5.00	5.18	5.55	5.70	5.77	6.23		# of strides		10.97	10.18	11.25	12.00	21.15	23.25	2.10
		velocity	8.29	10.12	10.00	9.65	9.01	8.77	8.67	8.03	9.01	169.0	9.12	9.82	8.89	8.33	9.46	8.60	
Freeman, Ron (USA) (1947)																			
FINAL - 1968 Olympic Games (Mexico City, MEX) (<i>Altitude</i>)																			
date	18-Oct-68	time			21.6			33.0	44.4	44.41	1 / 3								
reaction time		interval						11.40	11.40	PB	# of strides		21.60	11.40	11.40	21.60	22.80	1.20	
		velocity			9.26			8.77	8.77	9.01		9.26	8.77	8.77	9.26	8.77	9.26	8.77	
Black, Roger (GBR) (1966)																			
FINAL - 1996 Olympic Games (Atlanta, GA)																			
date	29-Jul-96	time			21.36			32.3	44.41	44.41	3 / 2								
reaction time	0.205	interval						10.94	12.11		# of strides		21.36	10.94	12.11	21.36	23.05	1.69	
		velocity			9.36			9.14	8.26	9.01		9.36	9.14	8.26	9.36	8.68			
Gardiner, Steven (BAH) (1995)																			
FINAL - 2017 IAAF World Championships (London, GBR)																			
date	08-Aug-17	time	6.15	11.06	15.98	21.05	26.38	31.99	37.94	44.41	44.41	4 / 2							
reaction time	0.188	interval	4.91	4.92	5.07	5.33	5.61	5.95	6.47		# of strides		11.06	9.99	10.94	12.42	21.05	23.36	2.31
		velocity	8.13	10.18	10.16	9.86	9.38	8.91	8.40	7.73	9.01	162.2	9.04	10.01	9.14	8.05	9.50	8.56	
Cedenio, Machel (TTO) (1995)																			
Semi-Final 3 - 2019 IAAF World Championships (Doha, QAT)																			
date	02-Oct-19	time	6.05	10.84	15.76	20.98	26.45	32.17	38.07	44.41	44.41	7 / 1							
reaction time	0.239	interval	4.79	4.92	5.22	5.47	5.72	5.90	6.34		# of strides		10.84	10.14	11.19	12.24	20.98	23.43	2.45
		velocity	8.26	10.44	10.16	9.58	9.14	8.74	8.47	7.89	9.01	166.2	9.23	9.86	8.94	8.17	9.53	8.54	
Cherry, Michael (USA) (1995)																			
FINAL - 2021 Weltklasse (Zürich, SUI)																			
date	09-Sep-21	time	6.0	10.8	15.9	21.1	26.5	32.1	38.0	44.41	44.41	4 / 1							
reaction time	0.179	interval	4.80	5.10	5.20	5.40	5.60	5.90	6.41		# of strides		10.80	10.30	11.00	12.31	21.10	23.31	2.21
		velocity	8.33	10.42	9.80	9.62	9.26	8.93	8.47	7.80	9.01	158.0	9.26	9.71	9.09	8.12	9.48	8.58	
Norman, Michael (USA) (1997)																			
FINAL - 2024 USA Olympic Trials (Eugene, OR)																			
date	24-Jun-24	time		10.82	20.90			32.15	44.41	44.41	5 / 2								
reaction time		interval			10.08			11.25	12.26		# of strides		10.82	10.08	11.25	12.26	20.90	23.51	2.61
		velocity		9.24	9.92			8.89	8.16	9.01	176.0	9.24	9.92	8.89	8.16	9.57	8.51		
Ogazi, Samuel (NGR) (2006)																			
Semi-Final 3 - 2024 Olympic Games (Paris, FRA)																			
date	06-Aug-24	time	6.20	10.99	15.90	21.09	26.62	32.29	38.16	44.41	44.41	5 / 3							
reaction time	0.195	interval	4.79	4.91	5.19	5.53	5.67	5.87	6.25	PB	# of strides		10.99	10.10	11.20	12.12	21.09	23.32	2.23
		velocity	8.06	10.44	10.18	9.63	9.04	8.82	8.52	8.00	9.01	160.0	9.10	9.90	8.93	8.25	9.48	8.58	
Brew, Derrick (USA) (1977)																			
FINAL - 2004 Olympic Games (Athens, GRE)																			
date	23-Aug-04	time			21.5			32.4	44.4	44.42	3 / 3								
reaction time	0.262	interval						10.9	12.0		# of strides		21.50	10.90	12.00	21.50	22.90	1.40	
		velocity			9.30			9.17	8.33	9.00		4.65	9.17	8.33	9.30	8.73			
James, Kirani (GRN) (1992)																			

																	Omega Timing (2021) - diamond league race analysis						
FINAL - 2021 Weltklasse (Zürich, SUI)																							
date	time	6.1	10.8	15.8	20.9	26.4	32.1	38.1	44.2	44.42	5 / 2												
reaction time	interval	velocity	8.20	10.64	10.00	9.80	9.09	8.77	8.33	7.91	9.00	# of strides	10.80	10.10	11.20	12.32	20.90	23.52	2.62				
velocity			8.20	10.64	10.00	9.80	9.09	8.77	8.33	7.91	9.00	161.2	9.26	9.90	8.93	8.12	9.57	8.50					
Hall, Quincy (USA) (1998)																							
Semi-Final 1 - 2024 USA Olympic Trials (Eugene, OR)																							
date	time				21.61				32.74			44.42	6 / 1										
reaction time	interval	velocity	8.85	9.70	10.31	11.13	11.68	8.56	9.00	158.5	# of strides	11.30	10.31	11.13	11.68	21.61	22.81	1.20					
velocity			8.85	9.70	10.31	11.13	11.68	8.56	9.00	158.5	158.5	8.85	9.70	8.98	8.56	9.25	8.77						
Bailey, Chris (USA) (2000)																							
FINAL - 2024 USA Olympic Trials (Eugene, OR)																							
date	time				21.83				32.70			44.42	9 / 3										
reaction time	interval	velocity	8.82	9.53	10.49	10.87	11.72	8.53	9.00	161.2	# of strides	11.34	10.49	10.87	11.72	21.83	22.59	0.76					
velocity			8.82	9.53	10.49	10.87	11.72	8.53	9.00	161.2	161.2	8.82	9.53	9.20	8.53	9.16	8.85						
Harrison, Alvin (USA) (1974)																							
Semi-Final 1 - 1996 USA Olympic Trials (Atlanta, GA)																							
date	time				21.82				32.74			44.43	3 / 1										
reaction time	interval	velocity	8.78	9.59	10.43	10.92	5.60	6.09	9.00	161.2	# of strides	11.39	10.43	10.92	11.69	21.82	22.61	0.79					
velocity			8.78	9.59	10.43	10.92	5.60	6.09	9.00	161.2	161.2	8.78	9.59	9.16	8.55	9.17	8.85						
Borlée, Jonathan (BEL) (1988)																							
Heat 3 - 2012 Olympic Games (London, GBR)																							
date	time				21.20				44.43			44.43	6 / 1										
reaction time	interval	velocity									# of strides					21.20	23.23	2.03					
velocity											171.2	171.2				9.43	8.61						
Dedewo, Paul (USA) (1991)																							
FINAL - 2018 Müller Anniversary Games (London, GBR)																							
date	time				21.3				32.3			44.43	6 / 2										
reaction time	interval	velocity	8.93	9.90	10.1	11.0	12.1	8.24	9.00	166.7	# of strides	11.20	10.10	11.00	12.13	21.30	23.13	1.83					
velocity			8.93	9.90	10.1	11.0	12.1	8.24	9.00	166.7	166.7	8.93	9.90	9.09	8.24	9.39	8.65						
Hall, Quincy (USA) (1998)																							
Semi-Final 3 - 2023 World Athletics Championships (Budapest, HUN)																							
date	time	6.22	11.22	16.28	21.51	26.86	32.44	38.22	44.43	44.43	7 / 1												
reaction time	interval	velocity	8.04	10.00	9.88	9.56	9.35	8.96	8.65	8.05	9.00	# of strides	11.22	10.29	10.93	11.99	21.51	22.92	1.41				
velocity			8.04	10.00	9.88	9.56	9.35	8.96	8.65	8.05	9.00	161.0	8.91	9.72	9.15	8.34	9.30	8.73					
Kebinatshipi, Collen (BOT) (2004)																							
Semi-Final 1 - 2024 Olympic Games (Paris, FRA)																							
date	time	6.12	11.16	16.38	21.70	27.08	32.75	38.53	44.43	44.43	4 / 3												
reaction time	interval	velocity	8.17	9.92	9.58	9.40	9.29	8.82	8.65	8.47	9.00	# of strides	11.16	10.54	11.05	11.68	21.70	22.73	1.03				
velocity			8.17	9.92	9.58	9.40	9.29	8.82	8.65	8.47	9.00	185.0	8.96	9.49	9.05	8.56	9.22	8.80					
Ndori, Bayapo (BOT) (1999)																							
Semi-Final 2 - 2024 Olympic Games (Paris, FRA)																							
date	time	6.09	10.99	16.02	21.19	26.55	32.20	38.13	44.43	44.43	7 / 4												
reaction time	interval	velocity	8.21	10.20	9.94	9.67	9.33	8.85	8.43	7.94	9.00	# of strides	10.99	10.20	11.01	12.23	21.19	23.24	2.05				
velocity			8.21	10.20	9.94	9.67	9.33	8.85	8.43	7.94	9.00	175.5	9.10	9.80	9.08	8.18	9.44	8.61					
Smith, John (USA) (1950)																							
FINAL - 1972 USA Olympic Trials (Eugene, OR)																							
date	time				21.2				44.3			44.3	3 / 2										
reaction time	interval	velocity									# of strides					21.20	23.10	1.90					
velocity											8.66	9.03				9.43	8.66						
Hall, Quincy (USA) (1998)																							
FINAL - 2023 Prefontaine Classic (Eugene, OR)																							
date	time	6.25	11.25	16.36	21.64	26.95	32.41	38.17	44.44	44.44	4 / 2												
reaction time	interval	velocity	8.00	10.00	9.78	9.47	9.42	9.16	8.68	7.97	9.00	# of strides	11.25	10.39	10.77	12.03	21.64	22.80	1.16				
velocity			8.00	10.00	9.78	9.47	9.42	9.16	8.68	7.97	9.00	160.0	8.89	9.62	9.29	8.31	9.24	8.77					
Deadmon, Bryce (USA) (1997)																							
Semi-Final 2 - 2024 USA Olympic Trials (Eugene, OR)																							
date	time				21.10				32.41			44.44	5 / 1										
reaction time	interval	velocity	9.22	9.76	10.25	11.31	12.03	8.31	9.00	161.2	# of strides	10.85	10.25	11.31	12.03	21.10	23.34	2.24					
velocity			9.22	9.76	10.25	11.31	12.03	8.31	9.00	161.2	161.2	9.22	9.76	8.84	8.31	9.48	8.57						
Brown, Chris (BAH) (1978)																							
FINAL - 2007 IAAF World Championships (Osaka, JPN)																							
date	time	5.93	10.66	15.53	20.74	26.14	31.81	37.88	44.45	44.45	8 / 4												
reaction time	interval	velocity	8.43	10.57	10.27	9.60	9.26	8.82	8.24	7.61	9.00	# of strides	10.66	10.08	11.07	12.64	20.74	23.71	2.97				
velocity			8.43	10.57	10.27	9.60	9.26	8.82	8.24	7.61	9.00	186.2	9.38	9.92	9.03	7.91	9.64	8.44					
van Niekerk, Wayde (RSA) (1992)																							
Semi-Final 2 - 2016 Olympic Games (Rio de Janeiro, BRA)																							
date	time				21.09				32.36			44.45	3 / 2										
reaction time	interval	velocity	9.19	9.79	10.21	11.27	12.09	8.87	8.27	9.00	# of strides	10.88	10.21	11.27	12.09	21.09	23.36	2.27					
velocity			9.19	9.79	10.21	11.27	12.09	8.87	8.27	9.00	161.2	161.2	9.19	9.79	8.87	8.27	9.48	8.56					
Taplin, Bralon (GRN) (1992)																							
FINAL - 2016 Olympic Games (Rio de Janeiro, BRA)																							
date	time	6.16	11.08	16.07	21.15	26.44	31.99	37.87	44.45	44.45	4 / 7												
reaction time	interval	velocity	8.00	9.00	9.58	9.29	8.87	8.27	7.61	7.00	# of strides	11.08	10.07	10.84	12.46	21.15	23.30	2.15					
velocity			8.00	9.00	9.58	9.29	8.87	8.27	7.61	7.00	161.2	161.2	11.08	10.07	10.84	12.46	21.15	23.30					

velocity		8.12	10.16	10.02	9.84	9.45	9.01	8.50	7.60	9.00	181.0	9.03	9.93	9.23	8.03	9.46	8.58		
Kebinatshipi, Collen (BOT) (2004)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
<i>Heat 2 - 2024 Olympic Games (Paris, FRA)</i>																			
date	04-Aug-24	time	6.09	11.04	16.15	21.51	27.00	32.69	38.46	44.45	44.45	2 / 3							
reaction time	0.155	interval	4.95	5.11	5.36	5.49	5.69	5.77	5.99		# of strides	11.04	10.47	11.18	11.76	21.51	22.94	1.43	
		velocity	8.21	10.10	9.78	9.33	9.11	8.79	8.67	8.35	9.00	185.2	9.06	9.55	8.94	8.50	9.30	8.72	
Santos, Luguelin (DOM) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
<i>FINAL - 2012 Olympic Games (London, GBR)</i>																			
date	06-Aug-12	time			21.4			32.2		44.5	44.46	7 / 2							
reaction time	0.185	interval					10.80		12.30		# of strides		21.40	10.80	12.30	21.40	23.10	1.70	
		velocity			9.35		9.26		8.13		9.00	186.5	4.67	9.26	8.13	9.35	8.66		
Al-Masrahi, Youssef (KSA) (1987)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
<i>FINAL - 2014 Asian Games (Incheon, KOR)</i>																			
date	28-Sep-14	time	6.15	11.01	16.08	21.22	26.64	32.37	38.16	44.46	44.46	1 / 1							
reaction time	0.166	interval	4.86	5.07	5.14	5.42	5.73	5.79	6.30		# of strides	11.01	10.21	11.15	12.09	21.22	23.24	2.02	
		velocity	8.13	10.29	9.86	9.73	9.23	8.73	8.64	7.94	9.00	9.08	9.79	8.97	8.27	9.43	8.61		
Kerley, Fred (USA) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
<i>FINAL - 2019 Memorial van Damme (Brussels, BEL)</i>																			
date	06-Sep-19	time	6.1	10.8	15.8	20.8	26.3	32.0	38.0	44.46	44.46	7 / 2							
reaction time	0.147	interval	4.7	5.0	5.0	5.5	5.7	6.0	12.5		# of strides	10.80	10.00	11.20	12.46	20.80	23.66	2.86	
		velocity	8.20	10.64	10.00	10.00	9.09	8.77	8.33	8.03	9.00	173.0	9.26	10.00	8.93	8.03	9.62	8.45	
Norwood, Vernon (USA) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
<i>FINAL - 2023 London Athletics Meet (London, GBR)</i>																			
date	23-Jul-23	time	6.11	11.04	16.11	21.31	26.72	32.35	38.15	44.46	44.46	3 / 3							
reaction time	0.161	interval	4.93	5.07	5.20	5.41	5.63	5.80	6.31		# of strides	11.04	10.27	11.04	12.11	21.31	23.15	1.84	
		velocity	8.18	10.14	9.86	9.62	9.24	8.88	8.62	7.92	9.00	175.0	9.06	9.74	9.06	8.26	9.39	8.64	
Richardson, Mark (GBR) (1972)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
<i>FINAL - 1997 IAAF World Championships (Athens, GRE)</i>																			
date	05-Aug-97	time	5.91	10.89	16.09	21.33	26.71	32.25	37.97	44.23	44.47	5 / 4							
reaction time	0.245	interval	4.98	5.20	5.24	5.38	5.54	5.72	6.26		# of strides	10.89	10.44	10.92	11.98	21.33	22.90	1.57	
		velocity	8.46	10.04	9.62	9.54	9.29	9.03	8.74	7.99	8.99	9.18	9.58	9.16	8.35	9.38	8.73		
London, Wil (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
<i>FINAL - 2017 USATF National Championships (Sacramento, CA)</i>																			
date	24-Jun-17	time		11.41		21.82		32.67		44.47	44.47	1 / 3							
reaction time		interval		10.41		10.85		11.80		11.80	PB	# of strides	11.41	10.41	10.85	11.80	21.82	22.65	0.83
		velocity		8.76		9.61		9.22		8.47	8.99	8.76	9.61	9.22	8.47	9.17	8.83		
Deadmon, Bryce (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
<i>FINAL - 2022 Weltklasse (Zürich, SUI)</i>																			
date	08-Sep-22	time	6.16	11.20	16.35	21.61	27.04	32.66	38.42	44.47	44.47	3 / 2							
reaction time	0.135	interval	5.04	5.15	5.26	5.43	5.62	5.76	6.05		# of strides	11.20	10.41	11.05	11.81	21.61	22.86	1.25	
		velocity	8.12	9.92	9.71	9.51	9.21	8.90	8.68	8.26	8.99	8.93	9.61	9.05	8.47	9.25	8.75		
Norwood, Vernon (USA) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
<i>FINAL - 2024 USA Olympic Trials (Eugene, OR)</i>																			
date	24-Jun-24	time		11.40		21.91		33.03		44.47	44.47	7 / 4							
reaction time		interval		10.51		11.12		11.44		11.44		# of strides	11.40	10.51	11.12	11.44	21.91	22.56	0.65
		velocity		8.77		9.51		8.99		8.74	8.99	8.77	9.51	8.99	8.74	9.13	8.87		
Haroun, Abdalelah (QAT) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
<i>FINAL - 2017 IAAF World Championships (London, GBR)</i>																			
date	08-Aug-17	time	6.17	11.24	16.35	21.62	27.06	32.66	38.45	44.48	44.48	3 / 3							
reaction time	0.190	interval	5.07	5.11	5.27	5.44	5.60	5.79	6.03		# of strides	11.24	10.38	11.04	11.82	21.62	22.86	1.24	
		velocity	8.10	9.86	9.78	9.49	9.19	8.93	8.64	8.29	8.99	167.4	8.90	9.63	9.06	8.46	9.25	8.75	
James, Kirani (GRN) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
<i>FINAL - 2022 World Athletics Championships (Eugene, OR)</i>																			
date	22-Jul-22	time		10.81		20.95		31.98		44.48	44.48	3 / 2							
reaction time	0.140	interval		10.14		11.03		12.50		12.50		# of strides	10.81	10.14	11.03	12.50	20.95	23.53	2.58
		velocity		9.25		9.86		9.07		8.00	8.99	162.5	9.25	9.86	9.07	8.00	9.55	8.50	
Dobson, Charles (GBR) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
<i>Semi-Final 1 - 2024 Olympic Games (Paris, FRA)</i>																			
date	06-Aug-24	time	6.00	10.97	16.10	21.38	26.80	32.47	38.35	44.48	44.48	8 / 4							
reaction time	0.143	interval	4.97	5.13	5.28	5.42	5.67	5.88	6.13		# of strides	10.97	10.41	11.09	12.01	21.38	23.10	1.72	
		velocity	8.33	10.06	9.75	9.47	9.23	8.82	8.50	8.16	8.99	165.0	9.12	9.61	9.02	8.33	9.35	8.66	
McQuay, Tony (USA) (1990)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
<i>FINAL - 2012 USA Olympic Trials (Eugene, OR)</i>																			
date	24-Jun-12	time			21.6			32.4		44.49	44.49	5 / 2							
reaction time	0.206	interval					10.80		12.09		# of strides		21.60	10.80	12.09	21.60	22.89	1.29	
		velocity			9.26		9.26		8.27		8.99	4.63	9.26	8.27	9.26	9.26	8.74		
Dobson, Charles (GBR) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
<i>FINAL - 2024 Memorial van Damme (Brussels, BEL)</i>																			
date	13-Sep-24	time	6.08	11.11	16.31	21.64	27.17	32.85	38.60	44.49	44.49	7 / 1							
reaction time	0.130	interval	5.03	5.20	5.33	5.53	5.68	5.75	5.89		# of strides	11.11	10.53	11.21	11.64	21.64	22.85	1.21	
		velocity	8.22	9.94	9.62	9.38	9.04	8.80	8.70	8.49	8.99	164.0	9.00	9.50	8.92	8.59	9.24	8.75	
Cameron, Bert (JAM) (1959)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		

WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation

															<i>Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988</i>		
Semi-Final 1 - 1988 Olympic Games (Seoul, KOR)	date	26-Sep-88	time	11.20	21.58	32.52	44.50	44.50		8 / 4							
reaction time	interval		velocity	8.93	9.63	9.14	8.35	8.99		# of strides	11.20	10.38	10.94	11.98	21.58	22.92	1.34
											8.93	9.63	9.14	8.35	9.27	8.73	
Young, Jerome (USA) (1976)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
															<i>Butler (2013) - IAAF world championships statistics handbook- moscow 2013</i>		
FINAL - 2003 IAAF World Championships (Paris, FRA)	date	26-Aug-03	time		21.4	32.1	44.50	44.50		6 / 4							
reaction time	interval	0.160	velocity		9.35	10.7	12.4	8.99		# of strides			10.70	12.40	21.40	23.10	1.70
						9.35	9.35	8.06					9.35	8.06	9.35	8.66	
Merritt, LaShawn (USA) (1986)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
															<i>Graubner (2009) - http://www.fgs.uni-halle.de</i>		
FINAL - 2008 IAAF World Athletic Final (Stuttgart, GER)	date	13-Sep-08	time	11.21	21.55	32.56	44.50	44.50		5 / 1							
reaction time	interval	0.144	velocity	8.92	9.67	10.34	11.01	11.94		# of strides	11.21	10.34	11.01	11.94	21.55	22.95	1.40
						9.67	9.08	8.38			8.92	9.67	9.08	8.38	9.28	8.71	
Nellum, Bryshon (USA) (1989)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
															<i>Lee (& Ferrara) (2017) - speedendurance.com/2017/07/13/400m-splits-from-usa-national-championships/</i>		
FINAL - 2017 USATF National Championships (Sacramento, CA)	date	24-Jun-17	time	11.09	21.15	32.31	44.50	44.50		7 / 4							
reaction time	interval		velocity	9.02	9.94	10.06	11.16	12.19		# of strides	11.09	10.06	11.16	12.19	21.15	23.35	2.20
						9.94	8.96	8.20			9.02	9.94	8.96	8.20	9.46	8.57	
James, Kirani (GRN) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
															<i>Omega Timing (2018) - diamond league race analysis</i>		
FINAL - 2018 Müller Anniversary Games (London, GBR)	date	21-Jul-18	time	11.0	21.0	32.2	44.50	44.50		7 / 3							
reaction time	interval	0.154	velocity	9.09	10.00	10.0	11.2	12.3		# of strides	11.00	10.00	11.20	12.30	21.00	23.50	2.50
						10.00	8.93	8.13			9.09	10.00	8.93	8.13	9.52	8.51	
Norwood, Vernon (USA) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
															<i>USATF and Karmarsh (2024) - USA Olympic trials results and race analysis</i>		
Semi-Final 2 - 2024 USA Olympic Trials (Eugene, OR)	date	23-Jun-24	time	10.78	21.05	32.23	44.50	44.50		7 / 2							
reaction time	interval		velocity	9.28	9.74	10.27	11.18	12.27		# of strides	10.78	10.27	11.18	12.27	21.05	23.45	2.40
						9.74	8.94	8.15			9.28	9.74	8.94	8.15	9.50	8.53	
Ogazi, Samuel (NGR) (2006)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
															<i>Paris 2024 Olympic Games - Results Book (2024)</i>		
Heat 4 - 2024 Olympic Games (Paris, FRA)	date	04-Aug-24	time	6.35	11.26	16.30	21.57	27.00	32.61	38.42	44.50	44.50					
reaction time	interval	0.223	velocity	7.87	10.18	9.92	9.49	9.21	8.91	8.61	8.22	8.99					
						9.92	9.49	9.21	8.91	8.61	8.22	8.99					
Smith, LaMont (USA) (1972)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
															<i>USATF Women's Sprint Development (1996)</i>		
Semi-Final 2 - 1996 USA Olympic Trials (Atlanta, GA)	date	17-Jun-96	time	11.42	21.48	33.00	38.54	44.51	44.51		5 / 1						
reaction time	interval		velocity	8.76	9.94	10.06	11.52	5.54	5.97	8.99							
						10.06	8.68	9.03	8.38		11.42	10.06	11.52	11.51	21.48	23.03	1.55
Young, Jerome (USA) (1976)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
															<i>Ritzdorf (1997) - biomechanical research project at the VI th world championships in athletics, Athens 1997</i>		
FINAL - 1997 IAAF World Championships (Athens, GRE)	date	05-Aug-97	time	6.16	11.16	16.24	21.32	26.72	32.20	38.06	44.32	44.51					
reaction time	interval	0.185	velocity	8.12	10.00	9.84	9.84	9.26	9.12	8.53	7.99	8.99					
						9.84	9.84	9.26	9.12	8.53	7.99	8.99					
Wariner, Jeremy (USA) (1984)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
															<i>Graubner (2009) - http://www.fgs.uni-halle.de</i>		
FINAL - 2008 IAAF World Athletic Final (Stuttgart, GER)	date	13-Sep-08	time	11.12	21.53	32.41	44.51	44.51		4 / 2							
reaction time	interval	0.175	velocity	8.99	9.61	10.41	10.88	12.10		# of strides	11.12	10.41	10.88	12.10	21.53	22.98	1.45
						10.41	10.88	12.10			8.99	9.61	9.19	8.26	9.29	8.70	
McQuay, Tony (USA) (1990)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
															<i>Lee (& Ferrara) (2017) - speedendurance.com/2017/07/13/400m-splits-from-usa-national-championships/</i>		
FINAL - 2017 USATF National Championships (Sacramento, CA)	date	24-Jun-17	time	11.04	21.04	32.04	44.51	44.51		2 / 5							
reaction time	interval		velocity	9.06	10.00	10.00	11.00	12.47		# of strides	11.04	10.00	11.00	12.47	21.04	23.47	2.43
						10.00	9.09	8.02			9.06	10.00	9.09	8.02	9.51	8.52	
Kerley, Fred (USA) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
															<i>Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Men's 400m</i>		
Semi-Final 1 - 2017 IAAF World Championships (London, GBR)	date	06-Aug-17	time	10.73	20.64	31.63	37.72	44.37	44.51		7 / 3						
reaction time	interval	0.137	velocity	9.32	10.09	10.99	6.09	6.65		# of strides	10.73	9.91	10.99	12.74	20.64	23.73	3.09
						10.99	6.09	6.65			8.99	9.32	10.09	9.10	7.85	9.69	8.43
Gardiner, Steven (BAH) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
															<i>Omega Timing (2019) - diamond league race analysis</i>		
FINAL - 2019 Herculis Meeting International d'Athlétisme (Monaco, MON)	date	12-Jul-19	time	11.2	21.4	32.6	44.51	44.51		5 / 1							
reaction time	interval	0.128	velocity	8.93	9.80	10.2	11.2	11.9		# of strides	11.20	10.20	11.20	11.91	21.40	23.11	1.71
						9.80	8.93	8.40			8.93	9.80	8.93	8.40	9.35	8.65	
James, Kirani (GRN) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
															<i>Omega Timing (2021) - diamond league race analysis</i>		
FINAL - 2021 Memorial van Damme (Brussels, BEL)	date	03-Sep-21	time	6.2	11.0	16.0	21.1	26.5	32.2	38.2	44.51	44.51					
reaction time	interval	0.159	velocity	8.06	10.42	10.00	9.80	9.26	8.77	8.33	7.92	8.99					
						10.00	9.80	9.26	8.77	8.33	7.92	8.99					
Hernández, Roberto (CUB) (1967)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
															<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>		
FINAL - 1992 Olympic Games (Barcelona, ESP)	date	05-Aug-92	time		21.2	32	44.6	44.52		2 / 5							
reaction time	interval		velocity			10.80	12.60			# of strides		21.20	10.80	12.60	21.20	23.40	2.20
						10.80	12.60					21.20	10.80	12.60	21.20	23.40	2.20

velocity	9.43	9.26	7.94	8.98	9.43	9.26	7.94	9.43	8.55
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Thomas, Iwan (GBR) (1974)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1997 IAAF World Championships (Athens, GRE)											<i>Ritzdorf (1997) - biomechanical research project at the VI th world championships in athletics, Athens 1997</i>								
date	05-Aug-97	time	5.72	10.74	15.68	20.84	26.24	31.92	37.90	44.36	44.52	2 / 6							
reaction time	0.165	interval	5.02	4.94	5.16	5.40	5.68	5.98	6.46	# of strides		10.74	10.10	11.08	12.44	20.84	23.52	2.68	
velocity	8.74	9.96	10.12	9.69	9.26	8.80	8.36	7.74	8.98	# of strides		9.31	9.90	9.03	8.04	9.60	8.50		
Gordon, Lalonde (TTO) (1988)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2012 Olympic Games (London, GBR)											<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>								
date	06-Aug-12	time	21.6		32.5		44.5		44.52	4 / 3									
reaction time	0.159	interval	10.90		12.00		PB		# of strides		21.60	10.90	12.00	21.60	22.90	1.30			
velocity	9.26		9.17		8.33		8.98		# of strides		160.7	4.63	9.17	8.33	9.26	8.73			
Santos, Luguelin (DOM) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2013 IAAF World Championships (Moscow, RUS)											<i>(2013) - www.trackandfieldnews.com/index.php?option=com_content&view=article&id=1698</i>								
date	13-Aug-13	time	11.6		22.0		32.7		44.5		44.52	7 / 3							
reaction time	0.350	interval	10.4		10.7		11.8		# of strides		11.60	10.40	10.70	11.80	22.00	22.50	0.50		
velocity	8.62		9.62		9.35		8.47		# of strides		8.62	9.62	9.35	8.47	9.09	8.89			
James, Kirani (GRN) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2023 World Athletics Championships (Budapest, HUN)											<i>Seiko Timing (2023) - world championship race analysis</i>								
date	24-Aug-23	time	11.13		21.34		32.18		44.52		44.52	4 / 5							
reaction time	0.133	interval	10.21		10.84		12.34		DQ		# of strides		11.13	10.21	10.84	12.34	21.34	23.18	1.84
velocity	8.98		9.79		9.23		8.10		# of strides		160.5	8.98	9.79	9.23	8.10	9.37	8.63		
Kamoga, Davis (UGA) (1968)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1996 Olympic Games (Atlanta, GA)											<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>								
date	29-Jul-96	time	21.76		32.5		44.53		44.53	2 / 3									
reaction time	0.264	interval	10.74		12.03		# of strides		# of strides		21.76	10.74	12.03	21.76	22.77	1.01			
velocity	9.19		9.31		8.31		8.98		# of strides		9.19	9.31	8.31	9.19	8.78				
Quow, Rennie (TTO) (1987)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 2 - 2009 IAAF World Championships (Berlin, GER)											<i>Graubner (2011) - biomechanical analysis of the sprint and hurdle events at the 2009 IAAF world championships in athletics</i>								
date	19-Aug-09	time	6.34	11.54	16.81	22.09	27.57	32.97	38.59	44.53	4 / 2								
reaction time	0.248	interval	5.20	5.27	5.28	5.48	5.40	5.62	5.94	PB	# of strides		11.54	10.55	10.88	11.56	22.09	22.44	0.35
velocity	7.89	9.62	9.49	9.47	9.12	9.26	8.90	8.42	8.98	# of strides		8.67	9.48	9.19	8.65	9.05	8.91		
Norman, Michael (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2019 Bauhaus Galan (Stockholm, SWE)											<i>Omega Timing (2019) - diamond league race analysis</i>								
date	30-May-19	time	11.0		21.8		32.6		44.53		44.53	5 / 1							
reaction time	0.158	interval	10.8		10.8		11.9		# of strides		11.00	10.80	10.80	11.93	21.80	22.73	0.93		
velocity	9.09		9.26		9.26		8.38		# of strides		9.09	9.26	9.26	8.38	9.17	8.80			
Hudson-Smith, Matthew (GBR) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2022 European Athletics Championships (Munich, GER)											<i>European Athletics (2022) - european athletics championships race analysis</i>								
date	17-Aug-22	time	11.06		21.40		32.36		44.53		44.53	4 / 1							
reaction time	0.213	interval	10.34		10.96		12.17		# of strides		11.06	10.34	10.96	12.17	21.40	23.13	1.73		
velocity	9.04		9.67		9.12		8.22		# of strides		165.0	9.04	9.67	9.12	8.22	9.35	8.65		
Holder, Reece (AUS) (2002)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 4 - 2024 Olympic Games (Paris, FRA)											<i>Paris 2024 Olympic Games - Results Book (2024)</i>								
date	04-Aug-24	time	6.07	10.86	15.76	20.88	26.28	31.99	38.05	44.53	6 / 3								
reaction time	0.144	interval	4.79	4.90	5.12	5.40	5.71	6.06	6.48	PB	# of strides		10.86	10.02	11.11	12.54	20.88	23.65	2.77
velocity	8.24	10.44	10.20	9.77	9.26	8.76	8.25	7.72	8.98	# of strides		171.0	9.21	9.98	9.00	7.97	9.58	8.46	
Dobson, Charles (GBR) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2024 Athletissima (Lausanne, SUI)											<i>Omega Timing (2024) - diamond league race analysis</i>								
date	22-Aug-24	time	6.04	10.98	16.03	21.31	26.76	32.46	38.31	44.53	4 / 5								
reaction time	0.147	interval	4.94	5.05	5.28	5.45	5.70	5.85	6.22	# of strides		10.98	10.33	11.15	12.07	21.31	23.22	1.91	
velocity	8.28	10.12	9.90	9.47	9.17	8.77	8.55	8.04	8.98	# of strides		9.11	9.68	8.97	8.29	9.39	8.61		
Matthews, Vince (USA) (1947)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1968 Pre-Olympic Test (Echo Summit, CA) (<i>Altitude</i>)											<i>Hymans (2015) - progression of IAAF world records - 2015 edition</i>								
date	31-Aug-68	time	21.3		44.4		44.4		44.4	1 / 1									
reaction time	interval	23.1		WR		# of strides		# of strides		illegal "brush" spikes		21.30		23.10		1.80			
velocity	9.39		8.66		9.01		9.01		9.01		9.01		9.39		8.66				
Mills, Curtis (USA) (1948)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1969 NCAA Championships (Knoxville, TN) (<i>yards</i>)											<i>Hymans (2015) - progression of IAAF world records - 2015 edition</i>								
date	21-Jun-69	time	21.6		44.4		44.4		44.4	1 / 1									
reaction time	interval	22.8		WRy (44.93)		# of strides		# of strides		21.60		22.80		1.20					
velocity	9.26		8.77		9.01		(44.7/440y)		(44.7/440y)		9.26		8.77						
Collett, Wayne (USA) (1949)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1972 UCLA Meet of Champions (Westwood, CA) (<i>yards</i>)											<i>Hymans (2015) - progression of IAAF world records - 2015 edition</i>								
date	15-Apr-72	time	21.3		44.4		44.4		44.4	7 / 2									
reaction time	interval	23.1		(44.7/440y)		# of strides		# of strides		21.30		23.10		1.80					
velocity	9.39		8.66		9.01		9.01		9.01		9.39		8.66						
Tiaco, Gabriel (CIV) (1963)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1984 Olympic Games (Los Angeles, CA)											<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>								
date	08-Aug-84	time	21.6		32.4		44.6		44.54	7 / 2									
reaction time	0.191	interval	10.80		12.20		PB		# of strides		21.60	10.80	12.20	21.60	23.00	1.40			
velocity	9.26		9.26		8.20		8.98		# of strides		9.26	9.26	8.20	9.26	8.70				
Kitur, Samson (KEN) (1966)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		

FINAL - 1993 IAAF World Championships (Stuttgart, GER)																	<i>Smith (1994) - 400m pace control</i>		
date	17-Aug-93	time							21.83	32.69	44.54	44.54	4 / 3						
reaction time		interval							10.86	11.85	11.85	# of strides	10.86	11.85	21.83	22.71	0.88		
		velocity							9.16	9.21	8.44	8.98	167.0	9.21	8.44	9.16	8.81		
Pettigrew, Antonio (USA) (1967)																	<i>Ferro (2001) - biomechanical analysis of the 7th world championships in athletics seville 1999</i>		
date	26-Aug-99	time	6.09	11.00	16.02	21.19	26.57	31.15	38.05	44.54	44.54	3 / 5							
reaction time	0.284	interval									DV	# of strides	11.00	10.19	9.96	13.39	21.19		
		velocity	8.21	10.18	9.96	9.67	9.29	10.92	7.25	7.70	8.98	167.0	9.09	9.81	10.04	7.47	9.44	8.57	
Borlée, Jonathan (BEL) (1988)																	<i>(2013) - www.trackandfieldnews.com/index.php?option=com_content&view=article&id=1698</i>		
date	13-Aug-13	time		11.1		21.4		32.4		44.5	44.54	8 / 4							
reaction time	0.224	interval				10.3		11.0		12.1	# of strides	11.10	10.30	11.00	12.10	21.40	23.10		
		velocity		9.01		9.71		9.09		8.26	8.98	167.0	9.01	9.71	9.09	8.26	9.35	8.66	
Yousif, Rabah (GBR) (1986)																	<i>Yamamoto (2015) - race analysis of 15th World Championships 400m - focusing on men's semis and women's prelims</i>		
date	24-Aug-15	time	6.18	11.32	16.45	21.75	27.14	32.68	38.51	44.54	44.54	4 / 3							
reaction time	0.142	interval									PB	# of strides	11.32	10.43	10.93	11.86	21.75		
		velocity	8.09	9.73	9.75	9.43	9.28	9.03	8.58	8.29	8.98	162.5	8.83	9.59	9.15	8.43	9.20	8.78	
Thebe, Baboloki (BOT) (1997)																	<i>Omega Timing (2018) - diamond league race analysis</i>		
date	21-Jul-18	time		11.6		21.9		32.8		44.54	44.54	9 / 4							
reaction time	0.165	interval				10.3		10.9		11.7	# of strides	11.60	10.30	10.90	11.74	21.90	22.64		
		velocity		8.62		9.71		9.17		8.52	8.98	174.5	8.62	9.71	9.17	8.52	9.13	8.83	
James, Kirani (GRN) (1992)																	<i>Omega Timing (2022) - diamond league race analysis</i>		
date	09-Jun-22	time	6.19	11.13	16.24	21.49	26.88	32.54	38.41	44.54	44.54	5 / 1							
reaction time	0.151	interval									# of strides	11.13	10.36	11.05	12.00	21.49	23.05		
		velocity	8.08	10.12	9.78	9.52	9.28	8.83	8.52	8.16	8.98	167.0	8.98	9.65	9.05	8.33	9.31	8.68	
Clark, Darren (AUS) (1965)																	<i>Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988</i>		
date	28-Sep-88	time		11.22		21.61		32.55		44.55	44.55	5 / 4							
reaction time	0.176	interval				10.39		10.94		12.00	# of strides	11.22	10.39	10.94	12.00	21.61	22.94		
		velocity		8.91		9.62		9.14		8.33	8.98	167.0	8.91	9.62	9.14	8.33	9.25	8.72	
Gaye, Demish (JAM) (1993)																	<i>Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Men's 400m</i>		
date	06-Aug-17	time		10.88		20.84		31.88	37.88	44.39	44.55	6 / 2							
reaction time	0.157	interval				9.96		11.04	6.00	6.51	PB	# of strides	10.88	9.96	11.04	12.51	20.84		
		velocity		9.19		10.04		9.06	8.33	7.68	8.98	181.4	9.19	10.04	9.06	7.99	9.60	8.49	
Zambrano, Anthony (COL) (1998)																	<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>		
date	02-Oct-19	time	6.15	11.09	16.19	21.56	27.07	32.67	38.42	44.55	44.55	8 / 2							
reaction time	0.183	interval									NR PB	# of strides	11.09	10.47	11.11	11.88	21.56		
		velocity	8.13	10.12	9.80	9.31	9.07	8.93	8.70	8.16	8.98	177.2	9.02	9.55	9.00	8.42	9.28	8.70	
James, Kirani (GRN) (1992)																	<i>Omega Timing (2022) - diamond league race analysis</i>		
date	06-Aug-22	time	6.10	11.04	16.19	21.46	26.88	32.51	38.41	44.55	44.55	6 / 2							
reaction time	0.152	interval									# of strides	11.04	10.42	11.05	12.04	21.46	23.09		
		velocity	8.20	10.12	9.71	9.49	9.23	8.88	8.47	8.14	8.98	159.2	9.06	9.60	9.05	8.31	9.32	8.66	
Norwood, Vernon (USA) (1992)																	<i>Omega Timing (2024) - diamond league race analysis</i>		
date	22-Aug-24	time	6.10	10.94	15.98	21.20	26.57	32.18	38.03	44.55	44.55	7 / 6							
reaction time	0.173	interval									# of strides	10.94	10.26	10.98	12.37	21.20	23.35		
		velocity	8.20	10.33	9.92	9.58	9.31	8.91	8.55	7.67	8.98	167.0	9.14	9.75	9.11	8.08	9.43	8.57	
Richards, Jereem (TTO) (1994)																	<i>Omega Timing (2024) - diamond league race analysis</i>		
date	30-Aug-24	time	6.11	11.01	16.13	21.49	27.03	32.72	38.46	44.55	44.55	6 / 3							
reaction time	0.145	interval									# of strides	11.01	10.48	11.23	11.83	21.49	23.06		
		velocity	8.18	10.20	9.77	9.33	9.03	8.79	8.71	8.21	8.98	171.0	9.08	9.54	8.90	8.45	9.31	8.67	
Egbunike, Innocent (NGR) (1961)																	<i>Moravec (1990) - time analysis of the sprints - Rome 1987 Scientific Report (2nd ed)</i>		
date	03-Sep-87	time		10.91		21.14		32.32		44.56	44.56	2 / 2							
reaction time		interval				10.23		11.18		12.24	# of strides	10.91	10.23	11.18	12.24	21.14	23.42		
		velocity		9.17		9.78		8.94		8.17	8.98	167.0	9.17	9.78	8.94	8.17	9.46	8.54	
Samukonga, Muzala (ZAM) (2002)																	<i>Paris 2024 Olympic Games - Results Book (2024)</i>		
date	04-Aug-24	time	6.10	10.83	15.83	21.09	26.51	32.15	38.03	44.56	44.56	3 / 1							
reaction time	0.151	interval									# of strides	10.83	10.26	11.06	12.41	21.09	23.47		
		velocity	8.20	10.57	10.00	9.51	9.23	8.87	8.50	7.66	8.98	177.0	9.23	9.75	9.04	8.06	9.48	8.52	
Ndori, Bayapo (BOT) (1999)																	<i>Omega Timing (2024) - diamond league race analysis</i>		
date	30-Aug-24	time	6.08	11.05	16.18	21.48	26.94	32.58	38.36	44.56	44.56	7 / 4							
reaction time	0.153	interval									# of strides	11.05	10.43	11.10	11.98	21.48	23.08		
		velocity		9.17		9.51		8.94		8.17	8.98	167.0	11.05	10.43	11.10	11.98	21.48	23.08	

Semi-Final 1 - 1987 IAAF World Championship (Rome, ITA)										<i>Moravec (1990) - time analysis of the sprints - Rome 1987 Scientific Report (2nd ed)</i>									
date	01-Sep-87	time	11.09	21.27	32.28	44.60	44.60	3 / 2											
reaction time		interval		10.18	11.01	12.32		# of strides	11.09	10.18	11.01	12.32	21.27	23.33	2.06				
		velocity	9.02	9.82	9.08	8.12	8.97		9.02	9.82	9.08	8.12	9.40	8.57					
Morris, Ian (TTO) (1961)																			
Semi-Final 2 - 1988 Olympic Games (Seoul, KOR)										<i>Bruggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988</i>									
date	26-Sep-88	time	11.31	21.83	32.69	44.60	44.60	3 / 2											
reaction time	0.211	interval		10.52	10.86	11.91	PB	# of strides	11.31	10.52	10.86	11.91	21.83	22.77	0.94				
		velocity	8.84	9.51	9.21	8.40	8.97		8.84	9.51	9.21	8.40	9.16	8.78					
Wariner, Jeremy (USA) (1984)																			
FINAL - 2009 IAAF World Championships (Berlin, GER)										<i>Graubner (2011) - biomechanical analysis of the sprint and hurdle events at the 2009 IAAF world championships in athletics</i>									
date	21-Aug-09	time	6.01	10.98	16.13	21.41	26.86	32.34	38.11	44.60	44.60	6 / 2							
reaction time	0.162	interval		4.97	5.15	5.28	5.45	5.48	5.77	6.49		# of strides	10.98	10.43	10.93	12.26	21.41	23.19	1.78
		velocity	8.32	10.06	9.71	9.47	9.17	9.12	8.67	7.70	8.97		9.11	9.59	9.15	8.16	9.34	8.62	
James, Kirani (GRN) (1992)																			
FINAL - 2011 IAAF World Championships (Daegu, KOR)										<i>Butler (2013) - IAAF world athletic results 2008-2011 full results</i>									
date	30-Aug-11	time		21.6	32.5	44.6	44.60	5 / 1											
reaction time	0.137	interval			10.9	12.1	PB	# of strides				10.90	12.10	21.60	23.00	1.40			
		velocity		9.26	9.17	8.26	8.97	162.0				9.17	8.26	9.26	8.70				
Kerley, Fred (USA) (1995)																			
FINAL - 2021 Doha Diamond League (Doha, QAT)										<i>Omega Timing (2021) - diamond league race analysis</i>									
date	28-May-21	time	6.1	11.1	16.1	21.4	26.9	32.5	38.3	44.60	44.60	4 / 3							
reaction time	0.140	interval		5.00	5.00	5.30	5.50	5.60	5.80	6.30		# of strides	11.10	10.30	11.10	12.10	21.40	23.20	1.80
		velocity	8.20	10.00	10.00	9.43	9.09	8.93	8.62	7.94	8.97		9.01	9.71	9.01	8.26	9.35	8.62	
Hall, Quincy (USA) (1998)																			
Heat 1 - 2024 USA Olympic Trials (Eugene, OR)										<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>									
date	21-Jun-24	time		11.18	21.40	32.50	44.60	44.60	7 / 1										
reaction time		interval			10.22	11.10	12.10		# of strides	11.18	10.22	11.10	12.10	21.40	23.20	1.80			
		velocity		8.94	9.78	9.01	8.26	8.97	158.0	8.94	9.78	9.01	8.26	9.35	8.62				
Neville, David (USA) (1984)																			
FINAL - 2008 USA Olympic Trials (Eugene, OR)										<i>USATF Women's Sprint Development with HPC (2008)</i>									
date	03-Jul-08	time	10.99	15.65	21.25	26.56	32.28	38.18	44.61	44.61	8 / 3								
reaction time		interval		4.66	5.60	5.31	5.72	5.90	6.43	PB	# of strides	10.99	10.26	11.03	12.33	21.25	23.36	2.11	
		velocity	9.10	10.73	8.93	9.42	8.74	8.47	7.78	8.97		9.10	9.75	9.07	8.11	9.41	8.56		
Hudson-Smith, Matthew (GBR) (1994)																			
FINAL - 2016 Olympic Games (Rio de Janeiro, BRA)										<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>									
date	14-Aug-16	time	6.20	11.19	16.25	21.53	26.98	32.50	38.28	44.61	44.61	7 / 8							
reaction time	0.138	interval		4.99	5.06	5.28	5.45	5.52	5.78	6.33		# of strides	11.19	10.34	10.97	12.11	21.53	23.08	1.55
		velocity	8.06	10.02	9.88	9.47	9.17	9.06	8.65	7.90	8.97		8.94	9.67	9.12	8.26	9.29	8.67	
Godwin, Elija (USA) (1999)																			
FINAL - 2021 South Eastern Conference Championships (College Station, TX)										<i>Vazel (2021) - https://twitter.com/pjvazel/status/1393829441172803591?s=21</i>									
date	15-May-21	time		10.6	20.4	31.5	44.61	44.61	4 / 3										
reaction time		interval			9.80	11.10	13.11	PB	# of strides	10.60	9.80	11.10	13.11	20.40	24.21	3.81			
		velocity		9.43	10.20	9.01	7.63	8.97	180.0	9.43	10.20	9.01	7.63	9.80	8.26				
James, Kirani (GRN) (1992)																			
FINAL - 2021 Doha Diamond League (Doha, QAT)										<i>Omega Timing (2021) - diamond league race analysis</i>									
date	28-May-21	time	6.2	11.1	16.2	21.5	26.9	32.5	38.4	44.61	44.61	6 / 4							
reaction time	0.159	interval		4.90	5.10	5.30	5.40	5.60	5.90	6.21		# of strides	11.10	10.40	11.00	12.11	21.50	23.11	1.61
		velocity	8.06	10.20	9.80	9.43	9.26	8.93	8.47	8.05	8.97		9.01	9.62	9.09	8.26	9.30	8.65	
Ndori, Bayapo (BOT) (1999)																			
FINAL - 2023 Kamila Skolimowska Memorial (Silesia, POL)										<i>Omega Timing (2023) - diamond league race analysis</i>									
date	16-Jul-23	time	6.12	11.12	16.21	21.41	26.89	32.61	38.49	44.61	44.61	2 / 2							
reaction time	0.162	interval		5.00	5.09	5.20	5.48	5.72	5.88	6.12	=PB	# of strides	11.12	10.29	11.20	12.00	21.41	23.20	1.79
		velocity	8.17	10.00	9.82	9.62	9.12	8.74	8.50	8.17	8.97		8.99	9.72	8.93	8.33	9.34	8.62	
Norwood, Vernon (USA) (1992)																			
FINAL - 2023 Prefontaine Classic (Eugene, OR)										<i>Omega Timing (2023) - diamond league race analysis</i>									
date	16-Sep-23	time	6.12	11.05	16.18	21.54	26.94	32.54	38.31	44.61	44.61	7 / 3							
reaction time	0.164	interval		4.93	5.13	5.36	5.40	5.60	5.77	6.30		# of strides	11.05	10.49	11.00	12.07	21.54	23.07	1.53
		velocity	8.17	10.14	9.75	9.33	9.26	8.93	8.67	7.94	8.97		9.05	9.53	9.09	8.29	9.29	8.67	
Deadmon, Bryce (USA) (1997)																			
FINAL - 2024 USA Olympic Trials (Eugene, OR)										<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>									
date	24-Jun-24	time		11.04	21.58	32.78	44.61	44.61	6 / 5										
reaction time		interval			10.54	11.20	11.83		# of strides	11.04	10.54	11.20	11.83	21.58	23.03	1.45			
		velocity		9.06	9.49	8.93	8.45	8.97	167.0	9.06	9.49	8.93	8.45	9.27	8.68				
Black, Roger (GBR) (1966)																			
FINAL - 1991 IAAF World Championships (Tokyo, JPN)										<i>Mochida (2008) - about the race pattern of the men's 400m in the world's top level</i>									
date	29-Aug-91	time		11.00	21.15	32.05	44.62	44.62	3 / 2										
reaction time		interval			10.15	10.90	12.57		# of strides	11.00	10.15	10.90	12.57	21.15	23.47	2.32			
		velocity		9.09	9.85	9.17	7.96	8.96	164.5	9.09	9.85	9.17	7.96	9.46	8.52				
Harrison, Alvin (USA) (1974)																			
FINAL - 1996 Olympic Games (Atlanta, GA)										<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>									
date	29-Jul-96	time		21.41	32.4	44.62	44.62	1 / 4											
reaction time	0.237	interval			10.99	12.22		# of strides				21.41	10.99	12.22	21.41	23.21	1.80		

velocity		9.34	9.10	8.18	8.96	9.34	9.10	8.18	9.34	8.62										
Harrison, Calvin (USA) (1974)	50m 100m 150m 200m 250m 300m 350m 400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential										
FINAL - 2003 USATF National Championships (Palo Alto, CA)												<i>USATF Women's Sprint Development (2003)</i>								
date	21-Jun-03	time		21.65	32.55	38.36	44.62	44.62	2 / 2											
reaction time		interval			10.90	5.81	6.26	DV	# of strides		10.90	12.07	21.65	22.97	1.32					
		velocity		9.24	9.17	8.61	7.99	8.96			9.17	8.29	9.24	8.71						
Williamson, Darold (USA) (1983)	50m 100m 150m 200m 250m 300m 350m 400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential										
FINAL - 2005 USATF National Championships (Carson, CA)												<i>USATF Women's Sprint Development (2005)</i>								
date	25-Jun-05	time		11.61	16.72	21.90	27.14	32.58	38.41	44.62	44.62	4 / 2								
reaction time		interval			5.11	5.18	5.24	5.44	5.83	6.21		# of strides	11.61	10.29	10.68	12.04	21.90	22.72	0.82	
		velocity		8.61	9.78	9.65	9.54	9.19	8.58	8.05	8.96		8.61	9.72	9.36	8.31	9.13	8.80		
Samba, Abderrahman (QAT) (1995)	50m 100m 150m 200m 250m 300m 350m 400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential										
FINAL - 2018 Müller Anniversary Games (London, GBR)												<i>Omega Timing (2018) - diamond league race analysis</i>								
date	21-Jul-18	time		11.4	21.8	32.8	44.62	44.62	2 / 5											
reaction time	0.179	interval			10.4	11.0	11.8	PB	# of strides		11.40	10.40	11.00	11.82	21.80	22.82	1.02			
		velocity		8.77	9.62	9.09	8.46	8.96	179.7		8.77	9.62	9.09	8.46	9.17	8.76				
Everett, Danny (USA) (1966)	50m 100m 150m 200m 250m 300m 350m 400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential										
FINAL - 1991 IAAF World Championships (Tokyo, JPN)												<i>Mochida (2008) - about the race pattern of the men's 400m in the world's top level</i>								
date	29-Aug-91	time		11.18	21.52	32.33	44.63	44.63	5 / 3											
reaction time		interval			10.34	10.81	12.30		# of strides		11.18	10.34	10.81	12.30	21.52	23.11	1.59			
		velocity		8.94	9.67	9.25	8.13	8.96	172.2		8.94	9.67	9.25	8.13	9.29	8.65				
Harrison, Alvin (USA) (1974)	50m 100m 150m 200m 250m 300m 350m 400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential										
FINAL - 2000 USA Olympic Trials (Sacramento, CA)												<i>Hymans (2008) - history of the US olympic trials - track and field</i>								
date	19-Jul-00	time		11.4	21.7	32.5	44.6	44.63	4 / 2											
reaction time		interval			10.3	10.8	12.1		# of strides		11.40	10.30	10.80	12.10	21.70	22.90	1.20			
		velocity		8.77	9.71	9.26	8.26	8.96			8.77	9.71	9.26	8.26	9.22	8.73				
Merritt, LaShawn (USA) (1986)	50m 100m 150m 200m 250m 300m 350m 400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential										
FINAL - 2011 IAAF World Championships (Daegu, KOR)												<i>Butler (2013) - IAAF world athletic results 2008-2011 full results</i>								
date	30-Aug-11	time		21.5	32.5	44.63	44.63	4 / 2												
reaction time	0.263	interval			11.0	12.1			# of strides			11.00	12.13	21.50	23.13	1.63				
		velocity		9.30	9.09	8.24	8.96		172.7			9.09	8.24	9.30	8.65					
Makwala, Isaac (BOT) (1986)	50m 100m 150m 200m 250m 300m 350m 400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential										
FINAL - 2015 IAAF World Championships (Beijing, CHN)												<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>								
date	26-Aug-15	time		6.14	10.91	15.85	20.98	26.22	31.71	37.80	44.63	4 / 5								
reaction time	0.218	interval			4.77	4.94	5.13	5.24	5.49	6.09	6.83		# of strides	10.91	10.07	10.73	12.92	20.98	23.65	2.67
		velocity		8.14	10.48	10.12	9.75	9.54	9.11	8.21	7.32	8.96		9.17	9.93	9.32	7.74	9.53	8.46	
Roberts, Gil (USA) (1989)	50m 100m 150m 200m 250m 300m 350m 400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential										
Heat 2 - 2017 USATF National Championships (Sacramento, CA)												<i>Lee (& Ferrara) (2017) - speedendurance.com/2017/07/13/400m-splits-from-usa-national-championships/</i>								
date	24-Jun-17	time		11.08	21.19	32.32	44.63	44.63	1 / 1											
reaction time		interval			10.11	11.13	12.31		# of strides		11.08	10.11	11.13	12.31	21.19	23.44	2.25			
		velocity		9.03	9.89	8.98	8.12	8.96			9.03	9.89	8.98	8.12	9.44	8.53				
Hudson-Smith, Matthew (GBR) (1994)	50m 100m 150m 200m 250m 300m 350m 400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential										
FINAL - 2018 Müller Anniversary Games (London, GBR)												<i>Omega Timing (2018) - diamond league race analysis</i>								
date	21-Jul-18	time		11.2	21.5	32.6	44.63	44.63	8 / 6											
reaction time	0.151	interval			10.3	11.1	12.0		# of strides		11.20	10.30	11.10	12.03	21.50	23.13	1.63			
		velocity		8.93	9.71	9.01	8.31	8.96	163.0		8.93	9.71	9.01	8.31	9.30	8.65				
Jones, Jonathan (BAR) (1999)	50m 100m 150m 200m 250m 300m 350m 400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential										
FINAL - 2019 Müller Anniversary Games (London, GBR)												<i>Omega Timing (2019) - diamond league race analysis</i>								
date	21-Jul-19	time		11.2	21.3	32.3	44.63	44.63	8 / 2											
reaction time	0.185	interval			10.1	11.0	12.3	NR	# of strides		11.20	10.10	11.00	12.33	21.30	23.33	2.03			
		velocity		8.93	9.90	9.09	8.11	8.96	174.2		8.93	9.90	9.09	8.11	9.39	8.57				
James, Kirani (GRN) (1992)	50m 100m 150m 200m 250m 300m 350m 400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential										
FINAL - 2021 Bauhaus Galan (Stockholm, SWE)												<i>Omega Timing (2021) - diamond league race analysis</i>								
date	04-Jul-21	time		6.1	10.9	15.9	21.0	26.4	32.2	38.2	44.63	5 / 1								
reaction time	0.158	interval			4.80	5.00	5.10	5.40	5.80	6.00	6.43		# of strides	10.90	10.10	11.20	12.43	21.00	23.63	2.63
		velocity		8.20	10.42	10.00	9.80	9.26	8.62	8.33	7.78	8.96		161.0	9.17	9.90	8.93	8.05	9.52	8.46
James, Kirani (GRN) (1992)	50m 100m 150m 200m 250m 300m 350m 400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential										
FINAL - 2024 Memorial van damme (Brussels, BEL)												<i>Omega Timing (2024) - diamond league race analysis</i>								
date	13-Sep-24	time		6.13	10.93	15.99	21.27	26.74	32.45	38.38	44.63	4 / 2								
reaction time	0.140	interval			4.80	5.06	5.28	5.47	5.71	5.93	6.25		# of strides	10.93	10.34	11.18	12.18	21.27	23.36	2.09
		velocity		8.16	10.42	9.88	9.47	9.14	8.76	8.43	8.00	8.96		161.0	9.15	9.67	8.94	8.21	9.40	8.56
Smith, Tommie (USA) (1944)	50m 100m 150m 200m 250m 300m 350m 400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential										
FINAL - 1967 San Jose State Invitational (San Jose, CA) (yards)												<i>Drake (1967) - der schnellste sprint der geschichte</i>								
date	20-May-67	time		11.0	21.6	33.3	44.5	44.5	1 / 1											
reaction time		interval			10.6	11.7	11.2	WR yards	# of strides		11.00	10.60	11.70	11.20	21.60	22.90	1.30			
		velocity		9.09	9.43	8.55	8.93	8.99	(44.8/440y)		9.09	9.43	8.55	8.93	9.26	8.73				
Smith, John (USA) (1950)	50m 100m 150m 200m 250m 300m 350m 400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential										
FINAL - 1972 NCAA Championships (Eugene, OR)												<i>Robinson (1974) - modern techniques of track and field</i>								
date	03-Jun-72	time		22.1			44.5	44.5	5 / 1											
reaction time		interval					22.4		# of strides					22.10	22.40	0.30				
		velocity		9.05			8.93	8.99						9.05	8.93					
Cedenio, Machel (TTO) (1995)	50m 100m 150m 200m 250m 300m 350m 400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential										

velocity 8.17 10.06 9.67 9.24 9.14 8.98 8.73 8.04 8.96 173.2 9.02 9.45 9.06 8.37 9.23 8.70

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Hudson-Smith, Matthew (GBR) (1994)																			
FINAL - 2022 World Athletics Championships (Eugene, OR)																			
date	22-Jul-22	time	10.98		21.14		32.13		44.66	44.66	5 / 3								
reaction time	0.169	interval			10.16		10.99		12.53		# of strides	10.98	10.16	10.99	12.53	21.14	23.52	2.38	
		velocity	9.11		9.84		9.10		7.98	8.96		9.11	9.84	9.10	7.98	9.46	8.50		
Samukonga, Muzala (ZAM) (2002)																			
FINAL - 2022 Commonwealth Games (Birmingham, GBR)																			
date	07-Aug-22	time	6.3	11.3	16.5	21.9	27.3	32.9	38.5	44.66	44.66	8 / 1							
reaction time	0.195	interval		5.00	5.20	5.40	5.40	5.60	5.60	6.16	NR PB	# of strides	11.30	10.60	11.00	11.76	21.90	22.76	0.86
		velocity	7.94	10.00	9.62	9.26	9.26	8.93	8.93	8.12	8.96		172.7	8.85	9.43	9.09	8.50	9.13	8.79
Norwood, Vernon (USA) (1992)																			
FINAL - 2022 Weltklasse (Zürich, SUI)																			
date	08-Sep-22	time	6.11	10.97	16.01	21.21	26.53	32.18	38.13	44.66	44.66	6 / 3							
reaction time	0.199	interval		4.86	5.04	5.20	5.32	5.65	5.95	6.53		# of strides	10.97	10.24	10.97	12.48	21.21	23.45	2.24
		velocity	8.18	10.29	9.92	9.62	9.40	8.85	8.40	7.66	8.96		175.0	9.12	9.77	9.12	8.01	9.43	8.53
Wilson, Quincy (USA) (2008)																			
Heat 2 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time	11.15		21.33		32.66		44.66	44.66	7 / 1								
reaction time		interval			10.18		11.33		12.00	WU18B PB	# of strides	11.15	10.18	11.33	12.00	21.33	23.33	2.00	
		velocity	8.97		9.82		8.83		8.33	8.96		173.5	8.97	9.82	8.83	8.33	9.38	8.57	
Yahia Ibrahim, Ammar Ismail (QAT) (1)																			
Heat 2 - 2024 Olympic Games (Paris, FRA)																			
date	04-Aug-24	time	6.25	11.13	16.05	21.08	26.43	32.08	38.14	44.66	44.66	8 / 4							
reaction time	0.171	interval		4.88	4.92	5.03	5.35	5.65	6.06	6.52		# of strides	11.13	9.95	11.00	12.58	21.08	23.58	2.50
		velocity	8.00	10.25	10.16	9.94	9.35	8.85	8.25	7.67	8.96		176.0	8.98	10.05	9.09	7.95	9.49	8.48
Mills, Derek (USA) (1972)																			
FINAL - 1996 USA Olympic Trials (Atlanta, GA)																			
date	19-Jun-96	time	11.12		21.32		32.16	38.12	44.67	44.67	7 / 5								
reaction time		interval			10.20		10.84	5.96	6.55		# of strides	11.12	10.20	10.84	12.51	21.32	23.35	2.03	
		velocity	8.99		9.80		9.23	8.39	7.63	8.95		8.99	9.80	9.23	7.99	9.38	8.57		
Harris, Otis (USA) (1982)																			
FINAL - 2004 USA Olympic Trials (Sacramento, CA)																			
date	15-Jul-04	time	11.38		21.57	27.11	32.67	38.67	44.67	44.67	8 / 2								
reaction time		interval			10.19	5.54	5.56	6.00	6.00		# of strides	11.38	10.19	11.10	12.00	21.57	23.10	1.53	
		velocity	8.79		9.81	9.03	8.99	8.33	8.33	8.95		167.7	8.79	9.81	9.01	8.33	9.27	8.66	
Cherry, Michael (USA) (1995)																			
FINAL - 2017 USATF National Championships (Sacramento, CA)																			
date	24-Jun-17	time	11.08		21.28		32.33		44.67	44.67	5 / 6								
reaction time		interval			10.20		11.05		12.34	PB	# of strides	11.08	10.20	11.05	12.34	21.28	23.39	2.11	
		velocity	9.03		9.80		9.05		8.10	8.95		9.03	9.80	9.05	8.10	9.40	8.55		
Bloomfield, Akeem (JAM) (1997)																			
FINAL - 2019 Memorial van Damme (Brussels, BEL)																			
date	06-Sep-19	time	6.2	10.9	15.8	20.8	26.2	32.0	38.0	44.67	44.67	6 / 3							
reaction time	0.184	interval		4.7	4.9	5.0	5.4	5.8	6.0	12.7		# of strides	10.90	9.90	11.20	12.67	20.80	23.87	3.07
		velocity	8.06	10.64	10.20	10.00	9.26	8.62	8.33	7.89	8.95		164.0	9.17	10.10	8.93	7.89	9.62	8.38
Kebinatshipi, Collen (BOT) (2004)																			
FINAL - 2024 Herculis Meeting International d'Atlétisme (Monaco, MON)																			
date	12-Jul-24	time	6.15	11.02	16.21	21.61	27.21	32.83	38.62	44.67	44.67	8 / 4							
reaction time	0.166	interval		4.87	5.19	5.40	5.60	5.62	5.79	6.05	PB	# of strides	11.02	10.59	11.22	11.84	21.61	23.06	1.45
		velocity	8.13	10.27	9.63	9.26	8.93	8.90	8.64	8.26	8.95		185.5	9.07	9.44	8.91	8.45	9.25	8.67
Yousif, Rabah (GBR) (1986)																			
FINAL - 2015 IAAF World Championships (Beijing, CHN)																			
date	26-Aug-15	time	6.28	11.35	16.47	21.74	27.21	32.80	38.64	44.68	44.68	3 / 6							
reaction time	0.134	interval		5.07	5.12	5.27	5.47	5.59	5.84	6.04		# of strides	11.35	10.39	11.06	11.88	21.74	22.94	1.20
		velocity	7.96	9.86	9.77	9.49	9.14	8.94	8.56	8.28	8.95		8.81	9.62	9.04	8.42	9.20	8.72	
Deadmon, Bryce (USA) (1997)																			
FINAL - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL)																			
date	06-Aug-22	time	6.28	11.29	16.37	21.60	27.08	32.72	38.50	44.68	44.68	2 / 3							
reaction time	0.164	interval		5.01	5.08	5.23	5.48	5.64	5.78	6.18		# of strides	11.29	10.31	11.12	11.96	21.60	23.08	1.48
		velocity	7.96	9.98	9.84	9.56	9.12	8.87	8.65	8.09	8.95		157.0	8.86	9.70	8.99	8.36	9.26	8.67
Norwood, Vernon (USA) (1992)																			
FINAL - 2024 Bislett Games (Oslo, NOR)																			
date	30-May-24	time	6.22	11.20	16.32	21.64	27.12	32.79	38.51	44.68	44.68	3 / 3							
reaction time	0.167	interval		4.98	5.12	5.32	5.48	5.67	5.72	6.17		# of strides	11.20	10.44	11.15	11.89	21.64	23.04	1.40
		velocity	8.04	10.04	9.77	9.40	9.12	8.82	8.74	8.10	8.95		173.0	8.93	9.58	8.97	8.41	9.24	8.68
Hall, Quincy (USA) (1998)																			
FINAL - 2024 Bauhaus Galan (Stockholm, SWE)																			
date	02-Jun-24	time	6.35	11.42	16.50	21.73	27.24	32.89	38.62	44.68	44.68	5 / 1							
reaction time	0.211	interval		5.07	5.08	5.23	5.51	5.65	5.73	6.06		# of strides	11.42	10.31	11.16	11.79	21.73	22.95	1.22
		velocity	7.87	9.86	9.84	9.56	9.07	8.85	8.73	8.25	8.95		8.76	9.70	8.96	8.48	9.20	8.71	
Bailey, Sean (JAM) (1997)																			

Paris 2024 Olympic Games - Results Book (2024)																			
Heat 2 - 2024 Olympic Games (Paris, FRA)																			
date	time	6.21	11.15	16.14	21.31	26.70	32.36	38.32	44.68	44.68	5 / 5	11.15	10.16	11.05	12.32	21.31	23.37	2.06	
reaction time	interval	velocity	8.05	10.12	10.02	9.67	9.28	8.83	8.39	7.86	8.95	# of strides	175.5	8.97	9.84	9.05	8.12	9.39	8.56
Al-Malky, Mohamed (OMA) (1962) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
Semi-Final 2 - 1988 Olympic Games (Seoul, KOR) <i>Bruggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988</i>																			
date	time	11.35	21.78	32.75	44.69	44.69	5 / 3	11.35	10.43	10.97	11.94	21.78	22.91	1.13					
reaction time	interval	velocity	8.81	9.59	9.12	8.38	8.95	# of strides	8.81	9.59	9.12	8.38	9.18	8.73					
Brew, Derrick (USA) (1977) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2004 USA Olympic Trials (Sacramento, CA) <i>USATF Women's Sprint Development (2004)</i>																			
date	time	10.99	21.44	26.80	32.45	38.32	44.69	44.69	3 / 3	10.99	10.45	11.01	12.24	21.44	23.25	1.81			
reaction time	interval	velocity	9.10	9.57	9.33	8.85	8.52	7.85	8.95	177.0	9.10	9.57	9.08	8.17	9.33	8.60			
Wariner, Jeremy (USA) (1984) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
Semi-Final 1 - 2009 IAAF World Championships (Berlin, GER) <i>Graubner (2009) - biomechanical analyses at the 12th IAAF world championships</i>																			
date	time	11.11	21.63	32.48	44.69	44.69	4 / 1	11.11	10.52	10.85	12.21	21.63	23.06	1.43					
reaction time	interval	velocity	9.00	9.51	9.22	8.19	8.95	# of strides	9.00	9.51	9.22	8.19	9.25	8.67					
Allen, Nathon (JAM) (1995) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2017 NCAA Championships (Eugene, OR) <i>USTFCCCA (2017) - NCAA DI outdoor championship history</i>																			
date	time	20.8	44.7	44.69	6 / 2	20.80	23.90	3.10											
reaction time	interval	velocity	9.62	8.37	8.95	# of strides	165.2	9.62	8.37										
Hudson-Smith, Matthew (GBR) (1994) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
Heat 2 - 2023 World Athletics Championships (Budapest, HUN) <i>Seiko Timing (2023) - world championship race analysis</i>																			
date	time	11.16	21.26	32.36	44.69	44.69	3 / 2	11.16	10.10	11.10	12.33	21.26	23.43	2.17					
reaction time	interval	velocity	8.96	9.90	9.01	8.11	8.95	# of strides	165.0	8.96	9.90	9.01	8.11	9.41	8.54				
Samukonga, Muzala (ZAM) (2002) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2024 Memorial van damme (Brussels, BEL) <i>Omega Timing (2024) - diamond league race analysis</i>																			
date	time	6.16	10.92	15.92	21.25	26.85	32.62	38.54	44.69	44.69	6 / 3	10.92	10.33	11.37	12.07	21.25	23.44	2.19	
reaction time	interval	velocity	8.12	10.50	10.00	9.38	8.93	8.67	8.45	8.13	8.95	# of strides	177.7	9.16	9.68	8.80	8.29	9.41	8.53
Honz, Karl (FRG) (1951) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 1972 West German National Championships (Munich, FRG) <i>Vazel (2015) - Van Niekerk and Merritt were on for the record at 300m</i>																			
date	time	20.7	44.70	44.70	1 / 1	20.70	24.0	3.30											
reaction time	interval	velocity	9.66	8.33	8.95	# of strides	9.66	8.33											
Thomas, Iwan (GBR) (1974) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 1996 Olympic Games (Atlanta, GA) <i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																			
date	time	21.30	32.4	44.70	44.70	8 / 5	21.30	23.40	2.10										
reaction time	interval	velocity	9.39	9.01	8.13	8.95	# of strides	9.39	9.01	8.13	8.13	9.39	8.55						
Young, Jerome (USA) (1976) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2000 USA Olympic Trials (Sacramento, CA) <i>Hymans (2008) - history of the US olympic trials - track and field</i>																			
date	time	11.4	21.7	32.4	44.7	44.70	1 / 4	11.40	10.30	10.70	12.30	21.70	23.00	1.30					
reaction time	interval	velocity	8.77	9.71	9.35	8.13	8.95	# of strides	8.77	9.71	9.35	8.13	9.22	8.70					
Haughton, Gregory (JAM) (1973) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2000 Olympic Games (Sydney, AUS) <i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																			
date	time	10.9	21.2	32.1	44.7	44.70	8 / 3	10.90	10.30	10.90	12.60	21.20	23.50	2.30					
reaction time	interval	velocity	9.17	9.71	9.17	7.94	8.95	# of strides	9.17	9.71	9.17	7.94	9.43	8.51					
Williamson, Darold (USA) (1983) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2004 USA Olympic Trials (Sacramento, CA) <i>USATF Women's Sprint Development (2004)</i>																			
date	time	11.28	21.75	26.02	32.53	38.36	44.70	44.70	2 / 4	11.28	10.47	10.78	12.17	21.75	22.95	1.20			
reaction time	interval	velocity	8.87	9.55	11.71	7.68	8.58	7.89	8.95	# of strides	165.5	8.87	9.55	9.28	8.22	9.20	8.71		
Rock, Andrew (USA) (1982) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2005 USATF National Championships (Carson, CA) <i>USATF Women's Sprint Development (2005)</i>																			
date	time	16.47	21.74	27.06	32.62	38.53	44.70	44.70	7 / 3	16.47	10.88	12.08	21.74	22.96	1.22				
reaction time	interval	velocity	9.11	9.49	9.40	8.99	8.46	8.10	8.95	# of strides	9.19	8.28	9.20	8.71					
Gordon, Lalonde (TTO) (1988) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
Semi-Final 2 - 2015 IAAF World Championships (Beijing, CHN) <i>Yamamoto (2015) - race analysis of 15th World Championships 400m- focusing on men's semis and women's prelims</i>																			
date	time	6.24	11.19	16.17	21.45	26.94	32.45	38.36	44.70	44.70	3 / 4	11.19	10.26	11.00	12.25	21.45	23.25	1.80	
reaction time	interval	velocity	8.01	10.10	10.04	9.47	9.11	9.07	8.46	7.89	8.95	# of strides	160.7	8.94	9.75	9.09	8.16	9.32	8.60
Gardiner, Steven (BAH) (1995) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2023 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR) <i>Omega Timing (2023) - diamond league race analysis</i>																			
date	time	6.22	11.21	16.38	21.73	27.20	32.83	38.56	44.70	44.70	5 / 1	11.21	10.52	11.10	11.87	21.73	22.97	1.24	
reaction time	interval	velocity	4.99	5.17	5.35	5.47	5.63	5.73	6.14	8.95	# of strides	11.21	10.52	11.10	11.87	21.73	22.97	1.24	

															Seiko Timing (2023) - world championship race analysis				
Heat 6 - 2023 World Athletics Championships (Budapest, HUN)																			
date	time	11.05	21.19	32.32	44.72	44.72	8 / 1												
reaction time	interval	0.155	10.14	11.13	12.40	11.05	# of strides	11.05	10.14	11.13	12.40	21.19	23.53	2.34					
	velocity	9.05	9.86	8.98	8.06	8.94	172.5	9.05	9.86	8.98	8.06	9.44	8.50						
Merritt, LaShawn (USA) (1986)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2005 USATF National Championships (Carson, CA)																			
date	time	11.34	16.30	21.47	26.86	32.48	38.33	44.73	44.73	6 / 4									
reaction time	interval		4.96	5.17	5.39	5.62	5.85	6.40		# of strides	11.34	10.13	11.01	12.25	21.47	23.26	1.79		
	velocity	8.82	10.08	9.67	9.28	8.90	8.55	7.81	8.94		8.82	9.87	9.08	8.16	9.32	8.60			
Roberts, Gil (USA) (1989)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2016 USA Olympic Trials (Eugene, OR)																			
date	time		21.0		32.1		44.73	44.73	6 / 2										
reaction time	interval				11.10		12.63			# of strides		21.00	11.10	12.63	21.00	23.73	2.73		
	velocity		9.52		9.01		7.92	8.94			4.76	9.01	7.92	9.52	8.43				
Lendore, Deon (TTO) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2021 Bauhaus Galan (Stockholm, SWE)																			
date	time	6.3	11.3	16.2	21.2	26.6	32.2	38.2	44.73	8 / 2									
reaction time	interval	0.204	5.00	4.90	5.00	5.40	5.60	6.00	6.53		# of strides	11.30	9.90	11.00	12.53	21.20	23.53	2.33	
	velocity	7.94	10.00	10.20	10.00	9.26	8.93	8.33	7.66	8.94		8.85	10.10	9.09	7.98	9.43	8.50		
dos Santos, Alison (BRA) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2023 Kamila Skolimowska Memorial (Silesia, POL)																			
date	time	6.19	11.05	16.04	21.27	26.69	32.42	38.37	44.73	44.73	4 / 3								
reaction time	interval	0.165	4.86	4.99	5.23	5.42	5.73	5.95	6.36		# of strides	11.05	10.22	11.15	12.31	21.27	23.46	2.19	
	velocity	8.08	10.29	10.02	9.56	9.23	8.73	8.40	7.86	8.94		157.0	9.05	9.78	8.97	8.12	9.40	8.53	
Ogazi, Samuel (NGR) (2006)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2024 Olympic Games (Paris, FRA)																			
date	time	6.33	11.19	16.20	21.46	27.08	32.92	38.74	44.73	44.73	3 / 7								
reaction time	interval	0.225	4.86	5.01	5.26	5.62	5.84	5.82	5.99		# of strides	11.19	10.27	11.46	11.81	21.46	23.27	1.81	
	velocity	7.90	10.29	9.98	9.51	8.90	8.56	8.59	8.35	8.94		161.0	8.94	9.74	8.73	8.47	9.32	8.59	
Plummer, Adolph (USA) (1938)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1963 Western Athletic Conference Championships (Tempe, AZ) (yards)																			
date	time			21.6				44.6	44.6	/ 1									
reaction time	interval							23.0	=WR yards	# of strides					21.60	23.00	1.40		
	velocity			9.26				8.70	8.97	(44.9/440y)					9.26	8.70			
Egbunike, Innocent (NGR) (1961)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 2 - 1988 Olympic Games (Seoul, KOR)																			
date	time	11.11		21.44		32.79		44.74	44.74	4 / 4									
reaction time	interval	0.253		10.33		11.35		11.95		# of strides	11.11	10.33	11.35	11.95	21.44	23.30	1.86		
	velocity	9.00		9.68		8.81		8.37	8.94		9.00	9.68	8.81	8.37	9.33	8.58			
Wariner, Jeremy (USA) (1984)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2008 Olympic Games (Beijing, CHN)																			
date	time		20.9		31.6		44.7	44.74	44.74	7 / 2									
reaction time	interval	0.209			10.70		13.10			# of strides		20.90	10.70	13.10	20.90	23.80	2.90		
	velocity		9.57		9.35		7.63	8.94				9.57	9.35	7.63	9.57	8.40			
Bingham, Michael (GBR) (1983)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 1 - 2009 IAAF World Championships (Berlin, GER)																			
date	time	11.15		21.84		32.76		44.74	44.74	8 / 2									
reaction time	interval	0.173		10.69		10.92		11.98	PB	# of strides	11.15	10.69	10.92	11.98	21.84	22.90	1.06		
	velocity	8.97		9.35		9.16		8.35	8.94		8.97	9.35	9.16	8.35	9.16	8.73			
Borlée, Kevin (BEL) (1988)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 1 - 2015 IAAF World Championships (Beijing, CHN)																			
date	time	6.07	11.10	16.20	21.44	26.91	32.51	38.41	44.74	44.74	8 / 4								
reaction time	interval	0.158	5.03	5.10	5.24	5.47	5.60	5.90	6.33		# of strides	11.10	10.34	11.07	12.23	21.44	23.30	1.86	
	velocity	8.24	9.94	9.80	9.54	9.14	8.93	8.47	7.90	8.94		174.7	9.01	9.67	9.03	8.18	9.33	8.58	
Hudson-Smith, Matthew (GBR) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 2 - 2017 IAAF World Championships (London, GBR)																			
date	time	10.81		21.03		32.09	38.14	44.60	44.74	2 / 4									
reaction time	interval	0.142		10.22		11.06	6.05	6.46		# of strides	10.81	10.22	11.06	12.51	21.03	23.57	2.54		
	velocity		9.25	9.78		9.04	8.26	7.74	8.94		164.0	9.25	9.78	9.04	7.99	9.51	8.49		
James, Kirani (GRN) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 2 - 2022 World Athletics Championships (Eugene, OR)																			
date	time	10.99		21.35		32.64		44.74	44.74	3 / 1									
reaction time	interval	0.148		10.36		11.29		12.10		# of strides	10.99	10.36	11.29	12.10	21.35	23.39	2.04		
	velocity		9.10	9.65		8.86	8.26	8.94			160.0	9.10	9.65	8.86	8.26	9.37	8.55		
Nene, Zakhiti (RSA) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2022 Weltklasse (Zürich, SUI)																			
date	time	6.08	11.06	16.20	21.49	26.87	32.50	38.39	44.74	44.74	7 / 4								
reaction time	interval	0.137	4.98	5.14	5.29	5.38	5.63	5.89	6.35	PB	# of strides	11.06	10.43	11.01	12.24	21.49	23.25	1.76	
	velocity	8.22	10.04	9.73	9.45	9.29	8.88	8.49	7.87	8.94		177.0	9.04	9.59	9.08	8.17	9.31	8.60	
Nene, Zakhiti (RSA) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2023 Kamila Skolimowska Memorial (Silesia, POL)																			
date	time	6.07	10.93	15.98	21.29	26.72	32.37	38.23	44.74	44.74	9 / 4								
reaction time	interval	0.150	4.86	5.05	5.31	5.43	5.65	5.86	6.51	=PB	# of strides	10.93	10.36	11.08	12.37	21.29	23.45	2.16	

velocity	8.24	10.29	9.90	9.42	9.21	8.85	8.53	7.68	8.94	176.2	9.15	9.65	9.03	8.08	9.39	8.53
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	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Clark, Darren (AUS) (1965)																				
FINAL - 1984 Olympic Games (Los Angeles, CA)																				
date	08-Aug-84	time			21.2			32.3	44.8	44.75	5 / 4									
reaction time	0.269	interval						11.10	12.50	AJR	# of strides	21.20	11.10	12.50	21.20	23.60	2.40			
velocity				9.43				9.01	8.00	8.94		9.43	9.01	8.00	9.43	8.47				
Nix, Sunder (USA) (1961)																				
FINAL - 1984 Olympic Games (Los Angeles, CA)																				
date	08-Aug-84	time			21.6			32.5	44.8	44.75	6 / 5									
reaction time	0.243	interval						10.90	12.30		# of strides	21.60	10.90	12.30	21.60	23.20	1.60			
velocity				9.26				9.17	8.13	8.94		9.26	9.17	8.13	9.26	8.62				
Grindley, David (GBR) (1972)																				
FINAL - 1992 Olympic Games (Barcelona, ESP)																				
date	05-Aug-92	time			21.3			32.2	44.8	44.75	3 / 6									
reaction time		interval						10.90	12.60		# of strides	21.30	10.90	12.60	21.30	23.50	2.20			
velocity				9.39				9.17	7.94	8.94		9.39	9.17	7.94	9.39	8.51				
van Niekerk, Wayde (RSA) (1992)																				
Semi-Final 3 - 2022 World Athletics Championships (Eugene, OR)																				
date	20-Jul-22	time			20.97			32.35	44.75	44.75	4 / 2									
reaction time	0.168	interval						10.13	11.38	12.40	# of strides	10.84	10.13	11.38	12.40	20.97	23.78	2.81		
velocity				9.23				9.87	8.79	8.06	8.94	164.5	9.23	9.87	8.79	8.06	9.54	8.41		
Sito, Luca (ITA) (2003)																				
Semi-Final 1 - 2024 European Athletics Championships (Roma, ITA)																				
date	09-Jun-24	time			11.20			21.53	32.60	44.75	44.75	5 / 1								
reaction time	0.153	interval						10.33	11.07	12.15	NR PB	# of strides	11.20	10.33	11.07	12.15	21.53	23.22	1.69	
velocity				8.93				9.68	9.03	8.23	8.94	172.0	8.93	9.68	9.03	8.23	9.29	8.61		
Singhapurage, Aruna Dharshana (SR)																				
Semi-Final 2 - 2024 Olympic Games (Paris, FRA)																				
date	06-Aug-24	time	6.30	11.33	16.39	21.65	27.18	32.90	38.75	44.75	44.75	4 / 5								
reaction time	0.178	interval			5.03	5.06	5.26	5.53	5.72	5.85	6.00	DQ	# of strides	11.33	10.32	11.25	11.85	21.65	23.10	1.45
velocity				7.94	9.94	9.88	9.51	9.04	8.74	8.55	8.33	8.94	8.83	9.69	8.89	8.44	9.24	8.66		
Dobson, Charles (GBR) (1999)																				
FINAL - 2024 Golden Gala Pietro Mennea (Roma, ITA)																				
date	30-Aug-24	time	6.13	11.22	16.45	21.80	27.29	32.94	38.77	44.75	44.75	2 / 6								
reaction time	0.145	interval			5.09	5.23	5.35	5.49	5.65	5.83	5.98	# of strides	11.22	10.58	11.14	11.81	21.80	22.95	1.15	
velocity				8.16	9.82	9.56	9.35	9.11	8.85	8.58	8.36	8.94	8.91	9.45	8.98	8.47	9.17	8.71		
Simpson, Brandon (JAM) (1981)																				
FINAL - 2004 Olympic Games (Athens, GRE)																				
date	23-Aug-04	time			21.6			32.4	44.7	44.76	6 / 5									
reaction time	0.277	interval						10.8	12.3		# of strides	21.60	10.80	12.30	21.60	23.10	1.50			
velocity				9.26				9.26	8.13	8.94		4.63	9.26	8.13	9.26	8.66				
Merritt, LaShawn (USA) (1986)																				
Semi-Final 2 - 2008 USA Olympic Trials (Eugene, OR)																				
date	30-Jun-08	time			10.97	16.06	21.56	26.98	32.84	38.55	44.76	44.76	5 / 2							
reaction time		interval				5.09	5.50	5.42	5.86	5.71	6.21	# of strides	10.97	10.59	11.28	11.92	21.56	23.20	1.64	
velocity				9.12	9.82	9.09	9.23	8.53	8.76	8.05	8.94	9.12	9.44	8.87	8.39	9.28	8.62			
Zambrano, Anthony (COL) (1998)																				
FINAL - 2021 Golden Gala Pietro Mennea (Florence, ITA)																				
date	10-Jun-21	time	6.3	11.4	16.7	22.1	27.5	33.1	38.8	44.76	44.76	5 / 1								
reaction time	0.152	interval			5.10	5.30	5.40	5.40	5.60	5.70	5.96	# of strides	11.40	10.70	11.00	11.66	22.10	22.66	0.56	
velocity				7.94	9.80	9.43	9.26	9.26	8.93	8.77	8.39	8.94	8.77	9.35	9.09	8.58	9.05	8.83		
Richards, Jereem (TTO) (1994)																				
Semi-Final 1 - 2023 World Athletics Championships (Budapest, HUN)																				
date	22-Aug-23	time			10.92			20.91	32.20	44.76	44.76	4 / 4								
reaction time	0.160	interval						9.99	11.29	12.56	# of strides	10.92	9.99	11.29	12.56	20.91	23.85	2.94		
velocity				9.16				10.01	8.86	7.96	8.94	176.0	9.16	10.01	8.86	7.96	9.56	8.39		
Gardiner, Steven (BAH) (1995)																				
FINAL - 2024 Seashore Doha Meeting (Doha, QAT)																				
date	10-May-24	time	6.11	11.02	16.16	21.52	27.02	32.80	38.68	44.76	44.76	5 / 1								
reaction time	0.128	interval			4.91	5.14	5.36	5.50	5.78	5.88	6.08	# of strides	11.02	10.50	11.28	11.96	21.52	23.24	1.72	
velocity				8.18	10.18	9.73	9.33	9.09	8.65	8.50	8.22	8.94	158.2	9.07	9.52	8.87	8.36	9.29	8.61	
Rouser, Jason (USA) (1970)																				
Semi-Final 2 - 1996 USA Olympic Trials (Atlanta, GA)																				
date	17-Jun-96	time			11.04			21.76	32.80	38.50	44.77	44.77	2 / 4							
reaction time		interval						10.72	11.04	5.70	6.27	PB	# of strides	11.04	10.72	11.04	11.97	21.76	23.01	1.25
velocity				9.06				9.33	9.06	8.77	7.97	8.93	9.06	9.33	9.06	8.35	9.19	8.69		
Rouser, Jason (USA) (1970)																				
FINAL - 1996 USA Olympic Trials (Atlanta, GA)																				
date	19-Jun-96	time			10.98			21.40	32.59	38.39	44.77	44.77	1 / 7							
reaction time		interval						10.42	11.19	5.80	6.38	=PB	# of strides	10.98	10.42	11.19	12.18	21.40	23.37	1.97
velocity				9.11				9.60	8.94	8.62	7.84	8.93	9.11	9.60	8.94	8.21	9.35	8.56		
Washington, Tyree (USA) (1976)																				

FINAL - 2003 IAAF World Championships (Paris, FRA)														<i>Bonvin (2003) - Compte-rendu 400m et relais 4x 400m</i>					
date	26-Aug-03	time		21.3	32.10	44.77	44.77	4 / 2 1											
reaction time	0.182	interval			10.8	12.7		# of strides		10.80	12.67	21.30	23.47	2.17					
		velocity		9.39	9.26	7.89	8.93			9.26	7.89	9.39	8.52						
Nellum, Bryshon (USA) (1989)																			
Semi-Final 2 - 2015 IAAF World Championships (Beijing, CHN)														<i>Yamamoto (2015) - race analysis of 15th World Championships 400m - focusing on men's semis and women's prelims</i>					
date	24-Aug-15	time	6.09	11.04	16.13	21.40	26.90	32.50	38.47	44.77	44.77	8 / 5							
reaction time	0.169	interval		4.95	5.09	5.27	5.50	5.60	5.97	6.30		# of strides	11.04	10.36	11.10	12.27	21.40	23.37	1.97
		velocity	8.21	10.10	9.82	9.49	9.09	8.93	8.38	7.94	8.93	172.2	9.06	9.65	9.01	8.15	9.35	8.56	
Francis, Javon (JAM) (1994)																			
Semi-Final 3 - 2015 IAAF World Championships (Beijing, CHN)														<i>Yamamoto (2015) - race analysis of 15th World Championships 400m - focusing on men's semis and women's prelims</i>					
date	24-Aug-15	time	6.26	11.19	16.22	21.50	27.09	32.62	38.46	44.77	44.77	4 / 4							
reaction time	0.177	interval		4.93	5.03	5.28	5.59	5.53	5.84	6.31		# of strides	11.19	10.31	11.12	12.15	21.50	23.27	1.77
		velocity	7.99	10.14	9.94	9.47	8.94	9.04	8.56	7.92	8.93	170.0	8.94	9.70	8.99	8.23	9.30	8.59	
Cherry, Michael (USA) (1995)																			
FINAL - 2017 NCAA Championships (Eugene, OR)														<i>USTFCCCA (2017) - NCAA DI outdoor championship history</i>					
date	09-Jun-17	time		22.0					44.8	44.77	3 / 3								
reaction time		interval							22.80		# of strides						22.00	22.80	0.80
		velocity		9.09					8.77	8.93	163.5						9.09	8.77	
Bloomfield, Akeem (JAM) (1997)																			
Semi-Final 3 - 2019 IAAF World Championships (Doha, QAT)														<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>					
date	02-Oct-19	time	6.24	11.14	16.12	21.25	26.66	32.34	38.29	44.77	44.77	6 / 3							
reaction time	0.207	interval		4.90	4.98	5.13	5.41	5.68	5.95	6.48		# of strides	11.14	10.11	11.09	12.43	21.25	23.52	2.27
		velocity	8.01	10.20	10.04	9.75	9.24	8.80	8.40	7.72	8.93	162.5	8.98	9.89	9.02	8.05	9.41	8.50	
Allison, Champion (USA) (1998)																			
FINAL - 2022 World Athletics Championships (Eugene, OR)														<i>Timing by Seiko (2022) - world athletics championships race analysis</i>					
date	22-Jul-22	time		11.22	21.57	32.76			44.77	44.77	6 / 4								
reaction time	0.148	interval			10.35	11.19			12.01		# of strides	11.22	10.35	11.19	12.01	21.57	23.20	1.63	
		velocity		8.91	9.66	8.94			8.33	8.93	169.0	8.91	9.66	8.94	8.33	9.27	8.62		
Willie, Ryan (USA) (2002)																			
FINAL - 2023 Kamila Skolimowska Memorial (Silesia, POL)														<i>Omega Timing (2023) - diamond league race analysis</i>					
date	16-Jul-23	time	6.09	11.01	16.07	21.42	26.96	32.66	38.53	44.77	44.77	8 / 5							
reaction time	0.153	interval		4.92	5.06	5.35	5.54	5.70	5.87	6.24		# of strides	11.01	10.41	11.24	12.11	21.42	23.35	1.93
		velocity	8.21	10.16	9.88	9.35	9.03	8.77	8.52	8.01	8.93	172.0	9.08	9.61	8.90	8.26	9.34	8.57	
Sato, Kentaro (JPN) (1994)																			
Heat 1 - 2023 World Athletics Championships (Budapest, HUN)														<i>Yamanaka (2024) - analysis of men's and women's 400m and 300m runs in the 2023 season</i>					
date	20-Aug-23	time	6.24	11.31	16.46	21.71	27.07	32.71	38.59	44.77	44.77	6 / 2							
reaction time	0.172	interval		5.07	5.15	5.25	5.36	5.64	5.88	6.18	NR PB	# of strides	11.31	10.40	11.00	12.06	21.71	23.06	1.35
		velocity	8.01	9.86	9.71	9.52	9.33	8.87	8.50	8.09	8.93	174.5	8.84	9.62	9.09	8.29	9.21	8.67	
Watson, Antonio (JAM) (2001)																			
Heat 5 - 2023 World Athletics Championships (Budapest, HUN)														<i>Seiko Timing (2023) - world championship race analysis</i>					
date	20-Aug-23	time		11.40	21.56			32.77	44.77	44.77	3 / 1								
reaction time	0.169	interval			10.16			11.21	12.00		# of strides	11.40	10.16	11.21	12.00	21.56	23.21	1.65	
		velocity		8.77	9.84			8.92	8.33	8.93	166.2	8.77	9.84	8.92	8.33	9.28	8.62		
Yahia Ibrahim, Ammar Ismail (QAT) (1)																			
Repechage 4 - 2024 Olympic Games (Paris, FRA)														<i>Paris 2024 Olympic Games - Results Book (2024)</i>					
date	05-Aug-24	time	6.45	11.57	16.75	22.00	27.37	32.89	38.66	44.77	44.77	3 / 1							
reaction time	0.158	interval		5.12	5.18	5.25	5.37	5.52	5.77	6.11		# of strides	11.57	10.43	10.89	11.88	22.00	22.77	0.77
		velocity	7.75	9.77	9.65	9.52	9.31	9.06	8.67	8.18	8.93	174.0	8.64	9.59	9.18	8.42	9.09	8.78	
Deadmon, Bryce (USA) (1997)																			
FINAL - 2024 Golden Gala Pietro Mennea (Roma, ITA)														<i>Omega Timing (2024) - diamond league race analysis</i>					
date	30-Aug-24	time	6.09	11.13	16.22	21.43	26.96	32.63	38.46	44.77	44.77	1 / 7							
reaction time	0.160	interval		5.04	5.09	5.21	5.53	5.67	5.83	6.31		# of strides	11.13	10.30	11.20	12.14	21.43	23.34	1.91
		velocity	8.21	9.92	9.82	9.60	9.04	8.82	8.58	7.92	8.93	167.0	8.98	9.71	8.93	8.24	9.33	8.57	
Harrison, Calvin (USA) (1974)																			
Semi-Final 2 - 1996 USA Olympic Trials (Atlanta, GA)														<i>USATF Women's Sprint Development (1996)</i>					
date	17-Jun-96	time		11.50	21.38			33.08	38.62	44.78	44.78	6 / 5							
reaction time		interval			9.88			11.70	5.54	6.16		# of strides	11.50	9.88	11.70	11.70	21.38	23.40	2.02
		velocity		8.70	10.12			8.55	9.03	8.12	8.93	167.0	8.70	10.12	8.55	8.55	9.35	8.55	
James, Kirani (GRN) (1992)																			
FINAL - 2022 Bislett Games (Oslo, NOR)														<i>Omega Timing (2022) - diamond league race analysis</i>					
date	16-Jun-22	time	6.10	11.05	16.18	21.43	26.87	32.66	38.59	44.78	44.78	6 / 1							
reaction time	0.142	interval		4.95	5.13	5.25	5.44	5.79	5.93	6.19		# of strides	11.05	10.38	11.23	12.12	21.43	23.35	1.92
		velocity	8.20	10.10	9.75	9.52	9.19	8.64	8.43	8.08	8.93	160.0	9.05	9.63	8.90	8.25	9.33	8.57	
Jones, Jonathan (BAR) (1999)																			
Semi-Final 3 - 2022 World Athletics Championships (Eugene, OR)														<i>Timing by Seiko (2022) - world athletics championships race analysis</i>					
date	20-Jul-22	time		11.27	21.49			32.57	44.78	44.78	3 / 3								
reaction time	0.149	interval			10.22			11.08	12.21		# of strides	11.27	10.22	11.08	12.21	21.49	23.29	1.80	
		velocity		8.87	9.78			9.03	8.19	8.93	173.2	8.87	9.78	9.03	8.19	9.31	8.59		
London, Wil (USA) (1997)																			
National FINAL - 2022 Weltklasse (Zürich, SUI)														<i>Omega Timing (2022) - diamond league race analysis</i>					
date	08-Sep-22	time	6.10	11.12	16.36	21.75	27.28	32.88	38.60	44.78	44.78	7 / 2							
reaction time	0.150	interval		5.02	5.24	5.39	5.53	5.60	5.72	6.18		# of strides	11.12	10.63	11.13	11.90	21.75	23.03	1.28

	velocity	8.20	9.96	9.54	9.28	9.04	8.93	8.74	8.09	8.93	178.0	8.99	9.41	8.98	8.40	9.20	8.68		
Bonevacia, Liemarvin (NED) (1989)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 2 - 2023 World Athletics Championships (Budapest, HUN)																			
Seiko Timing (2023) - world championship race analysis																			
date	20-Aug-23	time	11.53			21.88		33.13	44.78	44.78	7 / 3								
reaction time	0.186	interval				10.35		11.25	11.65		# of strides	11.53	10.35	11.25	11.65	21.88	22.90	1.02	
		velocity	8.67			9.66		8.89	8.58	8.93	178.0	8.67	9.66	8.89	8.58	9.14	8.73		
Hudson-Smith, Matthew (GBR) (1994)																			
Heat 1 - 2024 Olympic Games (Paris, FRA)																			
Paris 2024 Olympic Games - Results Book (2024)																			
date	04-Aug-24	time	6.12	11.04	16.11	21.37	26.84	32.49	38.41	44.78	44.78	6 / 1							
reaction time	0.165	interval				4.92	5.07	5.26	5.47	5.65	5.92	6.37							
		velocity	8.17	10.16	9.86	9.51	9.14	8.85	8.45	7.85	8.93	161.0	9.06	9.68	8.99	8.14	9.36	8.54	
James, Kirani (GRN) (1992)																			
Heat 5 - 2024 Olympic Games (Paris, FRA)																			
Paris 2024 Olympic Games - Results Book (2024)																			
date	04-Aug-24	time	6.07	10.94	16.01	21.27	26.77	32.59	38.52	44.78	44.78	6 / 1							
reaction time	0.159	interval				4.87	5.07	5.26	5.50	5.82	5.93	6.26							
		velocity	8.24	10.27	9.86	9.51	9.09	8.59	8.43	7.99	8.93	158.2	9.14	9.68	8.83	8.20	9.40	8.51	
Norwood, Vernon (USA) (1992)																			
FINAL - 2024 Memorial van damme (Brussels, BEL)																			
Omega Timing (2024) - diamond league race analysis																			
date	13-Sep-24	time	6.13	11.00	15.97	21.16	26.65	32.39	38.35	44.78	44.78	3 / 4							
reaction time	0.142	interval				4.87	4.97	5.19	5.49	5.74	5.96	6.43							
		velocity	8.16	10.27	10.06	9.63	9.11	8.71	8.39	7.78	8.93	175.7	9.09	9.84	8.90	8.07	9.45	8.47	
Young, Jerome (USA) (1976)																			
FINAL - 2003 USATF National Championships (Palo Alto, CA)																			
USATF Women's Sprint Development (2003)																			
date	21-Jun-03	time				21.67		32.59	38.42	44.79	44.79	6 / 3							
reaction time		interval						10.92	5.83	6.37	DV								
		velocity				9.23		9.16	8.58	7.85	8.93			10.92	12.20	21.67	23.12	1.45	
Raquil, Marc (FRA) (1977)																			
FINAL - 2003 IAAF World Championships (Paris, FRA)																			
Bonvin (2003) - Compte-rendu 400m et relais 4x 400m																			
date	26-Aug-03	time				21.8		33.0	44.79	44.79	5 / 2								
reaction time	0.174	interval						11.2	11.8	NR									
		velocity				9.17		8.93	8.48	8.93				11.20	11.79	21.80	22.99	1.19	
Brown, Chris (BAH) (1978)																			
FINAL - 2012 Olympic Games (London, GBR)																			
Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016																			
date	06-Aug-12	time				21.5		32.4	44.8	44.79	6 / 4								
reaction time	0.166	interval						10.90	12.40					21.50	10.90	12.40	21.50	23.30	
		velocity				9.30		9.17	8.06	8.93	187.7			4.65	9.17	8.06	9.30	8.58	
Taylor, Christopher (JAM) (1999)																			
FINAL - 2020 Olympic Games (Tokyo, JPN)																			
Omega Timing (2022) - Tokyo 2020 - race analysis - men's 400m final																			
date	05-Aug-21	time	6.14	10.98	15.99	21.28	26.77	32.47	38.42	44.79	44.79	9 / 6							
reaction time	0.158	interval				4.84	5.01	5.29	5.49	5.70	5.95	6.37							
		velocity	8.14	10.33	9.98	9.45	9.11	8.77	8.40	7.85	8.93	181.0	9.11	9.71	8.94	8.12	9.40	8.51	
Richards, Jereem (TTO) (1994)																			
FINAL - 2022 Prefontaine Classic (Eugene, OR)																			
Omega Timing (2022) - diamond league race analysis																			
date	28-May-22	time	5.98	10.72	15.76	21.07	26.58	32.28	38.26	44.79	44.79	7 / 5							
reaction time	0.159	interval				4.74	5.04	5.31	5.51	5.70	5.98	6.53							
		velocity	8.36	10.55	9.92	9.42	9.07	8.77	8.36	7.66	8.93	175.5	9.33	9.66	8.92	7.99	9.49	8.43	
Collett, Wayne (USA) (1949)																			
FINAL - 1972 Olympic Games (Munich, FRG)																			
Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016																			
date	07-Sep-72	time				21.4		32.5	44.8	44.80	3 / 2								
reaction time		interval						11.10	12.30					21.40	11.10	12.30	21.40	23.40	
		velocity				9.35		9.01	8.13	8.93	176.7			9.35	9.01	8.13	9.35	8.55	
Reynolds, Harry (Butch) (USA) (1964)																			
FINAL - 1987 IAAF World Championship (Rome, ITA)																			
Moravec (1990) - time analysis of the sprints - Rome 1987 Scientific Report (2nd ed)																			
date	03-Sep-87	time	11.22			21.71		32.74	44.80	44.80	7 / 3								
reaction time		interval				10.49		11.03	12.06					11.22	10.49	11.03	12.06	21.71	
		velocity				8.91		9.53	9.07	8.29	8.93			8.91	9.53	9.07	8.29	9.21	8.66
Blackwood, Michael (JAM) (1976)																			
FINAL - 2003 IAAF World Championships (Paris, FRA)																			
Bonvin (2003) - Compte-rendu 400m et relais 4x 400m																			
date	26-Aug-03	time				21.4		32.4	44.80	44.80	2 / 3								
reaction time	0.158	interval						11.0	12.4										
		velocity				9.35		9.09	8.06	8.93				11.00	12.40	21.40	23.40	2.00	
Neville, David (USA) (1984)																			
FINAL - 2008 Olympic Games (Beijing, CHN)																			
Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016																			
date	21-Aug-08	time				21.1		31.7	44.8	44.80	9 / 3								
reaction time	0.293	interval						10.60	13.10					21.10	10.60	13.10	21.10	23.70	
		velocity				9.48		9.43	7.63	8.93	166.2			9.48	9.43	7.63	9.48	8.44	
Djhone, Leslie (FRA) (1981)																			
Semi-Final 1 - 2009 IAAF World Championships (Berlin, GER)																			
Graubner (2009) - biomechanical analyses at the 12th IAAF world championships																			
date	19-Aug-09	time	11.32			21.87		32.85	44.80	44.80	3 / 3								
reaction time	0.165	interval				10.55		10.98	11.95					11.32	10.55	10.98	11.95	21.87	
		velocity	8.83			9.48		9.11	8.37	8.93				8.83	9.48	9.11	8.37	9.14	8.72
Nellum, Bryshon (USA) (1989)																			

FINAL - 2012 USA Olympic Trials (Eugene, OR)														<i>Hymans (2020) - history of the US olympic trials - track and field</i>							
date	24-Jun-12	time							21.9	32.9	44.80	44.80	7 / 3								
reaction time	0.225	interval								11.00	11.90		# of strides	21.90	11.00	11.90	21.90	22.90	1.00		
		velocity							9.13	9.09	8.40	8.93		4.57	9.09	8.40	9.13	8.73			
Norman, Michael (USA) (1997)																					
FINAL - 2017 USATF National Championships (Sacramento, CA)														<i>Lee (& Ferrara) (2017) - speedendurance.com/2017/07/13/400m-splits-from-usa-national-championships/</i>							
date	24-Jun-17	time	11.05	21.25	32.52	44.80	44.80	3 / 7													
reaction time		interval		10.20	11.27	12.28		# of strides	11.05	10.20	11.27	12.28		11.05	10.20	11.27	12.28	21.25	23.55	2.30	
		velocity	9.05	9.80	8.87	8.14	8.93		9.05	9.80	8.87	8.14		9.05	9.80	8.87	8.14	9.41	8.49		
Kerley, Fred (USA) (1995)																					
FINAL - 2018 Weltklasse (Zürich, SUI)														<i>Omega Timing (2018) - diamond league race analysis</i>							
date	30-Aug-18	time	11.1	21.3	32.5	44.80	44.80	5 / 1													
reaction time	0.140	interval		10.2	11.2	12.3		# of strides	11.10	10.20	11.20	12.30		11.10	10.20	11.20	12.30	21.30	23.50	2.20	
		velocity	9.01	9.80	8.93	8.13	8.93		173.5	9.01	9.80	8.93	8.13		9.01	9.80	8.93	8.13	9.39	8.51	
Bonevacia, Liemarvin (NED) (1989)																					
FINAL - 2021 Bauhaus Galan (Stockholm, SWE)														<i>Omega Timing (2021) - diamond league race analysis</i>							
date	04-Jul-21	time	6.5	11.5	16.4	21.5	26.8	32.5	38.4	44.80	44.80	3 / 3									
reaction time	0.202	interval		5.00	4.90	5.10	5.30	5.70	5.90	6.40		# of strides	11.50	10.00	11.00	12.30	21.50	23.30	1.80		
		velocity	7.69	10.00	10.20	9.80	9.43	8.77	8.47	7.81	8.93		8.70	10.00	9.09	8.13	9.30	8.58			
Kebinatshipi, Collen (BOT) (2004)																					
Heat 2 - 2023 World Athletics Championships (Budapest, HUN)														<i>Seiko Timing (2023) - world championship race analysis</i>							
date	20-Aug-23	time	10.92	21.37	32.68	44.80	44.80	6 / 4													
reaction time	0.155	interval		10.45	11.31	12.12	AJR PB	# of strides	10.92	10.45	11.31	12.12		10.92	10.45	11.31	12.12	21.37	23.43	2.06	
		velocity	9.16	9.57	8.84	8.25	8.93		189.0	9.16	9.57	8.84	8.25		9.16	9.57	8.84	8.25	9.36	8.54	
Norwood, Vernon (USA) (1992)																					
FINAL - 2024 Bauhaus Galan (Stockholm, SWE)														<i>Omega Timing (2024) - diamond league race analysis</i>							
date	02-Jun-24	time	6.15	11.09	16.18	21.47	26.96	32.68	38.49	44.80	44.80	6 / 2									
reaction time	0.160	interval		4.94	5.09	5.29	5.49	5.72	5.81	6.31		# of strides	11.09	10.38	11.21	12.12	21.47	23.33	1.86		
		velocity	8.13	10.12	9.82	9.45	9.11	8.74	8.61	7.92	8.93		9.02	9.63	8.92	8.25	9.32	8.57			
Schönlebe, Thomas (GDR) (1965)																					
Quarter-Final 2 - 1987 IAAF World Championship (Rome, ITA)														<i>Moravec (1990) - time analysis of the sprints - Rome 1987 Scientific Report (2nd ed)</i>							
date	31-Aug-87	time	11.52	21.79	32.76	44.81	44.81	1 / 1													
reaction time		interval		10.27	10.97	12.05	CR	# of strides	11.52	10.27	10.97	12.05		11.52	10.27	10.97	12.05	21.79	23.02	1.23	
		velocity	8.68	9.74	9.12	8.30	8.93		8.68	9.74	9.12	8.30		8.68	9.74	9.12	8.30	9.18	8.69		
Johnson, Michael (USA) (1967)																					
Semi-Final 1 - 1996 USA Olympic Trials (Atlanta, GA)														<i>USATF Women's Sprint Development (1996)</i>							
date	17-Jun-96	time	11.52	21.85	32.70	38.40	44.81	44.81	6 / 2												
reaction time		interval		10.33	10.85	5.70	6.41		# of strides	11.52	10.33	10.85	12.11		11.52	10.33	10.85	12.11	21.85	22.96	1.11
		velocity	8.68	9.68	9.22	8.77	7.80	8.93		8.68	9.68	9.22	8.26		8.68	9.68	9.22	8.26	9.15	8.71	
Borlée, Kevin (BEL) (1988)																					
FINAL - 2012 Olympic Games (London, GBR)														<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>							
date	06-Aug-12	time		21.9	32.8	44.8	44.81	9 / 5													
reaction time	0.151	interval		10.90	12.00		# of strides							21.90	10.90	12.00	21.90	22.90	1.00		
		velocity		9.13	9.17	8.33	8.93		173.2					4.57	9.17	8.33	9.13	8.73			
Haroun, Abdalelah (QAT) (1997)																					
FINAL - 2016 IAAF World Junior Championships (Bydgoszcz, POL)														<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>							
date	22-Jul-16	time	6.22	11.06	16.05	21.25	26.68	32.38	38.36	44.81	44.81	6 / 1									
reaction time	0.202	interval		4.84	4.99	5.20	5.43	5.70	5.98	6.45		# of strides	11.06	10.19	11.13	12.43	21.25	23.56	2.31		
		velocity	8.04	10.33	10.02	9.62	9.21	8.77	8.36	7.75	8.93		9.04	9.81	8.98	8.05	9.41	8.49			
Kerley, Fred (USA) (1995)																					
FINAL - 2019 Shanghai (Shanghai, CHN)														<i>Omega Timing (2019) - diamond league race analysis</i>							
date	18-May-19	time	10.6	20.8	32.3	44.81	44.81	5 / 1													
reaction time	0.158	interval		10.2	11.5	12.5		# of strides	10.60	10.20	11.50	12.51		10.60	10.20	11.50	12.51	20.80	24.01	3.21	
		velocity	9.43	9.80	8.70	7.99	8.93		173.5	9.43	9.80	8.70	7.99		9.43	9.80	8.70	7.99	9.62	8.33	
Lendore, Deon (TTO) (1992)																					
FINAL - 2021 Weltklasse (Zürich, SUI)														<i>Omega Timing (2021) - diamond league race analysis</i>							
date	09-Sep-21	time	6.2	11.1	16.1	21.3	26.6	32.3	38.3	44.81	44.81	6 / 3									
reaction time	0.187	interval		4.90	5.00	5.20	5.30	5.70	6.00	6.51		# of strides	11.10	10.20	11.00	12.51	21.30	23.51	2.21		
		velocity	8.06	10.20	10.00	9.62	9.43	8.77	8.33	7.68	8.93		168.5	9.01	9.80	9.09	7.99	9.39	8.51		
Norwood, Vernon (USA) (1992)																					
FINAL - 2022 Golden Gala Pietro Mennea (Rome, ITA)														<i>Omega Timing (2022) - diamond league race analysis</i>							
date	09-Jun-22	time	6.14	11.13	16.35	21.63	27.05	32.68	38.46	44.81	44.81	6 / 2									
reaction time	0.168	interval		4.99	5.22	5.28	5.42	5.63	5.78	6.35		# of strides	11.13	10.50	11.05	12.13	21.63	23.18	1.55		
		velocity	8.14	10.02	9.58	9.47	9.23	8.88	8.65	7.87	8.93		8.98	9.52	9.05	8.24	9.25	8.63			
Hudson-Smith, Matthew (GBR) (1994)																					
FINAL - 2022 Commonwealth Games (Birmingham, GBR)														<i>Longines Timing (2022) - commonwealth games race analysis</i>							
date	07-Aug-22	time	6.0	10.8	15.8	20.9	26.4	32.2	38.2	44.81	44.81	7 / 2									
reaction time	0.157	interval		4.80	5.00	5.10	5.50	5.80	6.00	6.61		# of strides	10.80	10.10	11.30	12.61	20.90	23.91	3.01		
		velocity	8.33	10.42	10.00	9.80	9.09	8.62	8.33	7.56	8.93		168.0	9.26	9.90	8.85	7.93	9.57	8.36		
Deadmon, Bryce (USA) (1997)																					
FINAL - 2023 Kamila Skolimowska Memorial (Silesia, POL)														<i>Omega Timing (2023) - diamond league race analysis</i>							
date	16-Jul-23	time	6.07	11.03	16.08	21.36	26.92	32.69	38.54	44.81	44.81	6 / 6									
reaction time	0.155	interval		4.96	5.05	5.28	5.56	5.77	5.85	6.27		# of strides	11.03	10.33	11.33	12.12	21.36	23.45	2.09		

velocity	8.24	10.08	9.90	9.47	8.99	8.67	8.55	7.97	8.93	168.0	9.07	9.68	8.83	8.25	9.36	8.53
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		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Nene, Zakhiti (RSA) (1998)																			
Repechage 3 - 2024 Olympic Games (Paris, FRA)		<i>Paris 2024 Olympic Games - Results Book (2024)</i>																	
date	05-Aug-24	time	6.14	11.15	16.38	21.72	27.23	32.83	38.60	44.81	44.81	4 / 1							
reaction time	0.140	interval		5.01	5.23	5.34	5.51	5.60	5.77	6.21		# of strides	11.15	10.57	11.11	11.98	21.72	23.09	1.37
		velocity	8.14	9.98	9.56	9.36	9.07	8.93	8.67	8.05	8.93	174.0	8.97	9.46	9.00	8.35	9.21	8.66	
Hall, Arman (USA) (1994)																			
FINAL - 2016 NCAA Championships (Eugene, OR)		<i>USTFCCA (2017) - NCAA DI outdoor championship history</i>																	
date	10-Jun-16	time			21.8		32.8		44.8	44.82	5 / 1								
reaction time		interval					11.00		12.00	=PB	# of strides			11.00	12.00	21.80	23.00	1.20	
		velocity			9.17		9.09		8.33	8.92				9.09	8.33	9.17	8.70		
Verburg, David (USA) (1991)																			
FINAL - 2016 USA Olympic Trials (Eugene, OR)		<i>Hymans (2020) - history of the US olympic trials - track and field</i>																	
date	03-Jul-16	time			21.6		32.6		44.82	44.82	4 / 3								
reaction time	0.203	interval					11.00		12.22		# of strides		21.60	11.00	12.22	21.60	23.22	1.62	
		velocity			9.26		9.09		8.18	8.92			4.63	9.09	8.18	9.26	8.61		
McDonald, Rusheen (JAM) (1992)																			
FINAL - 2023 Xiamen Diamond League (Xiamen, CHN)		<i>Omega Timing (2023) - diamond league race analysis</i>																	
date	02-Sep-23	time	6.26	11.13	16.21	21.60	27.21	32.99	38.76	44.82	44.82	7 / 3							
reaction time	0.179	interval		4.87	5.08	5.39	5.61	5.78	5.77	6.06		# of strides	11.13	10.47	11.39	11.83	21.60	23.22	1.62
		velocity	7.99	10.27	9.84	9.28	8.91	8.65	8.67	8.25	8.92	179.5	8.98	9.55	8.78	8.45	9.26	8.61	
Bailey, Chris (USA) (2000)																			
Semi-Final 1 - 2024 USA Olympic Trials (Eugene, OR)		<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>																	
date	23-Jun-24	time			11.55		22.15		33.01	44.82	44.82	5 / 2							
reaction time		interval					10.60		10.86	11.81	# of strides	11.55	10.60	10.86	11.81	22.15	22.67	0.52	
		velocity			8.66		9.43		9.21	8.47	8.92	8.66	9.43	9.21	8.47	9.03	8.82		
Martin, Roxbert (JAM) (1969)																			
FINAL - 1996 Olympic Games (Atlanta, GA)		<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																	
date	29-Jul-96	time			21.40		32.6		44.83	44.83	5 / 6								
reaction time	0.283	interval					11.20		12.23		# of strides		21.40	11.20	12.23	21.40	23.43	2.03	
		velocity			9.35		8.93		8.18	8.92			9.35	8.93	8.18	9.35	8.54		
Djhane, Leslie (FRA) (1981)																			
FINAL - 2003 IAAF World Championships (Paris, FRA)		<i>Bonvin (2003) - Compte-rendu 400m et relais 4x 400m</i>																	
date	26-Aug-03	time			21.4		32.40		44.83	44.83	8 / 5 4								
reaction time	0.170	interval					11.0		12.4		# of strides			11.00	12.43	21.40	23.43	2.03	
		velocity			9.35		9.09		8.05	8.92				9.09	8.05	9.35	8.54		
Clarke, Davian (JAM) (1976)																			
FINAL - 2004 Olympic Games (Athens, GRE)		<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																	
date	23-Aug-04	time			21.7		32.7		44.8	44.83	7 / 6								
reaction time	0.263	interval					11.0		12.1	PB	# of strides		21.70	11.00	12.10	21.70	23.10	1.40	
		velocity			9.22		9.09		8.26	8.92			4.61	9.09	8.26	9.22	8.66		
Borlée, Jonathan (BEL) (1988)																			
FINAL - 2012 Olympic Games (London, GBR)		<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																	
date	06-Aug-12	time			21.6		32.6		44.8	44.83	2 / 6								
reaction time	0.173	interval					11.00		12.20		# of strides		21.60	11.00	12.20	21.60	23.20	1.60	
		velocity			9.26		9.09		8.20	8.92	172.7		4.63	9.09	8.20	9.26	8.62		
Norwood, Vernon (USA) (1992)																			
FINAL - 2021 Bauhaus Galan (Stockholm, SWE)		<i>Omega Timing (2021) - diamond league race analysis</i>																	
date	04-Jul-21	time	6.2	11.2	16.3	21.5	26.9	32.5	38.4	44.83	44.83	4 / 4							
reaction time	0.196	interval		5.00	5.10	5.20	5.40	5.60	5.90	6.43		# of strides	11.20	10.30	11.00	12.33	21.50	23.33	1.83
		velocity	8.06	10.00	9.80	9.62	9.26	8.93	8.47	7.78	8.92		8.93	9.71	9.09	8.11	9.30	8.57	
Makwala, Isaac (BOT) (1986)																			
FINAL - 2021 Memorial van Damme (Brussels, BEL)		<i>Omega Timing (2021) - diamond league race analysis</i>																	
date	03-Sep-21	time	6.2	11.2	16.3	21.6	27.1	32.6	38.4	44.83	44.83	8 / 3							
reaction time	0.200	interval		5.00	5.10	5.30	5.50	5.50	5.80	6.43		# of strides	11.20	10.40	11.00	12.23	21.60	23.23	1.63
		velocity	8.06	10.00	9.80	9.43	9.09	9.09	8.62	7.78	8.92		8.93	9.62	9.09	8.18	9.26	8.61	
McKenley, Herb (JAM) (1922)																			
FINAL - 1947 (Long Beach, NJ) (440y Straightaway)		<i>Parienté (1978) - la fabuleuse histoire de l'athlétisme</i>																	
date	23-Aug-47	time			22.7				45.0	44.7	1 / 1								
reaction time		interval							22.3		# of strides					22.70	22.30	-0.40	
		velocity			8.81				8.97	8.95	(45.0/440y)					8.81	8.97		
Collett, Wayne (USA) (1949)																			
FINAL - 1971 USA National Championships (Eugene, OR) (yards)		<i>Parienté (1978) - la fabuleuse histoire de l'athlétisme</i>																	
date	26-Jun-71	time			21.2				44.7	44.7	1 / 2								
reaction time		interval							23.5		# of strides					21.20	23.50	2.30	
		velocity			9.43				8.51	8.95						9.43	8.51		
Mitchell, Richard (AUS) (1955)																			
FINAL - 1980 Olympic Games (Moscow, URS)		<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																	
date	30-Jul-80	time			21.8		33.0		44.9	44.84	4 / 2								
reaction time	0.152	interval					11.2		11.90		# of strides		21.80	11.20	11.90	21.80	23.10	1.30	
		velocity			9.17		8.93		8.40	8.92	171.0		9.17	8.93	8.40	9.17	8.66		
Brown, Chris (BAH) (1978)																			

FINAL - 2008 Olympic Games (Beijing, CHN)																	<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																
date	21-Aug-08	time					21.3	31.9	44.8	44.84					5 / 4																		
reaction time	0.231	interval					10.60	12.90						21.30	10.60	12.90	21.30	23.50	2.20														
		velocity					9.39	9.43	7.75	8.92				186.0	9.39	9.43	7.75	9.39	8.51														
Roberts, Gil (USA) (1989)																	<i>Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Men's 400m</i>																
Semi-Final 3 - 2017 IAAF World Championships (London, GBR)																	<i>Politt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Men's 400m</i>																
date	06-Aug-17	time					10.68	20.68	31.84	37.94	44.67	44.84					7 / 3																
reaction time	0.170	interval					10.00	11.16	6.10	6.73				# of strides	10.68	10.00	11.16	12.83	20.68	23.99	3.31												
		velocity					9.36	10.00	8.96	8.20	7.43	8.92				184.1	9.36	10.00	8.96	7.79	9.67	8.34											
Karam, Youssef (KUW) (1993)																	<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>																
FINAL - 2019 Asian Athletics Championships (Doha, QAT)																	<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>																
date	22-Apr-19	time					6.20	11.17	16.22	21.49	26.94	32.58	38.44	44.84	44.84					6 / 1													
reaction time	0.149	interval					4.97	5.05	5.27	5.45	5.64	5.86	6.40	NR PB				# of strides	11.17	10.32	11.09	12.26	21.49	23.35	1.86								
		velocity					8.06	10.06	9.90	9.49	9.17	8.87	8.53	7.81	8.92				167.2	8.95	9.69	9.02	8.16	9.31	8.57								
Norwood, Vernon (USA) (1992)																	<i>Omega Timing (2021) - diamond league race analysis</i>																
FINAL - 2021 Weltklasse (Zürich, SUI)																	<i>Omega Timing (2021) - diamond league race analysis</i>																
date	09-Sep-21	time					6.1	11.0	16.1	21.4	26.9	32.6	38.5	44.84	44.84					8 / 4													
reaction time	0.166	interval					4.90	5.10	5.30	5.50	5.70	5.90	6.34				# of strides	11.00	10.40	11.20	12.24	21.40	23.44	2.04									
		velocity					8.20	10.20	9.80	9.43	9.09	8.77	8.47	7.89	8.92				9.09	9.62	8.93	8.17	9.35	8.53									
Molnár, Attila (HUN) (2002)																	<i>Seiko Timing (2023) - world championship race analysis</i>																
Heat 1 - 2023 World Athletics Championships (Budapest, HUN)																	<i>Seiko Timing (2023) - world championship race analysis</i>																
date	20-Aug-23	time					11.25			21.46			32.95	44.84	44.84					9 / 3													
reaction time	0.172	interval					10.21			11.49			11.89	NR PB				# of strides	11.25	10.21	11.49	11.89	21.46	23.38	1.92								
		velocity					8.89			9.79			8.70	8.41	8.92				175.2	8.89	9.79	8.70	8.41	9.32	8.55								
McDonald, Rusheen (JAM) (1992)																	<i>Omega Timing (2023) - diamond league race analysis</i>																
FINAL - 2023 Memorial van Damme (Brussels, BEL)																	<i>Omega Timing (2023) - diamond league race analysis</i>																
date	08-Sep-23	time					6.17	11.07	16.15	21.49	27.08	32.74	38.56	44.84	44.84					4 / 1													
reaction time	0.177	interval					4.90	5.08	5.34	5.59	5.66	5.82	6.28				# of strides	11.07	10.42	11.25	12.10	21.49	23.35	1.86									
		velocity					8.10	10.20	9.84	9.36	8.94	8.83	8.59	7.96	8.92				182.0	9.03	9.60	8.89	8.26	9.31	8.57								
Harrison, Calvin (USA) (1974)																	<i>USATF Women's Sprint Development (2004)</i>																
FINAL - 2004 USA Olympic Trials (Atlanta, GA)																	<i>USATF Women's Sprint Development (2004)</i>																
date	15-Jul-04	time									21.72	27.17	32.72	38.48	44.85	44.85					7 / 5												
reaction time		interval									10.32	5.45	5.55	5.76	6.37	DV				# of strides	11.40	10.32	11.00	12.13	21.72	23.13	1.41						
		velocity									8.77	9.69	9.17	9.01	8.68	7.85	8.92				180.0	8.77	9.69	9.09	8.24	9.21	8.65						
Borlée, Jonathan (BEL) (1988)																	<i>Yamamoto (2015) - race analysis of 15th World Championships 400m- focusing on men's semis and women's prelims</i>																
Semi-Final 3 - 2015 IAAF World Championships (Beijing, CHN)																	<i>Yamamoto (2015) - race analysis of 15th World Championships 400m- focusing on men's semis and women's prelims</i>																
date	24-Aug-15	time					6.18	11.16	16.28	21.59	27.08	32.64	38.47	44.85	44.85					9 / 5													
reaction time	0.158	interval					4.98	5.12	5.31	5.49	5.56	5.83	6.38				# of strides	11.16	10.43	11.05	12.21	21.59	23.26	1.67									
		velocity					8.09	10.04	9.77	9.42	9.11	8.99	8.58	7.84	8.92				170.2	8.96	9.59	9.05	8.19	9.26	8.60								
Allen, Nathon (JAM) (1995)																	<i>Omega Timing (2019) - diamond league race analysis</i>																
FINAL - 2019 Müller Anniversary Games (London, GBR)																	<i>Omega Timing (2019) - diamond league race analysis</i>																
date	21-Jul-19	time								11.1			21.2	32.2	44.85	44.85					6 / 3												
reaction time	0.149	interval								10.1			11.0	12.7				# of strides	11.10	10.10	11.00	12.65	21.20	23.65	2.45								
		velocity								9.01			9.90	9.09	7.91	8.92				164.7	9.01	9.90	9.09	7.91	9.43	8.46							
Schersing, Mathias (GDR) (1964)																	<i>Heß (1985) - entwicklungsaspekte die leichtathletischen sprint-/hürdenisziplinen im olympiazzyklus 1981/84</i>																
FINAL - 1984 Olympischen Tag (Potsdam, GDR)																	<i>Heß (1985) - entwicklungsaspekte die leichtathletischen sprint-/hürdenisziplinen im olympiazzyklus 1981/84</i>																
date	21-Jul-84	time								11.37			21.83	32.80	44.86	44.86					1 / 1												
reaction time		interval								10.46			10.97	12.06	NR				# of strides	11.37	10.46	10.97	12.06	21.83	23.03	1.20							
		velocity								8.80			9.56	9.12	8.29	8.92				8.80	9.56	9.12	8.29	9.16	8.68								
Hernández, Roberto (CUB) (1967)																	<i>Butler (2013) - IAAF world championships statistics handbook- moscow 2013</i>																
FINAL - 1991 IAAF World Championships (Tokyo, JPN)																	<i>Butler (2013) - IAAF world championships statistics handbook- moscow 2013</i>																
date	29-Aug-91	time									21.51			44.86	44.86					6 / 4													
reaction time		interval									23.35						# of strides							21.51	23.35	1.84							
		velocity									9.30			8.57	8.92				169.7				9.30	8.57									
McDonald, Rusheen (JAM) (1992)																	<i>Yamamoto (2015) - race analysis of 15th World Championships 400m- focusing on men's semis and women's prelims</i>																
Semi-Final 2 - 2015 IAAF World Championships (Beijing, CHN)																	<i>Yamamoto (2015) - race analysis of 15th World Championships 400m- focusing on men's semis and women's prelims</i>																
date	24-Aug-15	time					6.34	11.41	16.53	21.87	27.46	32.99	38.73	44.86	44.86					5 / 6													
reaction time	0.208	interval					5.07	5.12	5.34	5.59	5.53	5.74	6.13				# of strides	11.41	10.46	11.12	11.87	21.87	22.99	1.12									
		velocity					7.89	9.86	9.77	9.36	8.94	9.04	8.71	8.16	8.92				182.0	8.76	9.56	8.99	8.42	9.14	8.70								
London, Wil (USA) (1997)																	<i>Omega Timing (2021) - diamond league race analysis</i>																
FINAL - 2021 Bauhaus Galan (Stockholm, SWE)																	<i>Omega Timing (2021) - diamond league race analysis</i>																
date	04-Jul-21	time					6.2	11.3	16.4	21.7	27.3	32.9	38.7	44.86	44.86					7 / 5													
reaction time	0.165	interval					5.10	5.10	5.30	5.60	5.60	5.80	6.16				# of strides	11.30	10.40	11.20	11.96	21.70	23.16	1.46									
		velocity					8.06	9.80	9.80	9.43	8.93	8.93	8.62	8.12	8.92				176.5	8.85	9.62	8.93	8.36	9.22	8.64								
Hall, Quincy (USA) (1998)																	<i>Seiko Timing (2023) - world championship race analysis</i>																
Heat 5 - 2023 World Athletics Championships (Budapest, HUN)																	<i>Seiko Timing (2023) - world championship race analysis</i>																
date	20-Aug-23	time								11.38			21.76	33.05	44.86	44.86					5 / 2												
reaction time	0.181	interval								10.38			11.29	11.81				# of strides	11.38	10.38	11.29	11.81	21.76	23.10	1.34								
		velocity								8.79			9.63	8.86	8.47	8.92				159.0	8.79	9.63	8.86	8.47	9.19	8.66							
Bailey, Chris (USA) (2000)																	<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>																
Heat 2 - 2024 USA Olympic Trials (Eugene, OR)																	<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>																
date	21-Jun-24	time									11.45			21.98	32.86	44.86	44.86					4 / 2											
reaction time		interval									10.53			10.88	12.00				# of strides	11.45	10.53	10.88	12.00	21.98	22.88	0.90							

velocity	8.73	9.50	9.19	8.33	8.92	179.2	8.73	9.50	9.19	8.33	9.10	8.74
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		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Schaffer, Frank (GDR) (1958)																			
FINAL - 1980 Olympic Games (Moscow, URS)																			
date	30-Jul-80	time			21.2		32.4		44.9	44.87	6 / 3								
reaction time	0.148	interval				11.2		12.50			# of strides		21.20	11.20	12.50	21.20	23.70	2.50	
		velocity			9.43		8.93		8.00	8.91			9.43	8.93	8.00	9.43	8.44		
Christopher, Tyler (CAN) (1983)																			
FINAL - 2007 IAAF World Athletic Final (Stuttgart, GER)																			
date	22-Sep-07	time	11.06		21.44		38.73		44.87	44.87	3 / 2								
reaction time	0.160	interval			10.38		17.29		6.14		# of strides	11.06	10.38	17.29	6.14	21.44	23.43	1.99	
		velocity	9.04		9.63		5.78		16.29	8.91		9.04	9.63	5.78	16.29	9.33	8.54		
Norwood, Vernon (USA) (1992)																			
FINAL - 2021 Doha Diamond League (Doha, QAT)																			
date	28-May-21	time	6.1	11.0	16.2	21.5	27.0	32.8	38.5	44.87	44.87	7 / 5							
reaction time	0.177	interval		4.90	5.20	5.30	5.50	5.80	5.70	6.37		# of strides	11.00	10.50	11.30	12.07	21.50	23.37	
		velocity	8.20	10.20	9.62	9.43	9.09	8.62	8.77	7.85	8.91		170.5	9.09	9.52	8.85	8.29	9.30	8.56
Ndori, Bayapo (BOT) (1999)																			
Heat 5 - 2022 World Athletics Championships (Eugene, OR)																			
date	17-Jul-22	time			11.17		21.46		32.55	44.87	44.87	8 / 1							
reaction time	0.140	interval			10.29		11.09		12.32		# of strides	11.17	10.29	11.09	12.32	21.46	23.41	1.95	
		velocity			8.95		9.72		9.02	8.12	8.91		174.2	8.95	9.72	9.02	8.12	9.32	8.54
Norwood, Vernon (USA) (1992)																			
Heat 3 - 2023 World Athletics Championships (Budapest, HUN)																			
date	20-Aug-23	time			11.28		21.56		32.76	44.87	44.87	4 / 2							
reaction time	0.194	interval			10.28		11.20		12.11		# of strides	11.28	10.28	11.20	12.11	21.56	23.31	1.75	
		velocity			8.87		9.73		8.93	8.26	8.91		173.0	8.87	9.73	8.93	8.26	9.28	8.58
Doom, Alexander (BEL) (1997)																			
Semi-Final 3 - 2024 European Athletics Championships (Roma, ITA)																			
date	09-Jun-24	time			11.24		21.42		32.73	44.87	44.87	5 / 1							
reaction time	0.197	interval			10.18		11.31		12.14		# of strides	11.24	10.18	11.31	12.14	21.42	23.45	2.03	
		velocity			8.90		9.82		8.84	8.24	8.91		179.0	8.90	9.82	8.84	8.24	9.34	8.53
Ndori, Bayapo (BOT) (1999)																			
Heat 3 - 2024 Olympic Games (Paris, FRA)																			
date	04-Aug-24	time	6.14	11.03	16.05	21.22	26.60	32.24	38.21	44.87	44.87	2 / 2							
reaction time	0.156	interval		4.89	5.02	5.17	5.38	5.64	5.97	6.66	# of strides	11.03	10.19	11.02	12.63	21.22	23.65	2.43	
		velocity	8.14	10.22	9.96	9.67	9.29	8.87	8.38	7.51	8.91		9.07	9.81	9.07	7.92	9.43	8.46	
Wiley, Cliff (USA) (1955)																			
FINAL - 1981 IAAF World Cup (Rome, ITA)																			
date	05-Sep-81	time					31.9		44.88	44.88	1 / 1								
reaction time		interval					12.98				# of strides				12.98				
		velocity					9.40		7.70	8.91					7.70				
Gillick, David (IRL) (1983)																			
Semi-Final 1 - 2009 IAAF World Championships (Berlin, GER)																			
date	19-Aug-09	time			11.27		21.80		32.77	44.88	44.88	6 / 4							
reaction time	0.147	interval			10.53		10.97		12.11		# of strides	11.27	10.53	10.97	12.11	21.80	23.08	1.28	
		velocity			8.87		9.50		9.12	8.26	8.91		8.87	9.50	9.12	8.26	9.17	8.67	
Mance, Josh (USA) (1992)																			
FINAL - 2012 USA Olympic Trials (Eugene, OR)																			
date	24-Jun-12	time			21.7		32.6		44.88	44.88	4 / 4								
reaction time	0.190	interval			10.90		12.28				# of strides		21.70	10.90	12.28	21.70	23.18	1.48	
		velocity			9.22		9.17		8.14	8.91			4.61	9.17	8.14	9.22	8.63		
Norman, Michael (USA) (1997)																			
FINAL - 2017 NCAA Championships (Eugene, OR)																			
date	09-Jun-17	time			20.8				44.9	44.88	7 / 4								
reaction time		interval							24.10	PB	# of strides					20.80	24.10	3.30	
		velocity			9.62				8.30	8.91						9.62	8.30		
Allen, Nathon (JAM) (1995)																			
FINAL - 2017 IAAF World Championships (London, GBR)																			
date	08-Aug-17	time	6.03	10.94	15.87	20.96	26.33	31.99	38.06	44.88	44.88	5 / 5							
reaction time	0.158	interval		4.91	4.93	5.09	5.37	5.66	6.07	6.82	# of strides	10.94	10.02	11.03	12.89	20.96	23.92	2.96	
		velocity	8.29	10.18	10.14	9.82	9.31	8.83	8.24	7.33	8.91		9.14	9.98	9.07	7.76	9.54	8.36	
Norwood, Vernon (USA) (1992)																			
FINAL - 2023 Kamila Skolimowska Memorial (Silesia, POL)																			
date	16-Jul-23	time	6.15	11.13	16.23	21.52	27.00	32.74	38.60	44.88	44.88	7 / 7							
reaction time	0.174	interval		4.98	5.10	5.29	5.48	5.74	5.86	6.28	# of strides	11.13	10.39	11.22	12.14	21.52	23.36	1.84	
		velocity	8.13	10.04	9.80	9.45	9.12	8.71	8.53	7.96	8.91		8.98	9.62	8.91	8.24	9.29	8.56	
Nene, Zakhiti (RSA) (1998)																			
Heat 1 - 2023 World Athletics Championships (Budapest, HUN)																			
date	20-Aug-23	time			11.10		21.39		32.49	44.88	44.88	8 / 4							
reaction time	0.145	interval			10.29		11.10		12.39		# of strides	11.10	10.29	11.10	12.39	21.39	23.49	2.10	
		velocity			9.01		9.72		9.01	8.07	8.91		9.01	9.72	9.01	8.07	9.35	8.51	
Sato, Fuga (JPN) (1996)																			

Semi-Final 2 - 2023 World Athletics Championships (Budapest, HUN)											Yamanaka (2024) - analysis of men's and women's 400m and 300m runs in the 2023 season								
date	time	6.02	10.88	15.85	21.09	26.60	32.40	38.38	44.88	44.88	6 / 4								
reaction time	interval	velocity	8.31	10.29	10.06	9.54	9.07	8.62	8.36	7.69	8.91	# of strides	10.88	10.21	11.31	12.48	21.09	23.79	2.70
													9.19	9.79	8.84	8.01	9.48	8.41	
Newhouse, Fred (USA) (1948)											Lamare (1976) - les jeux de la XXI olympia, Montreal 1976								
Semi-Final 2 - 1976 Olympic Games (Montreal, CAN)																			
date	time	11.10	21.49	32.47	44.89	44.89	44.89	44.89	44.89	44.89	2 / 1								
reaction time	interval	velocity	9.01	9.62	9.11	8.05	8.91	8.91	8.91	8.91	# of strides	11.10	10.39	10.98	12.42	21.49	23.40	1.91	
												9.01	9.62	9.11	8.05	9.31	8.55		
Haroun, Abdalelah (QAT) (1997)											Yamanaka (2018) - Race analysis of men and women 400m at 2018 competition								
FINAL - 2018 Asian Games (Jakarta, INA)																			
date	time	6.20	11.17	16.30	21.61	27.17	32.86	38.77	44.89	44.89	3 / 1								
reaction time	interval	velocity	8.06	10.06	9.75	9.42	8.99	8.79	8.46	8.17	8.91	# of strides	11.17	10.44	11.25	12.03	21.61	23.28	1.67
													8.95	9.58	8.89	8.31	9.25	8.59	
Jones, Jonathan (BAR) (1999)											Longines Timing (2022) - commonwealth games race analysis								
FINAL - 2022 Commonwealth Games (Birmingham, GBR)																			
date	time	6.2	11.1	16.1	21.3	26.8	32.5	38.4	44.89	44.89	5 / 3								
reaction time	interval	velocity	8.06	10.20	10.00	9.62	9.09	8.77	8.47	7.70	8.91	# of strides	11.10	10.20	11.20	12.39	21.30	23.59	2.29
													9.01	9.80	8.93	8.07	9.39	8.48	
Bailey, Chris (USA) (2000)											Paris 2024 Olympic Games - Results Book (2024)								
Heat 1 - 2024 Olympic Games (Paris, FRA)																			
date	time	6.29	11.30	16.36	21.57	26.96	32.53	38.46	44.89	44.89	3 / 2								
reaction time	interval	velocity	7.95	9.98	9.88	9.60	9.28	8.98	8.43	7.78	8.91	# of strides	11.30	10.27	10.96	12.36	21.57	23.32	1.75
													8.85	9.74	9.12	8.09	9.27	8.58	
Takano, Susumu (JPN) (1961)											Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988								
Semi-Final 1 - 1988 Olympic Games (Seoul, KOR)																			
date	time	11.43	21.98	32.90	44.90	44.90	44.90	44.90	44.90	44.90	4 / 5								
reaction time	interval	velocity	8.75	9.48	9.16	8.33	8.91	8.91	8.91	8.91	# of strides	11.43	10.55	10.92	12.00	21.98	22.92	0.94	
													8.75	9.48	9.16	8.33	9.10	8.73	
Schönlebe, Thomas (GDR) (1965)											Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988								
Semi-Final 2 - 1988 Olympic Games (Seoul, KOR)																			
date	time	11.51	22.18	33.23	44.90	44.90	44.90	44.90	44.90	44.90	2 / 5								
reaction time	interval	velocity	8.69	9.37	9.05	8.57	8.91	8.91	8.91	8.91	# of strides	11.51	10.67	11.05	11.67	22.18	22.72	0.54	
													8.69	9.37	9.05	8.57	9.02	8.80	
Borlée, Kevin (BEL) (1988)											Butler (2013) - IAAF world athletic results 2008-2011 full results								
FINAL - 2011 IAAF World Championships (Daegu, KOR)																			
date	time	21.7	32.7	44.90	44.90	44.90	44.90	44.90	44.90	44.90	6 / 3								
reaction time	interval	velocity	9.22	9.09	8.20	8.91	8.91	8.91	8.91	8.91	# of strides	11.00	12.20	21.70	23.20	8.62	1.50		
												9.09	8.20	9.22	8.62				
Deadmon, Bryce (USA) (1997)											Omega Timing (2023) - diamond league race analysis								
FINAL - 2023 Prefontaine Classic (Eugene, OR)																			
date	time	6.10	11.16	16.30	21.62	27.17	32.87	38.68	44.90	44.90	3 / 7								
reaction time	interval	velocity	8.20	9.88	9.73	9.40	9.01	8.77	8.61	8.04	8.91	# of strides	11.16	10.46	11.25	12.03	21.62	23.28	1.66
													8.96	9.56	8.89	8.31	9.25	8.59	
Morales-Williams, Christopher (CAN)											Omega Timing (2024) - diamond league race analysis								
FINAL - 2024 London Athletics Meet (London, GBR)																			
date	time	6.17	11.04	16.06	21.35	26.85	32.63	38.56	44.90	44.90	6 / 6								
reaction time	interval	velocity	8.10	10.27	9.96	9.45	9.09	8.65	8.43	7.89	8.91	# of strides	11.04	10.31	11.28	12.27	21.35	23.55	2.20
													9.06	9.70	8.87	8.15	9.37	8.49	
Black, Roger (GBR) (1966)											Federle (2003) - http://www.fgs.uni-halle.de								
FINAL - 1991 European Cup (Frankfurt, GER)																			
date	time	11.53	21.91	32.90	44.91	44.91	44.91	44.91	44.91	44.91	1 / 1								
reaction time	interval	velocity	8.67	9.63	9.10	8.33	8.91	8.91	8.91	8.91	# of strides	11.53	10.38	10.99	12.01	21.91	23.00	1.09	
													8.67	9.63	9.10	8.33	9.13	8.70	
Wariner, Jeremy (USA) (1984)											Graubner (2009) - http://www.fgs.uni-halle.de								
FINAL - 2004 Leichtathletik Team Challenge (Munich, GER)																			
date	time	11.05	21.64	32.76	44.91	44.91	44.91	44.91	44.91	44.91	1 / 1								
reaction time	interval	velocity	9.05	9.44	8.99	8.23	8.91	8.91	8.91	8.91	# of strides	11.05	10.59	11.12	12.15	21.64	23.27	1.63	
													9.05	9.44	8.99	8.23	9.24	8.59	
Maslák, Pavel (CZE) (1991)											(2013) - www.trackandfieldnews.com/index.php?option=com_content&view=article&id=1698								
FINAL - 2013 IAAF World Championships (Moscow, RUS)																			
date	time	11.2	21.8	32.9	44.91	44.91	44.91	44.91	44.91	44.91	1 / 5								
reaction time	interval	velocity	8.93	9.43	9.01	8.33	8.91	8.91	8.91	8.91	# of strides	11.20	10.60	11.10	12.00	21.80	23.10	1.30	
													8.93	9.43	9.01	8.33	9.17	8.66	
James, Kirani (GRN) (1992)											Seiko Timing (2023) - world championship race analysis								
Heat 4 - 2023 World Athletics Championships (Budapest, HUN)																			
date	time	11.12	21.70	33.16	44.91	44.91	44.91	44.91	44.91	44.91	6 / 1								
reaction time	interval	velocity	8.99	9.45	8.73	8.51	8.91	8.91	8.91	8.91	# of strides	11.12	10.58	11.46	11.75	21.70	23.21	1.51	
													8.99	9.45	8.73	8.51	9.22	8.62	
Boling, Matthew (USA) (2000)											USATF and Karmarush (2024) - USA Olympic trials results and race analysis								
Semi-Final 1 - 2024 USA Olympic Trials (Eugene, OR)																			
date	time	10.78	21.02	32.65	44.91	44.91	44.91	44.91	44.91	44.91	8 / 3								
reaction time	interval	velocity	10.24	11.63	12.26	8.91	8.91	8.91	8.91	8.91	# of strides	10.78	10.24	11.63	12.26	21.02	23.89	2.87	

	velocity	9.28	9.77	8.60	8.16	8.91		9.28	9.77	8.60	8.16	9.51	8.37					
Powell, Jevaghn (JAM) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 3 - 2024 Olympic Games (Paris, FRA)																		
date	06-Aug-24	time	6.07	10.86	15.78	20.94	26.41	32.16	38.31	44.91	9 / 4							
reaction time	0.155	interval	4.79	4.92	5.16	5.47	5.75	6.15	6.60	# of strides	10.86	10.08	11.22	12.75	20.94	23.97	3.03	
		velocity	8.24	10.44	10.16	9.69	9.14	8.70	8.13	7.58	8.91	175.5	9.21	9.92	8.91	7.84	9.55	8.34
Sang, Julius (KEN) (1948)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 1972 Olympic Games (Munich, FRG)																		
date	07-Sep-72	time			21.6		32.7		45.0	44.92	5 / 3							
reaction time		interval				11.10		12.30		# of strides	21.60	11.10	12.30		21.60	23.40	1.80	
		velocity			9.26		9.01		8.13	8.90	180.0	9.26	9.01	8.13	9.26	8.55	8.55	
Taylor, Angelo (USA) (1978)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2007 IAAF World Athletic Final (Stuttgart, GER)																		
date	22-Sep-07	time	11.29		21.90		38.96		44.92	44.92	6 / 3							
reaction time	0.156	interval			10.61		17.06		5.96	# of strides	11.29	10.61	17.06	5.96	21.90	23.02	1.12	
		velocity	8.86		9.43		5.86		16.78	8.90	8.86	9.43	5.86	16.78	9.13	8.69	8.69	
Feliz, Lidio Andres (DOM) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2022 Meeting de Paris (Paris, FRA)																		
date	16-Jun-22	time	6.20	11.07	16.01	21.15	26.60	32.40	38.40	44.92	44.92	4 / 2						
reaction time	0.187	interval		4.87	4.94	5.14	5.45	5.80	6.00	6.52	# of strides	11.07	10.08	11.25	12.52	21.15	23.77	2.62
		velocity	8.06	10.27	10.12	9.73	9.17	8.62	8.33	7.67	8.90	173.0	9.03	9.92	8.89	7.99	9.46	8.41
Zambrano, Anthony (COL) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Heat 2 - 2023 World Athletics Championships (Budapest, HUN)																		
date	20-Aug-23	time	11.03		21.29		32.62		44.92	44.92	9 / 5							
reaction time	0.223	interval			10.26		11.33		12.30	DQ	# of strides	11.03	10.26	11.33	12.30	21.29	23.63	2.34
		velocity	9.07		9.75		8.83		8.13	8.90	176.0	9.07	9.75	8.83	8.13	9.39	8.46	
Doom, Alexander (BEL) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Heat 6 - 2023 World Athletics Championships (Budapest, HUN)																		
date	20-Aug-23	time	11.50		21.59		32.90		44.92	44.92	5 / 2							
reaction time	0.171	interval			10.09		11.31		12.02	PB	# of strides	11.50	10.09	11.31	12.02	21.59	23.33	1.74
		velocity	8.70		9.91		8.84		8.32	8.90	177.5	8.70	9.91	8.84	8.32	9.26	8.57	
Uti, Sunday (NGR) (1962)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 1984 Olympic Games (Los Angeles, CA)																		
date	08-Aug-84	time			21.8				44.93	44.93	2 / 6							
reaction time	0.186	interval						23.13		# of strides					21.80	23.13	1.33	
		velocity			9.17			8.65	8.90						9.17	8.65	8.65	
Collazo, William (CUB) (1986)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 2 - 2009 IAAF World Championships (Berlin, GER)																		
date	19-Aug-09	time	10.97		21.56		32.67		44.93	44.93	5 / 3							
reaction time	0.147	interval			10.59		11.11		12.26	PB	# of strides	10.97	10.59	11.11	12.26	21.56	23.37	1.81
		velocity	9.12		9.44		9.00		8.16	8.90	9.12	9.44	9.00	8.16	9.28	8.56	8.56	
Strother, Nathan (USA) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2018 Weltklasse (Zürich, SUI)																		
date	30-Aug-18	time	11.3		21.7		32.7		44.93	44.93	3 / 2							
reaction time	0.156	interval			10.4		11.0		12.2	# of strides	11.30	10.40	11.00	12.23	21.70	23.23	1.53	
		velocity	8.85		9.62		9.09		8.18	8.90	175.2	8.85	9.62	9.09	8.18	9.22	8.61	
Cedenio, Machel (TTO) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
National FINAL - 2019 Memorial van Damme (Brussels, BEL)																		
date	06-Sep-19	time	6.3	11.2	16.3	21.6	27.1	32.9	38.8	44.93	44.93	4 / 1						
reaction time		interval		4.9	5.1	5.3	5.5	5.8	5.9	6.1	# of strides	11.20	10.40	11.30	12.03	21.60	23.33	1.73
		velocity	7.94	10.20	9.80	9.43	9.09	8.62	8.47	8.16	8.90	8.93	9.62	8.85	8.31	9.26	8.57	
Ogando, Alexander (DOM) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2023 Memorial van Damme (Brussels, BEL)																		
date	08-Sep-23	time	6.11	10.98	16.14	21.51	27.16	32.88	38.83	44.93	44.93	2 / 2						
reaction time	0.157	interval		4.87	5.16	5.37	5.65	5.72	5.95	6.10	# of strides	10.98	10.53	11.37	12.05	21.51	23.42	1.91
		velocity	8.18	10.27	9.69	9.31	8.85	8.74	8.40	8.20	8.90	178.7	9.11	9.50	8.80	8.30	9.30	8.54
Matthews, Vince (USA) (1947)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 1968 USA Olympic Trials (Echo Summit, CA) (Altitude)																		
date	14-Sep-68	time			20.7				44.8	44.8	5 / 4							
reaction time		interval						24.1	(44.86)	# of strides					20.70	24.10	3.40	
		velocity			9.66			8.30	8.93						9.66	8.30	8.30	
Evans, Lee (USA) (1947)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 1969 NCAA Championships (Knoxville, TN) (yards)																		
date	21-Jun-69	time			21.4				44.8	44.8	1 / 2							
reaction time		interval						23.4	(45.32)	# of strides					21.40	23.40	2.00	
		velocity			9.35			8.55	8.93	(45.1/440y)					9.35	8.55	8.55	
Reynolds, Harry (Butch) (USA) (1964)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 2 - 1987 IAAF World Championship (Rome, ITA)																		
date	01-Sep-87	time	11.46		21.80		33.00		44.94	44.94	2 / 4							
reaction time		interval			10.34		11.20		11.94	# of strides	11.46	10.34	11.20	11.94	21.80	23.14	1.34	
		velocity	8.73		9.67		8.93		8.38	8.90	8.73	9.67	8.93	8.38	9.17	8.64	8.64	
Cameron, Bert (JAM) (1959)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	

velocity	8.79	9.65	9.26	8.94	8.53	7.86	8.90	171.5	8.79	9.65	9.10	8.18	9.20	8.62
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		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Brown, Chris (BAH) (1978)																		
Semi-Final 3 - 2009 IAAF World Championships (Berlin, GER)																		
date	19-Aug-09	time	11.08		21.72		32.84		44.95	44.95	3 / 1							
reaction time	0.129	interval			10.64		11.12		12.11		# of strides	11.08	10.64	11.12	12.11	21.72	23.23	1.51
		velocity	9.03		9.40		8.99		8.26	8.90		9.03	9.40	8.99	8.26	9.21	8.61	
Hudson-Smith, Matthew (GBR) (1994)																		
FINAL - 2018 Weltklasse (Zürich, SUI)																		
date	30-Aug-18	time	11.0		21.3		32.5		44.95	44.95	6 / 3							
reaction time	0.139	interval			10.3		11.2		12.5		# of strides	11.00	10.30	11.20	12.45	21.30	23.65	2.35
		velocity	9.09		9.71		8.93		8.03	8.90	161.2	9.09	9.71	8.93	8.03	9.39	8.46	
Robinson, Justin (USA) (2002)																		
Semi-Final 1 - 2024 USA Olympic Trials (Eugene, OR)																		
date	23-Jun-24	time	11.19		21.79		33.16		44.95	44.95	7 / 4							
reaction time		interval			10.60		11.37		11.79		# of strides	11.19	10.60	11.37	11.79	21.79	23.16	1.37
		velocity	8.94		9.43		8.80		8.48	8.90		8.94	9.43	8.80	8.48	9.18	8.64	
Harrison, Calvin (USA) (1974)																		
FINAL - 2003 IAAF World Championships (Paris, FRA)																		
date	26-Aug-03	time			21.5		32.3		44.96	44.96	3 / 6							
reaction time	0.176	interval					10.8		12.7	DV	# of strides			10.80	12.66	21.50	23.46	1.96
		velocity			9.30		9.26		7.90	8.90				9.26	7.90	9.30	8.53	
Mitchell, Manteo (USA) (1987)																		
FINAL - 2012 USA Olympic Trials (Eugene, OR)																		
date	24-Jun-12	time			21.2		32.3		44.96	44.96	3 / 5							
reaction time	0.191	interval					11.10		12.66	PB	# of strides			21.20	11.10	12.66	21.20	23.76
		velocity			9.43		9.01		7.90	8.90				4.72	9.01	7.90	9.43	8.42
Igbokwe, Obi (USA) (1997)																		
FINAL - 2019 Memorial van Damme (Brussels, BEL)																		
date	06-Sep-19	time	6.1	11.0	16.0	21.2	26.6	32.4	38.4	44.96	44.96							
reaction time	0.136	interval		4.9	5.0	5.2	5.4	5.8	6.0	12.6	# of strides	11.00	10.20	11.20	12.56	21.20	23.76	2.56
		velocity	8.20	10.20	10.00	9.62	9.26	8.62	8.33	7.96	8.90	9.09	9.80	8.93	7.96	9.43	8.42	
Mweresa, Boniface (KEN) (1993)																		
FINAL - 2022 Commonwealth Games (Birmingham, GBR)																		
date	07-Aug-22	time	6.0	10.8	15.8	21.0	26.5	32.3	38.4	44.96	44.96							
reaction time	0.178	interval		4.80	5.00	5.20	5.50	5.80	6.10	6.56	# of strides	10.80	10.20	11.30	12.66	21.00	23.96	2.96
		velocity	8.33	10.42	10.00	9.62	9.09	8.62	8.20	7.62	8.90	9.26	9.80	8.85	7.90	9.52	8.35	
Bailey, Sean (JAM) (1997)																		
FINAL - 2023 World Athletics Championships (Budapest, HUN)																		
date	24-Aug-23	time	11.18		21.67		32.90		44.96	44.96	9 / 5							
reaction time	0.169	interval			10.49		11.23		12.06		# of strides	11.18	10.49	11.23	12.06	21.67	23.29	1.62
		velocity	8.94		9.53		8.90		8.29	8.90		8.94	9.53	8.90	8.29	9.23	8.59	
Morales-Williams, Christopher (CAN) (1997)																		
Heat 5 - 2024 Olympic Games (Paris, FRA)																		
date	04-Aug-24	time	6.13	11.13	16.23	21.57	27.14	32.94	38.78	44.96	44.96							
reaction time	0.177	interval		5.00	5.10	5.34	5.57	5.80	5.84	6.18	# of strides	11.13	10.44	11.37	12.02	21.57	23.39	1.82
		velocity	8.16	10.00	9.80	9.36	8.98	8.62	8.56	8.09	8.90	164.0	8.98	9.58	8.80	8.32	9.27	8.55
Dobson, Charles (GBR) (1999)																		
Heat 6 - 2024 Olympic Games (Paris, FRA)																		
date	04-Aug-24	time	6.14	11.15	16.25	21.57	27.08	32.77	38.69	44.96	44.96							
reaction time	0.156	interval		5.01	5.10	5.32	5.51	5.69	5.92	6.27	# of strides	11.15	10.42	11.20	12.19	21.57	23.39	1.82
		velocity	8.14	9.98	9.80	9.40	9.07	8.79	8.45	7.97	8.90	162.7	8.97	9.60	8.93	8.20	9.27	8.55
Egbunike, Innocent (NGR) (1961)																		
FINAL - 1988 Weltklasse (Zurich, SUI)																		
date	17-Aug-88	time			20.9		32.3		44.97	44.97	/ 6							
reaction time		interval					11.40		12.67		# of strides			11.40	12.67	20.90	24.07	3.17
		velocity			9.57		8.77		7.89	8.89				8.77	7.89	9.57	8.31	
Schultz, Ingo (GER) (1975)																		
FINAL - 2002 German National Championships (Bochum, GER)																		
date	06-Jul-02	time	11.29		21.38		32.47		44.97	44.97	/ 1							
reaction time	0.179	interval			10.09		11.09		12.50		# of strides	11.29	10.09	11.09	12.50	21.38	23.59	2.21
		velocity	8.86		9.91		9.02		8.00	8.89		8.86	9.91	9.02	8.00	9.35	8.48	
Willie, Kelly (USA) (1982)																		
FINAL - 2004 USA Olympic Trials (Sacramento, CA)																		
date	15-Jul-04	time	10.89		21.62		27.01		32.48	38.32	44.97	44.97						
reaction time		interval			10.73		5.39		5.47	5.84	6.65	# of strides	10.89	10.73	10.86	12.49	21.62	23.35
		velocity	9.18		9.32		9.28		9.14	8.56	7.52	8.89	9.32	9.21	8.01	9.25	8.57	
Henry, Tabarie (ISV) (1987)																		
Semi-Final 3 - 2009 IAAF World Championships (Berlin, GER)																		
date	19-Aug-09	time	11.22		21.91		32.89		44.97	44.97	4 / 2							
reaction time	0.146	interval			10.69		10.98		12.08		# of strides	11.22	10.69	10.98	12.08	21.91	23.06	1.15
		velocity	8.91		9.35		9.11		8.28	8.89		8.91	9.35	9.11	8.28	9.13	8.67	
Al-Masrahi, Youssef (KSA) (1987)																		

FINAL - 2013 IAAF World Championships (Moscow, RUS)										(2013) - www.trackandfieldnews.com/index.php?option=com_content&view=article&id=1698									
date	13-Aug-13	time	11.4	21.8	32.7	45.0	44.97	3 / 6											
reaction time	0.162	interval		10.4	10.9	12.3		# of strides	11.40	10.40	10.90	12.30	21.80	23.20	1.40				
		velocity	8.77	9.62	9.17	8.13	8.89		8.77	9.62	9.17	8.13	9.17	8.62					
Taylor, Christopher (JAM) (1999)										50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential									
Semi-Final 1 - 2022 World Athletics Championships (Eugene, OR)										Timing by Seiko (2022) - world athletics championships race analysis									
date	20-Jul-22	time	11.16	21.66	32.89	44.97	44.97	3 / 3											
reaction time	0.173	interval		10.50	11.23	12.08		# of strides	11.16	10.50	11.23	12.08	21.66	23.31	1.65				
		velocity	8.96	9.52	8.90	8.28	8.89		182.0	8.96	9.52	8.90	8.28	9.23	8.58				
van Niekerk, Wayde (RSA) (1992)										50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential									
FINAL - 2022 World Athletics Championships (Eugene, OR)										Timing by Seiko (2022) - world athletics championships race analysis									
date	22-Jul-22	time	10.98	21.33	32.21	44.97	44.97	7 / 5											
reaction time	0.248	interval		10.35	10.88	12.76		# of strides	10.98	10.35	10.88	12.76	21.33	23.64	2.31				
		velocity	9.11	9.66	9.19	7.84	8.89		166.0	9.11	9.66	9.19	7.84	9.38	8.46				
Sato, Fuga (JPN) (1996)										50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential									
Heat 4 - 2023 World Athletics Championships (Budapest, HUN)										Yamanaka (2024) - analysis of men's and women's 400m and 300m runs in the 2023 season									
date	20-Aug-23	time	6.12	11.13	16.25	21.54	27.02	32.73	38.69	44.97	44.97	5 / 2							
reaction time	0.167	interval		5.01	5.12	5.29	5.48	5.71	5.96	6.28	PB	# of strides	11.13	10.41	11.19	12.24	21.54	23.43	1.89
		velocity	8.17	9.98	9.77	9.45	9.12	8.76	8.39	7.96	8.89		176.0	8.98	9.61	8.94	8.17	9.29	8.54
Pinder, Demetrius (BAH) (1989)										50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential									
FINAL - 2012 Olympic Games (London, GBR)										Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016									
date	06-Aug-12	time	10.9	21.4	32.3	45.0	44.98	8 / 7											
reaction time	0.153	interval		10.50	10.90	12.70		# of strides	10.90	10.50	10.90	12.70	21.40	23.60	2.20				
		velocity	9.17	9.52	9.17	7.87	8.89		174.7	9.17	9.52	9.17	7.87	9.35	8.47				
Quow, Rennie (TTO) (1987)										50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential									
Semi-Final 1 - 2015 IAAF World Championships (Beijing, CHN)										Yamamoto (2015) - race analysis of 15th World Championships 400m- focusing on men's semis and women's prelims									
date	24-Aug-15	time	6.17	11.18	16.27	21.44	26.76	32.40	38.39	44.98	44.98	4 / 5							
reaction time	0.189	interval		5.01	5.09	5.17	5.32	5.64	5.99	6.59		# of strides	11.18	10.26	10.96	12.58	21.44	23.54	2.10
		velocity	8.10	9.98	9.82	9.67	9.40	8.87	8.35	7.59	8.89		188.0	8.94	9.75	9.12	7.95	9.33	8.50
Gardiner, Steven (BAH) (1995)										50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential									
Semi-Final 2 - 2015 IAAF World Championships (Beijing, CHN)										Yamamoto (2015) - race analysis of 15th World Championships 400m- focusing on men's semis and women's prelims									
date	24-Aug-15	time	6.57	11.71	16.83	22.15	27.63	33.11	38.92	44.98	44.98	6 / 7							
reaction time	0.204	interval		5.14	5.12	5.32	5.48	5.48	5.81	6.06		# of strides	11.71	10.44	10.96	11.87	22.15	22.83	0.68
		velocity	7.61	9.73	9.77	9.40	9.12	9.12	8.61	8.25	8.89		159.0	8.54	9.58	9.12	8.42	9.03	8.76
Hudson-Smith, Matthew (GBR) (1994)										50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential									
Semi-Final 1 - 2022 European Athletics Championships (Munich, GER)										European Athletics (2022) - european athletics championships race analysis									
date	16-Aug-22	time	10.89	21.31	32.41	44.98	44.98	5 / 1											
reaction time	0.169	interval		10.42	11.10	12.57		# of strides	10.89	10.42	11.10	12.57	21.31	23.67	2.36				
		velocity	9.18	9.60	9.01	7.96	8.89		164.7	9.18	9.60	9.01	7.96	9.39	8.45				
Scotch, Leungo (BOT) (1996)										50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential									
FINAL - 2023 London Athletics Meet (London, GBR)										Omega Timing (2023) - diamond league race analysis									
date	23-Jul-23	time	6.09	11.02	16.08	21.26	26.70	32.43	38.40	44.98	44.98	2 / 5							
reaction time	0.162	interval		4.93	5.06	5.18	5.44	5.73	5.97	6.58		# of strides	11.02	10.24	11.17	12.55	21.26	23.72	2.46
		velocity	8.21	10.14	9.88	9.65	9.19	8.73	8.38	7.60	8.89		176.2	9.07	9.77	8.95	7.97	9.41	8.43
Bailey, Sean (JAM) (1997)										50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential									
Heat 4 - 2023 World Athletics Championships (Budapest, HUN)										Seiko Timing (2023) - world championship race analysis									
date	20-Aug-23	time	11.36	21.70	33.05	44.98	44.98	3 / 3											
reaction time	0.183	interval		10.34	11.35	11.93		# of strides	11.36	10.34	11.35	11.93	21.70	23.28	1.58				
		velocity	8.80	9.67	8.81	8.38	8.89		176.0	8.80	9.67	8.81	8.38	9.22	8.59				
Sacoer, Jonathan (BEL) (1999)										50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential									
FINAL - 2024 European Athletics Championships (Roma, ITA)										European Athletics (2024) - 2024 european athletics championships - results book									
date	10-Jun-24	time	11.10	21.44	32.42	44.98	44.98	5 / 4											
reaction time	0.184	interval		10.34	10.98	12.56		# of strides	11.10	10.34	10.98	12.56	21.44	23.54	2.10				
		velocity	9.01	9.67	9.11	7.96	8.89		169.5	9.01	9.67	9.11	7.96	9.33	8.50				
Lincoln, Judson (USA) (2004)										50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential									
Semi-Final 2 - 2024 USA Olympic Trials (Eugene, OR)										USATF and Karmarsh (2024) - USA Olympic trials results and race analysis									
date	23-Jun-24	time	10.76	20.86	32.13	44.98	44.98	8 / 4											
reaction time		interval		10.10	11.27	12.85		# of strides	10.76	10.10	11.27	12.85	20.86	24.12	3.26				
		velocity	9.29	9.90	8.87	7.78	8.89		9.29	9.90	8.87	7.78	9.59	8.29					
Hernández, Roberto (CUB) (1967)										50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential									
FINAL - 1987 IAAF World Championship (Rome, ITA)										Moravec (1990) - time analysis of the sprints - Rome 1987 Scientific Report (2nd ed)									
date	03-Sep-87	time	11.07	21.48	32.66	44.99	44.99	4 / 4											
reaction time		interval		10.41	11.18	12.33		# of strides	11.07	10.41	11.18	12.33	21.48	23.51	2.03				
		velocity	9.03	9.61	8.94	8.11	8.89		9.03	9.61	8.94	8.11	9.31	8.51					
Clarke, Davian (JAM) (1976)										50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential									
FINAL - 1996 Olympic Games (Atlanta, GA)										Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016									
date	29-Jul-96	time	21.37	32.7	44.99	44.99	6 / 7												
reaction time	0.348	interval		11.33	12.29		# of strides			21.37	11.33	12.29	21.37	23.62	2.25				
		velocity	9.36	8.83	8.14	8.89				9.36	8.83	8.14	9.36	8.47					
Witherspoon, Reggie (USA) (1985)										50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential									
Semi-Final 1 - 2008 USA Olympic Trials (Eugene, OR)										USATF Women's Sprint Development with HPC (2008)									
date	30-Jun-08	time	11.16	16.35	21.61	27.16	32.95	38.77	44.99	44.99	6 / 1								
reaction time		interval		5.19	5.26	5.55	5.79	5.82	6.22	PB		# of strides	11.16	10.45	11.34	12.04	21.61	23.38	1.77

velocity	8.96	9.63	9.51	9.01	8.64	8.59	8.04	8.89			8.96	9.57	8.82	8.31	9.25	8.55
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		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Miller, Ramon (BAH) (1987)																			
Semi-Final 1 - 2009 IAAF World Championships (Berlin, GER)																			
date	19-Aug-09	time	11.26		21.99		32.80		44.99	44.99	5 / 5								
reaction time	0.157	interval			10.73		10.81		12.19	PB	# of strides	11.26	10.73	10.81	12.19	21.99	23.00	1.01	
		velocity	8.88		9.32		9.25		8.20	8.89		8.88	9.32	9.25	8.20	9.10	8.70		
Gonzales, Jermaine (JAM) (1984)																			
FINAL - 2011 IAAF World Championships (Daegu, KOR)																			
date	30-Aug-11	time					32.7		44.99	44.99	3 / 4								
reaction time	0.138	interval					12.3		12.3		# of strides				12.29				
		velocity				9.17	8.14		8.89	8.89	168.0				8.14				
James, Kirani (GRN) (1992)																			
FINAL - 2013 IAAF World Championships (Moscow, RUS)																			
date	13-Aug-13	time	11.1		21.3		31.9		45.0	44.99	5 / 7								
reaction time	0.186	interval			10.2		10.6		13.1		# of strides	11.10	10.20	10.60	13.10	21.30	23.70	2.40	
		velocity	9.01		9.80		9.43		7.63	8.89		9.01	9.80	9.43	7.63	9.39	8.44		
Nene, Zakhiti (RSA) (1998)																			
FINAL - 2022 Meeting de Paris (Paris, FRA)																			
date	16-Jun-22	time	6.07	11.04	16.16	21.43	26.93	32.69	38.60	44.99	44.99	7 / 3							
reaction time	0.142	interval		4.97	5.12	5.27	5.50	5.76	5.91	6.39		# of strides	11.04	10.39	11.26	12.30	21.43	23.56	2.13
		velocity	8.24	10.06	9.77	9.49	9.09	8.68	8.46	7.82	8.89	177.2	9.06	9.62	8.88	8.13	9.33	8.49	
Sato, Kentaro (JPN) (1994)																			
Semi-Final 1 - 2023 World Athletics Championships (Budapest, HUN)																			
date	22-Aug-23	time	6.11	11.11	16.22	21.45	26.82	32.56	38.56	44.99	44.99	6 / 5							
reaction time	0.180	interval		5.00	5.11	5.23	5.37	5.74	6.00	6.43		# of strides	11.11	10.34	11.11	12.43	21.45	23.54	2.09
		velocity	8.18	10.00	9.78	9.56	9.31	8.71	8.33	7.78	8.89	174.0	9.00	9.67	9.00	8.05	9.32	8.50	
Norwood, Vernon (USA) (1992)																			
FINAL - 2023 Xiamen Diamond League (Xiamen, CHN)																			
date	02-Sep-23	time	6.19	11.30	16.56	22.00	27.52	33.20	38.86	44.99	44.99	6 / 4							
reaction time	0.166	interval		5.11	5.26	5.44	5.52	5.68	5.66	6.13		# of strides	11.30	10.70	11.20	11.79	22.00	22.99	0.99
		velocity	8.08	9.78	9.51	9.19	9.06	8.80	8.83	8.16	8.89	172.2	8.85	9.35	8.93	8.48	9.09	8.70	
Sacoor, Jonathan (BEL) (1999)																			
Semi-Final 1 - 2024 European Athletics Championships (Roma, ITA)																			
date	09-Jun-24	time	11.17		21.59		32.64		44.99	44.99	4 / 2								
reaction time	0.165	interval			10.42		11.05		12.35	PB	# of strides	11.17	10.42	11.05	12.35	21.59	23.40	1.81	
		velocity	8.95		9.60		9.05		8.10	8.89	171.7	8.95	9.60	9.05	8.10	9.26	8.55		
Sito, Luca (ITA) (2003)																			
Heat 3 - 2024 Olympic Games (Paris, FRA)																			
date	04-Aug-24	time	6.13	11.11	16.20	21.49	27.01	32.70	38.54	44.99	44.99	8 / 3							
reaction time	0.163	interval		4.98	5.09	5.29	5.52	5.69	5.84	6.45		# of strides	11.11	10.38	11.21	12.29	21.49	23.50	2.01
		velocity	8.16	10.04	9.82	9.45	9.06	8.79	8.56	7.75	8.89	173.0	9.00	9.63	8.92	8.14	9.31	8.51	
Singhapurage, Aruna Dharshana (SR)																			
Heat 5 - 2024 Olympic Games (Paris, FRA)																			
date	04-Aug-24	time	6.41	11.38	16.34	21.58	27.12	32.83	38.75	44.99	44.99	9 / 3							
reaction time	0.192	interval		4.97	4.96	5.24	5.54	5.71	5.92	6.24		# of strides	11.38	10.20	11.25	12.16	21.58	23.41	1.83
		velocity	7.80	10.06	10.08	9.54	9.03	8.76	8.45	8.01	8.89	180.0	8.79	9.80	8.89	8.22	9.27	8.54	
Johnson, Michael (USA) (1967)																			
FINAL - 2000 ISTAF (Berlin, GER)																			
date	01-Sep-00	time	11.42		22.22		33.20		45.00	45.00	1 / 1								
reaction time		interval			10.80		10.98		11.80		# of strides	11.42	10.80	10.98	11.80	22.22	22.78	0.56	
		velocity	8.76		9.26		9.11		8.47	8.89		8.76	9.26	9.11	8.47	9.00	8.78		
Miller, Ramon (BAH) (1987)																			
Heat 5 - 2009 IAAF World Championships (Berlin, GER)																			
date	18-Aug-09	time	11.16		21.70		32.74		45.00	45.00	4 / 1								
reaction time	0.143	interval			10.54		11.04		12.26	PB	# of strides	11.16	10.54	11.04	12.26	21.70	23.30	1.60	
		velocity	8.96		9.49		9.06		8.16	8.89		8.96	9.49	9.06	8.16	9.22	8.58		
Samba, Abderrahman (QAT) (1995)																			
FINAL - 2019 Herculis Meeting International d'Athlétisme (Monaco, MON)																			
date	12-Jul-19	time	11.2		21.6		32.8		45.00	45.00	3 / 2								
reaction time	0.141	interval			10.4		11.2		12.2		# of strides	11.20	10.40	11.20	12.20	21.60	23.40	1.80	
		velocity	8.93		9.62		8.93		8.20	8.89		8.93	9.62	8.93	8.20	9.26	8.55		
Bonevacia, Liemarvin (NED) (1989)																			
FINAL - 2021 Memorial van Damme (Brussels, BEL)																			
date	03-Sep-21	time	6.3	11.3	16.3	21.5	26.9	32.6	38.6	45.00	45.00	6 / 4							
reaction time	0.135	interval		5.00	5.00	5.20	5.40	5.70	6.00	6.40		# of strides	11.30	10.20	11.10	12.40	21.50	23.50	2.00
		velocity	7.94	10.00	10.00	9.62	9.26	8.77	8.33	7.81	8.89	184.0	8.85	9.80	9.01	8.06	9.30	8.51	
Gakou, Amadou (SEN) (1940)																			
FINAL - 1968 Olympic Games (Mexico City, MEX) (Altitude)																			
date	18-Oct-68	time			21.7		32.9		45.0	45.01	5 / 4								
reaction time		interval					11.20		12.10	NR	# of strides		21.70	11.20	12.10	21.70	23.30	1.60	
		velocity			9.22		8.93		8.26	8.89			9.22	8.93	8.26	9.22	8.58		
Schönelebe, Thomas (GDR) (1965)																			

FINAL - 1984 East German Athletics Sportfest (East Berlin, GDR)																			
date	15-Jul-84	time	11.40	21.70	32.82	45.01	45.01	<i>Heß (1985) - entwicklungsaspekte die leichtathletischen sprint-/hürdendisziplinen im olympiazzyklus 1981/84</i>											
reaction time		interval		10.30	11.12	12.19	AJR / PB	# of strides	11.40	10.30	11.12	12.19	21.70	23.31	1.61				
		velocity	8.77	9.71	8.99	8.20	8.89		8.77	9.71	8.99	8.20	9.22	8.58					
Parrela, Sanderlei Claro (BRA) (1974) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2000 Olympic Games (Sydney, AUS)																			
date	25-Sep-00	time	11.5	21.6	32.7	45.0	45.01	<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>											
reaction time		interval		10.10	11.10	12.30		# of strides	11.50	10.10	11.10	12.30	21.60	23.40	1.80				
		velocity	8.70	9.90	9.01	8.13	8.89		8.70	9.90	9.01	8.13	9.26	8.55					
Brew, Derrick (USA) (1977) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2005 USATF National Championships (Carson, CA)																			
date	25-Jun-05	time	11.28	16.41	21.56	26.89	32.50	38.51	45.01	45.01	3 / 5								
reaction time		interval		5.13	5.15	5.33	5.61	6.01	6.50		# of strides	11.28	10.28	10.94	12.51				
		velocity	8.87	9.75	9.71	9.38	8.91	8.32	7.69	8.89		8.87	9.73	9.14	7.99	9.28	8.53		
Witherspoon, Reggie (USA) (1985) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2008 USA Olympic Trials (Eugene, OR)																			
date	03-Jul-08	time	11.02	15.65	21.51	27.10	32.53	38.58	45.01	45.01	7 / 4								
reaction time		interval		4.63	5.86	5.59	5.43	6.05	6.43		# of strides	11.02	10.49	11.02	12.48				
		velocity	9.07	10.80	8.53	8.94	9.21	8.26	7.78	8.89		9.07	9.53	9.07	8.01	9.30	8.51		
Kebinatshipi, Collen (BOT) (2004) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2023 FBK Games (Hengelo, NED)																			
date	04-Jun-23	time	6.20	11.24	16.53	22.08	27.71	33.30	38.95	45.01	45.01	7 / 1							
reaction time	0.179	interval		5.04	5.29	5.55	5.63	5.59	5.65	6.06		# of strides	11.24	10.84	11.22	11.71			
		velocity	8.06	9.92	9.45	9.01	8.88	8.94	8.85	8.25	8.89		8.90	9.23	8.91	8.54	9.06	8.72	
Nene, Zakhiti (RSA) (1998) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
Heat 5 - 2024 Olympic Games (Paris, FRA)																			
date	04-Aug-24	time	6.06	10.96	15.99	21.27	26.75	32.49	38.43	45.01	45.01	4 / 4							
reaction time	0.134	interval		4.90	5.03	5.28	5.48	5.74	5.94	6.58		# of strides	10.96	10.31	11.22	12.52			
		velocity	8.25	10.20	9.94	9.47	9.12	8.71	8.42	7.60	8.89		176.0	9.12	9.70	8.91	7.99	9.40	8.42
Doom, Alexander (BEL) (1997) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
Heat 6 - 2024 Olympic Games (Paris, FRA)																			
date	04-Aug-24	time	6.42	11.36	16.32	21.52	27.02	32.81	38.76	45.01	45.01	7 / 2							
reaction time	0.188	interval		4.94	4.96	5.20	5.50	5.79	5.95	6.25		# of strides	11.36	10.16	11.29	12.20			
		velocity	7.79	10.12	10.08	9.62	9.09	8.64	8.40	8.00	8.89		179.2	8.80	9.84	8.86	8.20	9.29	8.51
Sito, Luca (ITA) (2003) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
Semi-Final 2 - 2024 Olympic Games (Paris, FRA)																			
date	06-Aug-24	time	6.17	11.08	16.00	21.17	26.60	32.35	38.39	45.01	45.01	9 / 5							
reaction time	0.148	interval		4.91	4.92	5.17	5.43	5.75	6.04	6.62		# of strides	11.08	10.09	11.18	12.66			
		velocity	8.10	10.18	10.16	9.67	9.21	8.70	8.28	7.55	8.89		9.03	9.91	8.94	7.90	9.45	9.45	8.39
Raquil, Marc (FRA) (1977) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2006 European Championships (Göteborg, SWE)																			
date	09-Aug-06	time			22.5		33.0		45.02	45.02	1 / 1								
reaction time		interval					10.50		12.02		# of strides		22.50	10.50	12.02				
		velocity			8.89		19.05		8.32	8.88			4.44	9.52	8.32	8.89	8.88		
Quow, Rennie (TTO) (1987) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2009 IAAF World Championships (Berlin, GER)																			
date	21-Aug-09	time	6.49	11.73	17.08	22.45	27.82	33.29	39.06	45.02	45.02	3 / 3							
reaction time	0.195	interval		5.24	5.35	5.37	5.37	5.47	5.77	5.96		# of strides	11.73	10.72	10.84	11.73			
		velocity	7.70	9.54	9.35	9.31	9.31	9.14	8.67	8.39	8.88		8.53	9.33	9.23	8.53	8.91	8.86	0.12
Lendore, Deon (TTO) (1992) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2014 NCAA Championships (Eugene, OR)																			
date	13-Jun-14	time			21.6		32.7		45.0	45.02	4 / 1								
reaction time		interval					11.10		12.30		# of strides		11.10	12.30	21.60				
		velocity			9.26		9.01		8.13	8.88			9.01	8.13	9.26	8.55			
Samukonga, Muzala (ZAM) (2002) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
Semi-Final 2 - 2022 World Athletics Championships (Eugene, OR)																			
date	20-Jul-22	time	11.45		22.03		33.15		45.02	45.02	6 / 3								
reaction time	0.196	interval			10.58		11.12		11.87	PB	# of strides	11.45	10.58	11.12	11.87				
		velocity	8.73		9.45		8.99		8.42	8.88		8.73	9.45	8.99	8.42	9.08	8.70		
Molnár, Attila (HUN) (2002) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
Semi-Final 1 - 2023 World Athletics Championships (Budapest, HUN)																			
date	22-Aug-23	time	11.04		21.21		32.55		45.02	45.02	9 / 6								
reaction time	0.156	interval			10.17		11.34		12.47		# of strides	11.04	10.17	11.34	12.47				
		velocity	9.06		9.83		8.82		8.02	8.88		177.0	9.06	9.83	8.82	8.02	9.43	8.40	
Scotch, Leungo (BOT) (1996) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2024 Bislett Games (Oslo, NOR)																			
date	30-May-24	time	6.13	11.02	16.09	21.38	26.88	32.59	38.54	45.02	45.02	8 / 4							
reaction time	0.157	interval		4.89	5.07	5.29	5.50	5.71	5.95	6.48		# of strides	11.02	10.36	11.21	12.43			
		velocity	8.16	10.22	9.86	9.45	9.09	8.76	8.40	7.72	8.88		9.07	9.65	8.92	8.05	9.35	8.46	2.26
Hall, Quincy (USA) (1998) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			
FINAL - 2024 Bislett Games (Oslo, NOR)																			
date	30-May-24	time	6.36	11.37	16.45	21.69	27.13	32.78	38.68	45.02	45.02	4 / 5							
reaction time	0.201	interval		5.01	5.08	5.24	5.44	5.65	5.90	6.34		# of strides	11.37	10.32	11.09	12.24			
															21.69	23.33	1.64		

velocity	7.86	9.98	9.84	9.54	9.19	8.85	8.47	7.89	8.88	161.0	8.80	9.69	9.02	8.17	9.22	8.57
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	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Larregina, Elián (ARG) (2000)																			
Semi-Final 2 - 2024 Olympic Games (Paris, FRA)																			
date	06-Aug-24	time	6.16	11.12	16.16	21.36	26.80	32.60	38.67	45.02	2 / 6								
reaction time	0.154	interval		4.96	5.04	5.20	5.44	5.80	6.07	6.35	# of strides	11.12	10.24	11.24	12.42	21.36	23.66	2.30	
		velocity	8.12	10.08	9.92	9.62	9.19	8.62	8.24	7.87	8.88	8.99	9.77	8.90	8.05	9.36	8.45		
<i>Paris 2024 Olympic Games - Results Book (2024)</i>																			
Al-Malky, Mohamed (OMA) (1962)																			
FINAL - 1988 Olympic Games (Seoul, KOR)																			
date	28-Sep-88	time		11.19		21.49		32.50		45.03	45.03	1 / 8							
reaction time	0.169	interval				10.30		11.01		12.53	# of strides	11.19	10.30	11.01	12.53	21.49	23.54	2.05	
		velocity		8.94		9.71		9.08		7.98	8.88	8.94	9.71	9.08	7.98	9.31	8.50		
<i>Bruggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988</i>																			
Neville, David (USA) (1984)																			
Semi-Final 2 - 2008 USA Olympic Trials (Eugene, OR)																			
date	30-Jun-08	time	11.21	16.46	21.85	27.16	32.95	38.64	45.03	45.03	3 / 3								
reaction time		interval		5.25	5.39	5.31	5.79	5.69	6.39		# of strides	11.21	10.64	11.10	12.08	21.85	23.18	1.33	
		velocity		8.92	9.52	9.28	9.42	8.64	8.79	7.82	8.88	8.92	9.40	9.01	8.28	9.15	8.63		
<i>USATF Women's Sprint Development with HPC (2008)</i>																			
Henriques, Anderson (BRA) (1992)																			
FINAL - 2013 IAAF World Championships (Moscow, RUS)																			
date	13-Aug-13	time	11.2		21.5		32.7		45.0	45.03	2 / 8								
reaction time	0.157	interval			10.3		11.2		12.3		# of strides	11.20	10.30	11.20	12.30	21.50	23.50	2.00	
		velocity		8.93		9.71		8.93		8.13	8.88	8.93	9.71	8.93	8.13	9.30	8.51		
<i>(2013) - www.trackandfieldnews.com/index.php?option=com_content&view=article&id=1698</i>																			
Sacoor, Jonathan (BEL) (1999)																			
FINAL - 2018 IAAF World Junior Championships (Tampere, FIN)																			
date	13-Jul-18	time	6.24	11.29	16.40	21.80	27.35	33.00	38.83	45.03	45.03	5 / 1							
reaction time	0.154	interval		5.05	5.11	5.40	5.55	5.65	5.83	6.20	NJR	# of strides	11.29	10.51	11.20	12.03	21.80	23.23	1.43
		velocity		8.01	9.90	9.78	9.26	9.01	8.85	8.58	8.06	8.88	8.86	9.51	8.93	8.31	9.17	8.61	
<i>Koyama (2018) - research on athlete performance and technique- 2018 data book</i>																			
Makwala, Isaac (BOT) (1986)																			
FINAL - 2021 Bauhaus Galan (Stockholm, SWE)																			
date	04-Jul-21	time	6.3	11.3	16.3	21.4	26.6	32.2	38.3	45.03	45.03	6 / 6							
reaction time	0.207	interval		5.00	5.00	5.10	5.20	5.60	6.10	6.73	# of strides	11.30	10.10	10.80	12.83	21.40	23.63	2.23	
		velocity		7.94	10.00	10.00	9.80	9.62	8.93	8.20	7.43	8.88	180.7	8.85	9.90	9.26	7.79	9.35	8.46
<i>Omega Timing (2021) - diamond league race analysis</i>																			
Petrucciani, Ricky (SUI) (2000)																			
FINAL - 2022 European Athletics Championships (Munich, GER)																			
date	17-Aug-22	time	11.23		21.72		32.91		45.03	45.03	8 / 2								
reaction time	0.197	interval		10.49		11.19		12.12		12.12	# of strides	11.23	10.49	11.19	12.12	21.72	23.31	1.59	
		velocity		8.90		9.53		8.94		8.25	8.88	178.0	8.90	9.53	8.94	8.25	9.21	8.58	
<i>European Athletics (2022) - european athletics championships race analysis</i>																			
Bredau, Jean Paul (GER) (1999)																			
Semi-Final 2 - 2024 European Athletics Championships (Roma, ITA)																			
date	09-Jun-24	time	11.20		21.49		32.72		45.03	45.03	5 / 2								
reaction time	0.160	interval		10.29		11.23		12.31		12.31	# of strides	11.20	10.29	11.23	12.31	21.49	23.54	2.05	
		velocity		8.93		9.72		8.90		8.12	8.88	175.0	8.93	9.72	8.90	8.12	9.31	8.50	
<i>European Athletics (2024) - 2024 european athletics championships - results book</i>																			
Ndori, Bayapo (BOT) (1999)																			
FINAL - 2024 London Athletics Meet (London, GBR)																			
date	20-Jul-24	time	6.29	11.21	16.30	21.62	27.13	32.82	38.74	45.03	45.03	2 / 7							
reaction time	0.164	interval		4.92	5.09	5.32	5.51	5.69	5.92	6.29	# of strides	11.21	10.41	11.20	12.21	21.62	23.41	1.79	
		velocity		7.95	10.16	9.82	9.40	9.07	8.79	8.45	7.95	8.88	8.92	9.61	8.93	8.19	9.25	8.54	
<i>Omega Timing (2024) - diamond league race analysis</i>																			
Diouf, Cheikh Tidiane (SEN) (1995)																			
Repechage 4 - 2024 Olympic Games (Paris, FRA)																			
date	05-Aug-24	time	6.24	11.22	16.41	21.77	27.34	33.04	38.90	45.03	45.03	8 / 2							
reaction time	0.220	interval		4.98	5.19	5.36	5.57	5.70	5.86	6.13	=PB	# of strides	11.22	10.55	11.27	11.99	21.77	23.26	1.49
		velocity		8.01	10.04	9.63	9.33	8.98	8.77	8.53	8.16	8.88	164.0	8.91	9.48	8.87	8.34	9.19	8.60
<i>Paris 2024 Olympic Games - Results Book (2024)</i>																			
Davis, Otis (USA) (1932)																			
FINAL - 1960 Olympic Games (Rome, ITA)																			
date	06-Sep-60	time	10.9		21.5		32.4		44.9	44.9	3 / 1								
reaction time		interval			10.6		10.9		12.5		WR	# of strides	10.90	10.60	10.90	12.50	21.50	23.40	1.90
		velocity		9.17		9.43		9.17		8.00	8.91	(45.07)	9.17	9.43	9.17	8.00	9.30	8.55	
<i>Khomenkov (1982) - a textbook for a track and field coach</i>																			
Kaufmann, Carl (FRG) (1936)																			
FINAL - 1960 Olympic Games (Rome, ITA)																			
date	06-Sep-60	time	10.9		21.5		32.7		44.9	44.9	1 / 2								
reaction time		interval			10.6		11.2		12.2		=WR	# of strides	10.90	10.60	11.20	12.20	21.50	23.40	1.90
		velocity		9.17		9.43		8.93		8.20	8.91	(45.08)	9.17	9.43	8.93	8.20	9.30	8.55	
<i>Khomenkov (1982) - a textbook for a track and field coach</i>																			
Larrabee, Mike (USA) (1933)																			
FINAL - 1964 USA Olympic Trials (Los Angeles, CA)																			
date	12-Sep-64	time	10.4		20.9		32.1		44.9	44.9	1 / 1								
reaction time		interval			10.5		11.2		12.8		=WR	# of strides	10.40	10.50	11.20	12.80	20.90	24.00	3.10
		velocity		9.62		9.52		8.93		7.81	8.91	8.91	9.62	9.52	8.93	7.81	9.57	8.33	
<i>FIND SOURCE ???</i>																			
Matthews, Vince (USA) (1947)																			
FINAL - 1972 USA Olympic Trials (Eugene, OR)																			
date	09-Jul-72	time		21.4					44.9	44.9	5 / 3								
reaction time		interval							23.5		# of strides				21.40	23.50	2.10		
		velocity		9.35					8.51	8.91					9.35	8.51			
<i>Hymans (2008) - history of the US olympic trials - track and field</i>																			
Brijdenback, Alfons (BEL) (1954)																			

FINAL - 1976 Olympic Games (Montreal, CAN)													<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>							
date	29-Jul-76	time		21.8		32.6		45.1	45.04		8 / 4									
reaction time		interval				10.80		12.50		# of strides	21.80	10.80	12.50	21.80	23.30	1.50				
		velocity		9.17		9.26		8.00	8.88		170.0	9.17	9.26	8.00	9.17	8.58				
Santos, Luguelín (DOM) (1993)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place													0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Heat 1 - 2012 Olympic Games (London, GBR)													<i>Hadley (2012) - uka 2012 olympic games report: 400m, 4x 400m</i>							
date	04-Aug-12	time		21.10				45.04	45.04		7 / 1									
reaction time	0.187	interval						23.94		# of strides					21.10	23.94	2.84			
		velocity		9.48				8.35	8.88		188.7				9.48	8.35				
Gaye, Demish (JAM) (1993)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place													0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2017 IAAF World Championships (London, GBR)													<i>Yamanaka (2017) - male and female 400m analysis in the 2017 season</i>							
date	08-Aug-17	time	6.16	11.02	15.91	21.03	26.49	32.24	38.35	45.04	45.04	8 / 6								
reaction time	0.179	interval		4.86	4.89	5.12	5.46	5.75	6.11	6.69		# of strides	11.02	10.01	11.21	12.80	21.03	24.01	2.98	
		velocity	8.12	10.29	10.22	9.77	9.16	8.70	8.18	7.47	8.88		182.4	9.07	9.99	8.92	7.81	9.51	8.33	
Bloomfield, Akeem (JAM) (1997)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place													0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2019 Müller Grand Prix (Birmingham, GBR)													<i>Omega Timing (2019) - diamond league race analysis</i>							
date	18-Aug-19	time		11.4		21.8		33.0		45.04	45.04	6 / 1								
reaction time	0.191	interval				10.4		11.2		12.0		# of strides	11.40	10.40	11.20	12.04	21.80	23.24	1.44	
		velocity		8.77		9.62		8.93		8.31	8.88		164.0	8.77	9.62	8.93	8.31	9.17	8.61	
Cherry, Michael (USA) (1995)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place													0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2022 Prefontaine Classic (Eugene, OR)													<i>Omega Timing (2022) - diamond league race analysis</i>							
date	28-May-22	time	6.09	11.07	16.23	21.57	26.99	32.59	38.52	45.04	45.04	6 / 6								
reaction time	0.179	interval		4.98	5.16	5.34	5.42	5.60	5.93	6.52		# of strides	11.07	10.50	11.02	12.45	21.57	23.47	1.90	
		velocity	8.21	10.04	9.69	9.36	9.23	8.93	8.43	7.67	8.88		158.5	9.03	9.52	9.07	8.03	9.27	8.52	
Joseph, Michael (LCA) (2002)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place													0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Heat 1 - 2023 World Athletics Championships (Budapest, HUN)													<i>Seiko Timing (2023) - world championship race analysis</i>							
date	20-Aug-23	time		11.33		21.61		32.79		45.04	45.04	5 / 5								
reaction time	0.153	interval				10.28		11.18		12.25		# of strides	11.33	10.28	11.18	12.25	21.61	23.43	1.82	
		velocity		8.83		9.73		8.94		8.16	8.88		170.0	8.83	9.73	8.94	8.16	9.25	8.54	
Nakajima, Yuki Joseph (JPN) (2002)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place													0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 3 - 2023 World Athletics Championships (Budapest, HUN)													<i>Yamanaka (2024) - analysis of men's and women's 400m and 300m runs in the 2023 season</i>							
date	22-Aug-23	time	6.23	11.19	16.22	21.51	26.96	32.69	38.64	45.04	45.04	9 / 3								
reaction time	0.215	interval		4.88	4.95	5.15	5.36	5.60	5.88	6.40	PB	# of strides	11.19	10.32	11.18	12.35	21.51	23.53	2.02	
		velocity	8.28	10.25	10.10	9.71	9.33	8.93	8.50	7.81	8.88		170.0	8.94	9.69	8.94	8.10	9.30	8.50	
Molnár, Attila (HUN) (2002)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place													0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 1 - 2024 European Athletics Championships (Roma, ITA)													<i>European Athletics (2024) - 2024 european athletics championships - results book</i>							
date	09-Jun-24	time		11.10		21.40		32.62		45.04	45.04	8 / 3								
reaction time	0.167	interval				10.30		11.22		12.42		# of strides	11.10	10.30	11.22	12.42	21.40	23.64	2.24	
		velocity		9.01		9.71		8.91		8.05	8.88		176.0	9.01	9.71	8.91	8.05	9.35	8.46	
Sito, Luca (ITA) (2003)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place													0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2024 European Athletics Championships (Roma, ITA)													<i>European Athletics (2024) - 2024 european athletics championships - results book</i>							
date	10-Jun-24	time		11.07		21.26		32.33		45.04	45.04	7 / 5								
reaction time	0.222	interval				10.19		11.07		12.71		# of strides	11.07	10.19	11.07	12.71	21.26	23.78	2.52	
		velocity		9.03		9.81		9.03		7.87	8.88		172.7	9.03	9.81	9.03	7.87	9.41	8.41	
Cameron, Bert (JAM) (1959)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place													0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 1983 IAAF World Championships (Helsinki, FIN)													<i>Butler (2013) - IAAF world championships statistics handbook- moscow 2013</i>							
date	10-Aug-83	time		21.8				45.05	45.05		4 / 1									
reaction time		interval						23.25	CR		# of strides				21.80	23.25	1.45			
		velocity		9.17				8.60	8.88		177.0				9.17	8.60				
Watts, Quincy (USA) (1970)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place													0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 1993 IAAF World Championships (Stuttgart, GER)													<i>Butler (2013) - IAAF world championships statistics handbook- moscow 2013</i>							
date	17-Aug-93	time		21.85				45.05	45.05		5 / 4									
reaction time		interval						23.20			# of strides				21.85	23.20	1.35			
		velocity		9.15				8.62	8.88		175.2				9.15	8.62				
Brew, Derrick (USA) (1977)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place													0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2003 USATF National Championships (Palo Alto, CA)													<i>USATF Women's Sprint Development (2003)</i>							
date	21-Jun-03	time		21.59		32.81		38.79		45.05	45.05	4 / 4 2								
reaction time		interval				11.22		5.98		6.26		# of strides			11.22	12.24	21.59	23.46	1.87	
		velocity		9.26		8.91		8.36		7.99	8.88				8.91	8.17	9.26	8.53		
Gay, Tyson (USA) (1982)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place													0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2010 Jamaica Invitational (Kingston, JAM)													<i>Vazel (2015) - Van Niekerk and Merritt were on for the record at 300m</i>							
date	01-May-10	time		10.6				45.05	45.05		/ 1									
reaction time		interval						34.5			# of strides	10.60								
		velocity		9.43				8.71	8.88			9.43								
Warholm, Karsten (NOR) (1996)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place													0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2020 Bauhaus Galan (Stockholm, SWE)													<i>Omega Timing (2020) - diamond league race analysis</i>							
date	23-Aug-20	time	6.2	11.5	16.9	22.4	27.9	33.6	39.3	45.05	45.05	8 / 1								
reaction time	0.163	interval		5.30	5.40	5.50	5.50	5.70	5.70	5.75		# of strides	11.50	10.90	11.20	11.45	22.40	22.65	0.25	
		velocity	8.06	9.43	9.26	9.09	9.09	8.77	8.77	8.70	8.88		164.2	8.70	9.17	8.93	8.73	8.93	8.83	
Norwood, Vernon (USA) (1992)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place													0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2023 FBK Games (Hengelo, NED)													<i>Omega Timing (2023) - continental tour race analysis</i>							
date	04-Jun-23	time	6.21	11.18	16.32	21.64	27.11	32.77	38.63	45.05	45.05	4 / 2								
reaction time	0.243	interval		4.97	5.14	5.32	5.47	5.66	5.86	6.42		# of strides	11.18	10.46	11.13	12.28	21.64	23.41	1.77	

velocity 8.05 10.06 9.73 9.40 9.14 8.83 8.53 7.79 8.88 177.0 8.94 9.56 8.98 8.14 9.24 8.54

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Barnes, Zandron (JAM) (2001)																		
Heat 6 - 2023 World Athletics Championships (Budapest, HUN)																		
date	20-Aug-23	time	11.26		21.39		32.49		45.05	45.05	9 / 3							
reaction time	0.186	interval			10.13		11.10		12.56		# of strides	11.26	10.13	11.10	12.56	21.39	23.66	2.27
		velocity	8.88		9.87		9.01		7.96	8.88	178.0	8.88	9.87	9.01	7.96	9.35	8.45	
Redmond, Derek (GBR) (1965)																		
FINAL - 1987 IAAF World Championship (Rome, ITA)																		
date	03-Sep-87	time	11.10		21.36		32.55		45.06	45.06	6 / 5							
reaction time		interval			10.26		11.19		12.51		# of strides	11.10	10.26	11.19	12.51	21.36	23.70	2.34
		velocity	9.01		9.75		8.94		7.99	8.88	178.0	9.01	9.75	8.94	7.99	9.36	8.44	
Canal, David (ESP) (1978)																		
FINAL - 2004 DLV-Gala (Erfurt, GER)																		
date	13-Jun-04	time	11.03		21.25		32.55		45.06	45.06	1 / 1							
reaction time	0.191	interval			10.22		11.30		12.51		# of strides	11.03	10.22	11.30	12.51	21.25	23.81	2.56
		velocity	9.07		9.78		8.85		7.99	8.88	178.0	9.07	9.78	8.85	7.99	9.41	8.40	
Harris, Jerry (USA) (1981)																		
FINAL - 2004 USA Olympic Trials (Sacramento, CA)																		
date	15-Jul-04	time	11.36		21.87	27.40	33.10	38.82	45.06	45.06	1 / 7							
reaction time		interval			10.51	5.53	5.70	5.72	6.24		# of strides	11.36	10.51	11.23	11.96	21.87	23.19	1.32
		velocity	8.80		9.51	9.04	8.77	8.74	8.01	8.88	171.5	8.80	9.51	8.90	8.36	9.14	8.62	
Cedenio, Machel (TTO) (1995)																		
FINAL - 2015 IAAF World Championships (Beijing, CHN)																		
date	26-Aug-15	time	6.34	11.41	16.52	21.84	27.32	33.03	38.88	45.06	2 / 7							
reaction time	0.206	interval			5.07	5.11	5.32	5.48	5.71	5.85	# of strides	11.41	10.43	11.19	12.03	21.84	23.22	1.38
		velocity	7.89	9.86	9.78	9.40	9.12	8.76	8.55	8.09	8.88	8.76	9.59	8.94	8.31	9.16	8.61	
Dunkley, Fitzroy (JAM) (1993)																		
FINAL - 2016 NCAA Championships (Eugene, OR)																		
date	10-Jun-16	time			21.7		32.9		45.1	45.06	2 / 2							
reaction time		interval					11.20		12.20	PB	# of strides			11.20	12.20	21.70	23.40	1.70
		velocity			9.22		8.93		8.20	8.88	178.0			8.93	8.20	9.22	8.55	
Igbokwe, Obi (USA) (1997)																		
FINAL - 2019 Müller Anniversary Games (London, GBR)																		
date	21-Jul-19	time	10.8		20.9		32.0		45.06	45.06	3 / 4							
reaction time	0.128	interval			10.1		11.1		13.1		# of strides	10.80	10.10	11.10	13.06	20.90	24.16	3.26
		velocity	9.26		9.90		9.01		7.66	8.88	175.0	9.26	9.90	9.01	7.66	9.57	8.28	
Lendore, Deon (TTO) (1992)																		
FINAL - 2021 Memorial van Damme (Brussels, BEL)																		
date	03-Sep-21	time	6.2	11.0	16.0	21.2	26.6	32.3	38.4	45.06	3 / 5							
reaction time	0.205	interval			4.80	5.00	5.20	5.40	5.70	6.10	# of strides	11.00	10.20	11.10	12.76	21.20	23.86	2.66
		velocity	8.06	10.42	10.00	9.62	9.26	8.77	8.20	7.51	8.88	9.09	9.80	9.01	7.84	9.43	8.38	
McRae, Khaleb (USA) (2000)																		
FINAL - 2024 USA Olympic Trials (Eugene, OR)																		
date	24-Jun-24	time	10.96		21.33		32.60		45.06	45.06	4 / 7							
reaction time		interval			10.37		11.27		12.46		# of strides	10.96	10.37	11.27	12.46	21.33	23.73	2.40
		velocity	9.12		9.64		8.87		8.03	8.88	178.0	9.12	9.64	8.87	8.03	9.38	8.43	
Nene, Zakhiti (RSA) (1998)																		
Semi-Final 3 - 2024 Olympic Games (Paris, FRA)																		
date	06-Aug-24	time	6.08	10.97	16.02	21.27	26.83	32.59	38.52	45.06	3 / 6							
reaction time	0.146	interval			4.89	5.05	5.25	5.56	5.76	5.93	# of strides	10.97	10.30	11.32	12.47	21.27	23.79	2.52
		velocity	8.22	10.22	9.90	9.52	8.99	8.68	8.43	7.65	8.88	9.12	9.71	8.83	8.02	9.40	8.41	
Haughton, Gregory (JAM) (1973)																		
FINAL - 1999 IAAF World Championships (Sevilla, ESP)																		
date	26-Aug-99	time	6.03	11.01	16.05	21.22	26.60	32.25	38.32	45.07	2 / 5							
reaction time	0.168	interval			4.98	5.04	5.17	5.38	5.65	6.07	# of strides	11.01	10.21	11.03	12.82	21.22	23.85	2.63
		velocity	8.29	10.04	9.92	9.67	9.29	8.85	8.24	7.41	8.88	9.08	9.79	9.07	7.80	9.43	8.39	
Borlée, Jonathan (BEL) (1988)																		
FINAL - 2011 IAAF World Championships (Daegu, KOR)																		
date	30-Aug-11	time			21.7		32.9		45.07	45.07	8 / 5							
reaction time	0.160	interval					11.2		12.2		# of strides			11.20	12.17	21.70	23.37	1.67
		velocity			9.22		8.93		8.22	8.88	171.7			8.93	8.22	9.22	8.56	
Berry, Mike (USA) (1991)																		
FINAL - 2014 NCAA Championships (Eugene, OR)																		
date	13-Jun-14	time			21.9		32.9		45.1	45.07	6 / 2							
reaction time		interval					11.00		12.20		# of strides			11.00	12.20	21.90	23.20	1.30
		velocity			9.13		9.09		8.20	8.88	178.0			9.09	8.20	9.13	8.62	
Norwood, Vernon (USA) (1992)																		
Semi-Final 1 - 2015 IAAF World Championships (Beijing, CHN)																		
date	24-Aug-15	time	6.13	11.01	16.00	21.24	26.76	32.49	38.52	45.07	9 / 6							
reaction time	0.182	interval			4.88	4.99	5.24	5.52	5.73	6.03	# of strides	11.01	10.23	11.25	12.58	21.24	23.83	2.59
		velocity	8.16	10.25	10.02	9.54	9.06	8.73	8.29	7.63	8.88	9.08	9.78	8.89	7.95	9.42	8.39	
Brown, Chris (BAH) (1978)																		

										<i>Yamamoto (2015) - race analysis of 15th World Championships 400m- focusing on men's semis and women's prelims</i>								
Semi-Final 1 - 2015 IAAF World Championships (Beijing, CHN)																		
date	time	5.99	10.85	15.87	21.14	26.71	32.45	38.51	45.07	45.07	2 / 7	10.85	10.29	11.31	12.62	21.14	23.93	2.79
reaction time	interval	4.86	5.02	5.27	5.57	5.74	6.06	6.56	7.62	8.88	# of strides	9.22	9.72	8.84	7.92	9.46	8.36	
	velocity	8.35	10.29	9.96	9.49	8.98	8.71	8.25	7.62	8.88		9.22	9.72	8.84	7.92	9.46	8.36	
Janežič, Luka (SLO) (1995)																		
Semi-Final 2 - 2016 Olympic Games (Rio de Janeiro, BRA)										<i>Škraba (2016) - 45.07 - 400m analysis of Luka Janežič</i>								
date	time	11.3	21.5	32.8	45.07	45.07	45.07	45.07	45.07	45.07	4 / 4	11.30	10.20	11.30	12.27	21.50	23.57	2.07
reaction time	interval	0.154	10.20	11.30	12.27	NR	8.88	166.0	8.88	166.0	# of strides	8.85	9.80	8.85	8.15	9.30	8.49	
	velocity	8.85	9.80	8.85	8.15	8.88	8.15	8.88	8.15	8.88		8.85	9.80	8.85	8.15	9.30	8.49	
Bonevacia, Liemarvin (NED) (1989)																		
FINAL - 2020 Olympic Games (Tokyo, JPN)										<i>Omega Timing (2022) - Tokyo 2020 - race analysis - men's 400m final</i>								
date	time	6.26	11.16	16.06	21.14	26.49	32.21	38.30	45.07	45.07	3 / 8	11.16	9.98	11.07	12.86	21.14	23.93	2.79
reaction time	interval	0.168	4.90	4.90	5.08	5.35	5.72	6.09	6.77	8.88	# of strides	11.16	9.98	11.07	12.86	21.14	23.93	2.79
	velocity	7.99	10.20	10.20	9.84	9.35	8.74	8.21	7.39	8.88	182.7	8.96	10.02	9.03	7.78	9.46	8.36	
Owens-Delerme, Ayden (PUR) (2000)																		
Decathlon - Heat 3 - 2022 World Athletics Championships (Eugene, OR)										<i>Timing by Seiko (2022) - world athletics championships race analysis</i>								
date	time	11.04	21.29	32.67	45.07	45.07	45.07	45.07	45.07	45.07	7 / 1	11.04	10.25	11.38	12.40	21.29	23.78	2.49
reaction time	interval	0.189	10.25	11.38	12.40	NR PB	8.88	173.7	8.88	173.7	# of strides	11.04	10.25	11.38	12.40	21.29	23.78	2.49
	velocity	9.06	9.76	8.79	8.06	8.88	8.06	8.88	8.06	8.88	173.7	9.06	9.76	8.79	8.06	9.39	8.41	
Re, Davide (ITA) (1993)																		
Heat 4 - 2023 World Athletics Championships (Budapest, HUN)										<i>Seiko Timing (2023) - world championship race analysis</i>								
date	time	11.48	22.01	33.35	45.07	45.07	45.07	45.07	45.07	45.07	4 / 4	11.48	10.53	11.34	11.72	22.01	23.06	1.05
reaction time	interval	0.153	10.53	11.34	11.72	8.88	8.88	174.0	8.88	174.0	# of strides	11.48	10.53	11.34	11.72	22.01	23.06	1.05
	velocity	8.71	9.50	8.82	8.53	8.88	8.53	8.88	8.53	8.88	174.0	8.71	9.50	8.82	8.53	9.09	8.67	
Ingvalsen, Håvard Bentsdal (NOR) (2002)																		
FINAL - 2023 Memorial van Damme (Brussels, BEL)										<i>Omega Timing (2023) - diamond league race analysis</i>								
date	time	6.31	11.29	16.41	21.73	27.25	32.92	38.77	45.07	45.07	6 / 3	11.29	10.44	11.19	12.15	21.73	23.34	1.61
reaction time	interval	0.206	4.98	5.12	5.32	5.52	5.67	5.85	6.30	8.88	# of strides	11.29	10.44	11.19	12.15	21.73	23.34	1.61
	velocity	7.92	10.04	9.77	9.40	9.06	8.82	8.55	7.94	8.88	182.5	8.86	9.58	8.94	8.23	9.20	8.57	
Samukonga, Muzala (ZAM) (2002)																		
FINAL - 2024 Seashore Doha Meeting (Doha, QAT)										<i>Omega Timing (2024) - diamond league race analysis</i>								
date	time	6.11	10.99	16.19	21.66	27.30	33.17	38.98	45.07	45.07	3 / 2	10.99	10.67	11.51	11.90	21.66	23.41	1.75
reaction time	interval	0.175	4.88	5.20	5.47	5.64	5.87	5.81	6.09	8.88	# of strides	10.99	10.67	11.51	11.90	21.66	23.41	1.75
	velocity	8.18	10.25	9.62	9.14	8.87	8.52	8.61	8.21	8.88	162.0	9.10	9.37	8.69	8.40	9.23	8.54	
Molnár, Attila (HUN) (2002)																		
FINAL - 2024 European Athletics Championships (Roma, ITA)										<i>European Athletics (2024) - 2024 european athletics championships - results book</i>								
date	time	11.12	21.45	32.66	45.07	45.07	45.07	45.07	45.07	45.07	3 / 6	11.12	10.33	11.21	12.41	21.45	23.62	2.17
reaction time	interval	0.193	10.33	11.21	12.41	8.88	8.88	175.0	8.88	175.0	# of strides	11.12	10.33	11.21	12.41	21.45	23.62	2.17
	velocity	8.99	9.68	8.92	8.06	8.88	8.06	8.88	8.06	8.88	175.0	8.99	9.68	8.92	8.06	9.32	8.47	
Bredau, Jean Paul (GER) (1999)																		
Heat 3 - 2024 Olympic Games (Paris, FRA)										<i>Paris 2024 Olympic Games - Results Book (2024)</i>								
date	time	6.17	11.11	16.16	21.42	26.97	32.76	38.73	45.07	45.07	5 / 4	11.11	10.31	11.34	12.31	21.42	23.65	2.23
reaction time	interval	0.158	4.94	5.05	5.26	5.55	5.79	5.97	6.34	8.88	# of strides	11.11	10.31	11.34	12.31	21.42	23.65	2.23
	velocity	8.10	10.12	9.90	9.51	9.01	8.64	8.38	7.89	8.88	173.0	9.00	9.70	8.82	8.12	9.34	8.46	
Carlowitz, Jens (GDR) (1964)																		
Semi-Final 1 - 1988 Olympic Games (Seoul, KOR)										<i>Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988</i>								
date	time	11.19	21.52	32.67	45.08	45.08	45.08	45.08	45.08	45.08	2 / 6	11.19	10.33	11.15	12.41	21.52	23.56	2.04
reaction time	interval	0.230	10.33	11.15	12.41	8.87	8.87	162.0	8.87	162.0	# of strides	11.19	10.33	11.15	12.41	21.52	23.56	2.04
	velocity	8.94	9.68	8.97	8.06	8.87	8.06	8.87	8.06	8.87	162.0	8.94	9.68	8.97	8.06	9.29	8.49	
Haydock-Wilson, Alex (GBR) (1999)																		
Semi-Final 3 - 2022 World Athletics Championships (Eugene, OR)										<i>Timing by Seiko (2022) - world athletics championships race analysis</i>								
date	time	11.46	21.88	32.90	45.08	45.08	45.08	45.08	45.08	45.08	8 / 4	11.46	10.42	11.02	12.18	21.88	23.20	1.32
reaction time	interval	0.141	10.42	11.02	12.18	PB	8.87	168.2	8.87	168.2	# of strides	11.46	10.42	11.02	12.18	21.88	23.20	1.32
	velocity	8.73	9.60	9.07	8.21	8.87	8.21	8.87	8.21	8.87	168.2	8.73	9.60	9.07	8.21	9.14	8.62	
Ingvalsen, Håvard Bentsdal (NOR) (2002)																		
FINAL - 2023 World Athletics Championships (Budapest, HUN)										<i>Seiko Timing (2023) - world championship race analysis</i>								
date	time	11.39	21.66	32.91	45.08	45.08	45.08	45.08	45.08	45.08	3 / 6	11.39	10.27	11.25	12.17	21.66	23.42	1.76
reaction time	interval	0.199	10.27	11.25	12.17	8.87	8.87	162.0	8.87	162.0	# of strides	11.39	10.27	11.25	12.17	21.66	23.42	1.76
	velocity	8.78	9.74	8.89	8.22	8.87	8.22	8.87	8.22	8.87	162.0	8.78	9.74	8.89	8.22	9.23	8.54	
Blockburger, Johnnie (USA) (2002)																		
Heat 3 - 2024 USA Olympic Trials (Eugene, OR)										<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>								
date	time	11.02	21.47	33.03	45.08	45.08	45.08	45.08	45.08	45.08	9 / 1	11.02	10.34	11.00	12.34	21.47	23.61	2.14
reaction time	interval	0.146	10.45	11.56	12.05	8.87	8.87	162.0	8.87	162.0	# of strides	11.02	10.34	11.00	12.34	21.47	23.61	2.14
	velocity	9.07	9.57	8.65	8.30	8.87	8.30	8.87	8.30	8.87	162.0	9.07	9.57	8.65	8.30	9.32	8.47	
Sacoer, Jonathan (BEL) (1999)																		
Heat 4 - 2024 Olympic Games (Paris, FRA)										<i>Paris 2024 Olympic Games - Results Book (2024)</i>								
date	time	6.30	11.40	16.52	21.74	27.12	32.74	38.61	45.08	45.08	8 / 4	11.40	10.34	11.00	12.34	21.74	23.34	1.60
reaction time	interval	0.146	5.10	5.12	5.22	5.38	5.62	5.87	6.47	8.87	# of strides	11.40	10.34	11.00	12.34	21.74	23.34	1.60
	velocity	7.94	9.80	9.77	9.58	9.29	8.90	8.52	7.73	8.87	169.0	8.77	9.67	9.09	8.10	9.20	8.57	
Juantorena, Alberto (CUB) (1950)																		
FINAL - 1980 Olympic Games (Moscow, URS)										<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>								
date	time	21.5	32.9	45.1	45.09	45.09	45.09	45.09	45.09	45.09	3 / 4	21.50	11.40	12.20	21.50	23.60	2.10	
reaction time	interval	0.220	11.4	12.20	8.87	8.87	8.87	8.87	8.87	8.87	# of strides	21.50	11.40	12.20	21.50	23.60	2.10	

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
velocity		9.30	8.77	8.20	8.87	159.0	9.30	8.77	8.20	9.30	8.47								
Valmon, Andrew (USA) (1965)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 1991 IAAF World Championships (Tokyo, JPN)		<i>Butler (2013) - IAAF world championships statistics handbook- moscow 2013</i>																	
date	29-Aug-91	time	21.49						45.09	45.09	1 / 5								
reaction time		interval							23.60		# of strides				21.49	23.60	2.11		
		velocity	9.31						8.47	8.87	175.5								
Washington, Tyree (USA) (1976)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 1 - 2003 USATF National Championships (Palo Alto, CA)		<i>USATF Women's Sprint Development (2003)</i>																	
date	20-Jun-03	time	21.37		32.78	38.51	45.09		45.09	7 / 1									
reaction time		interval			11.41	5.73	6.58				# of strides			11.41	12.31	21.37	23.72	2.35	
		velocity	9.36		8.76	8.73	7.60		8.87					8.76	8.12	9.36	8.43		
Frolov, Vladislav (RUS) (1980)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2006 European Championships (Göteborg, SWE)		<i>Behm (2006) - Championnats d'Europe Göteborg 2006... Le 400m avec ou sans obstacles</i>																	
date	09-Aug-06	time	22.3		32.9		45.09		45.09	1 / 2									
reaction time		interval			10.60		12.19		PB		# of strides		22.30	10.60	12.19	22.30	22.79	0.49	
		velocity	8.97		18.87		8.20		8.87				4.48	9.43	8.20	8.97	8.78		
van Niekerk, Wayde (RSA) (1992)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2013 Golden Spike (Ostrava, CZE)		<i>Vazel (2018) - historical analysis and coaching commentary - biomechanical report - London 2017 - Men's 400m</i>																	
date	27-Jun-13	time	11.2	21.3		32.5		45.09	45.09	1 / 2									
reaction time	0.217	interval		10.1		11.2		12.6	PB		# of strides	11.20	10.10	11.20	12.59	21.30	23.79	2.49	
		velocity	8.93	9.90		8.93		7.94	8.87			8.93	9.90	8.93	7.94	9.39	8.41		
Hall, Arman (USA) (1994)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2016 USA Olympic Trials (Eugene, OR)		<i>Hymans (2020) - history of the US olympic trials - track and field</i>																	
date	03-Jul-16	time	22.0		33.0		45.09		45.09	3 / 4									
reaction time	0.174	interval			11.00		12.09				# of strides		22.00	11.00	12.09	22.00	23.09	1.09	
		velocity	9.09		9.09		8.27		8.87				4.55	9.09	8.27	9.09	8.66		
Lincoln, Judson (USA) (2004)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Heat 1 - 2024 USA Olympic Trials (Eugene, OR)		<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>																	
date	21-Jun-24	time	10.89		21.14		32.49		45.09	45.09	6 / 3								
reaction time		interval			10.25		11.35		12.60		# of strides	10.89	10.25	11.35	12.60	21.14	23.95	2.81	
		velocity	9.18		9.76		8.81		7.94	8.87	181.0	9.18	9.76	8.81	7.94	9.46	8.35		
Juantorena, Alberto (CUB) (1950)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 1 - 1976 Olympic Games (Montreal, CAN)		<i>Lamare (1976) - les jeux de la XXI olympia, Montreal 1976</i>																	
date	28-Jul-76	time	11.90		22.37		32.47		45.10	45.10	7 / 1								
reaction time		interval			10.47		10.10		12.63		# of strides	11.90	10.47	10.10	12.63	22.37	22.73	0.36	
		velocity	8.40		9.55		9.90		7.92	8.87	160.0	8.40	9.55	9.90	7.92	8.94	8.80		
Brijdenbach, Alfons (BEL) (1954)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 1980 Olympic Games (Moscow, URS)		<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																	
date	30-Jul-80	time	21.1		32.4		45.1		45.10	1 / 5									
reaction time	0.140	interval			11.3		12.70				# of strides		21.10	11.30	12.70	21.10	24.00	2.90	
		velocity	9.48		8.85		7.87		8.87				9.48	8.85	7.87	9.48	8.33		
Cameron, Bert (JAM) (1959)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 2 - 1984 Olympic Games (Los Angeles, CA)		<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																	
date	07-Aug-84	time	22.6		34.3		45.1		45.10	2 / 4									
reaction time		interval			11.7		10.8				# of strides		22.60	11.70	10.80	22.60	22.50	-0.10	
		velocity	8.85		8.55		9.26		8.87				4.42	8.55	9.26	8.85	8.89		
Ismail, Ibrahim (QAT) (1972)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 1992 Olympic Games (Barcelona, ESP)		<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																	
date	05-Aug-92	time	21.4		32.5		45.1		45.10	1 / 7									
reaction time		interval			11.10		12.60				# of strides		21.40	11.10	12.60	21.40	23.70	2.30	
		velocity	9.35		9.01		7.94		8.87				9.35	9.01	7.94	9.35	8.44		
Watts, Quincy (USA) (1970)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 1 - 1996 USA Olympic Trials (Atlanta, GA)		<i>USATF Women's Sprint Development (1996)</i>																	
date	17-Jun-96	time	11.48		21.67		32.88		38.92	45.10	5 / 3								
reaction time		interval			10.19		11.21		6.04	6.18	# of strides	11.48	10.19	11.21	12.22	21.67	23.43	1.76	
		velocity	8.71		9.81		8.92		8.28	8.09	8.87	8.71	9.81	8.92	8.18	9.23	8.54		
Norwood, Vernon (USA) (1992)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2015 NCAA Championships (Eugene, OR)		<i>USTFCCCA (2017) - NCAA DI outdoor championship history</i>																	
date	12-Jun-15	time	22.2				45.1		45.10	4 / 1									
reaction time		interval					22.90				# of strides				22.20	22.90	0.70		
		velocity	9.01				8.73		8.87						9.01	8.73			
Borlée, Kevin (BEL) (1988)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 1 - 2017 IAAF World Championships (London, GBR)		<i>Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Men's 400m</i>																	
date	06-Aug-17	time	11.20		21.56		32.65		38.60	44.95	45.10	9 / 4							
reaction time	0.146	interval			10.36		11.09		5.95	6.35	# of strides	11.20	10.36	11.09	12.30	21.56	23.39	1.83	
		velocity	8.93		9.65		9.02		8.40	7.87	8.87	174.8	8.93	9.65	9.02	8.13	9.28	8.55	
Biron, Gilles (FRA) (1995)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2023 Xiamen Diamond League (Xiamen, CHN)		<i>Omega Timing (2023) - diamond league race analysis</i>																	
date	02-Sep-23	time	6.30	11.40	16.63	22.08	27.50	33.11	38.87	45.10	9 / 5								
reaction time	0.198	interval		5.10	5.23	5.45	5.42	5.61	5.76	6.23	# of strides	11.40	10.68	11.03	11.99	22.08	23.02	0.94	
		velocity	7.94	9.80	9.56	9.17	9.23	8.91	8.68	8.03	8.87	176.5	8.77	9.36	9.07	8.34	9.06	8.69	
McDonald, Rusheen (JAM) (1992)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	

FINAL - 2023 Prefontaine Classic (Eugene, OR)																	<i>Omega Timing (2023) - diamond league race analysis</i>			
date	16-Sep-23	time	6.28	11.20	16.29	21.63	27.32	33.07	38.78	45.10	45.10	8 / 5								
reaction time	0.196	interval	4.92	5.09	5.34	5.69	5.75	5.71	6.32			# of strides	11.20	10.43	11.44	12.03	21.63	23.47	1.84	
		velocity	7.96	10.16	9.82	9.36	8.79	8.70	8.76	7.91	8.87		8.93	9.59	8.74	8.31	9.25	8.52		
Bada, Sunday (NGR) (1969)																	<i>Smith (1994) - 400m pace control</i>			
FINAL - 1993 IAAF World Championships (Stuttgart, GER)																				
date	17-Aug-93	time	10.98			21.02	32.26	45.11	45.11	45.11	6 / 5									
reaction time		interval				10.04	11.24	12.85			# of strides	10.98	10.04	11.24	12.85	21.02	24.09	3.07		
		velocity	9.11			9.96	8.90	7.78	8.87	8.87	177.0	9.11	9.96	8.90	7.78	9.51	8.30			
Djhane, Leslie (FRA) (1981)																	<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>			
FINAL - 2008 Olympic Games (Beijing, CHN)																				
date	21-Aug-08	time				21.5	32.2	45.1	45.11	45.11	6 / 5									
reaction time	0.164	interval					10.70	12.90			# of strides					21.50	23.60	2.10		
		velocity				9.30	9.35	7.75	8.87	8.87	166.5		21.50	10.70	12.90	9.30	9.35	7.75	9.30	8.47
Cherry, Michael (USA) (1995)																	<i>USTFCCCA (2017) - NCAA DI outdoor championship history</i>			
FINAL - 2016 NCAA Championships (Eugene, OR)																				
date	10-Jun-16	time				21.6	32.8	45.1	45.11	45.11	6 / 3									
reaction time		interval					11.20	12.30			# of strides				11.20	12.30	21.60	23.50	1.90	
		velocity				9.26	8.93	8.13	8.87	8.87					8.93	8.13	9.26	8.51		
Gaye, Demish (JAM) (1993)																	<i>Omega Timing (2019) - diamond league race analysis</i>			
FINAL - 2019 Müller Anniversary Games (London, GBR)																				
date	21-Jul-19	time	10.9			20.9	32.2	45.11	45.11	45.11	7 / 5									
reaction time	0.157	interval					11.3	12.9			# of strides	10.90	10.00	11.30	12.91	20.90	24.21	3.31		
		velocity	9.17			10.00	8.85	7.75	8.87	8.87	183.0	9.17	10.00	8.85	7.75	9.57	8.26			
Norwood, Vernon (USA) (1992)																	<i>Omega Timing (2023) - diamond league race analysis</i>			
FINAL - 2023 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR)																				
date	28-May-23	time	6.22	11.28	16.60	22.07	27.60	33.24	38.91	45.11	45.11	6 / 2								
reaction time	0.167	interval	5.06	5.32	5.47	5.53	5.64	5.67	6.20			# of strides	11.28	10.79	11.17	11.87	22.07	23.04	0.97	
		velocity	8.04	9.88	9.40	9.14	9.04	8.87	8.82	8.06	8.87	176.5	8.87	9.27	8.95	8.42	9.06	8.68		
van Niekerk, Wayde (RSA) (1992)																	<i>Seiko Timing (2023) - world championship race analysis</i>			
FINAL - 2023 World Athletics Championships (Budapest, HUN)																				
date	24-Aug-23	time	11.05			21.35	32.44	45.11	45.11	45.11	2 / 7									
reaction time	0.171	interval				10.30	11.09	12.67			# of strides	11.05	10.30	11.09	12.67	21.35	23.76	2.41		
		velocity	9.05			9.71	9.02	7.89	8.87	8.87		9.05	9.71	9.02	7.89	9.37	8.42			
Bredau, Jean Paul (GER) (1999)																	<i>European Athletics (2024) - 2024 european athletics championships - results book</i>			
FINAL - 2024 European Athletics Championships (Roma, ITA)																				
date	10-Jun-24	time	11.36			21.81	32.96	45.11	45.11	45.11	4 / 7									
reaction time	0.173	interval				10.45	11.15	12.15			# of strides	11.36	10.45	11.15	12.15	21.81	23.30	1.49		
		velocity	8.80			9.57	8.97	8.23	8.87	8.87	171.5	8.80	9.57	8.97	8.23	9.17	8.58			
Morales-Williams, Christopher (CAN)																	<i>Omega Timing (2024) - diamond league race analysis</i>			
FINAL - 2024 Herculis Meeting International d'Athlétisme (Monaco, MON)																				
date	12-Jul-24	time	6.18	11.05	16.08	21.45	27.11	32.98	38.85	45.11	45.11	6 / 6								
reaction time	0.213	interval	4.87	5.03	5.37	5.66	5.87	5.87	6.26			# of strides	11.05	10.40	11.53	12.13	21.45	23.66	2.21	
		velocity	8.09	10.27	9.94	9.31	8.83	8.52	8.52	7.99	8.87	163.0	9.05	9.62	8.67	8.24	9.32	8.45		
Ogando, Alexander (DOM) (2000)																	<i>Paris 2024 Olympic Games - Results Book (2024)</i>			
Heat 4 - 2024 Olympic Games (Paris, FRA)																				
date	04-Aug-24	time	6.30	11.24	16.32	21.55	27.06	32.86	38.80	45.11	45.11	2 / 5								
reaction time	0.215	interval	4.94	5.08	5.23	5.51	5.80	5.94	6.31			# of strides	11.24	10.31	11.31	12.25	21.55	23.56	2.01	
		velocity	7.94	10.12	9.84	9.56	9.07	8.62	8.42	7.92	8.87	177.0	8.90	9.70	8.84	8.16	9.28	8.49		
Clark, Darren (AUS) (1965)																	<i>Butler (2010) - 1st/IAAF VTB bank continental cup, IAAF statistics handbook - split 2010</i>			
FINAL - 1985 IAAF World Cup (Canberra, AUS)																				
date	05-Oct-85	time				21.1		45.12	45.12	45.12	4 / 4									
reaction time		interval						24.02			# of strides					21.10	24.02	2.92		
		velocity				9.48		8.33	8.87	8.87					9.48	8.33				
Morris, Ian (TTO) (1961)																	<i>Butler (2013) - IAAF world championships statistics handbook- moscow 2013</i>			
FINAL - 1991 IAAF World Championships (Tokyo, JPN)																				
date	29-Aug-91	time				21.76		45.12	45.12	45.12	8 / 6									
reaction time		interval						23.36			# of strides					21.76	23.36	1.60		
		velocity				9.19		8.56	8.87	8.87	176.5				9.19	8.56				
Rooney, Martyn (GBR) (1987)																	<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>			
FINAL - 2008 Olympic Games (Beijing, CHN)																				
date	21-Aug-08	time				21.5	32.1	45.1	45.12	45.12	8 / 6									
reaction time	0.208	interval					10.60	13.00			# of strides				21.50	23.60	2.10			
		velocity				9.30	9.43	7.69	8.87	8.87	167.2		21.50	10.60	13.00	9.30	9.43	7.69	9.30	8.47
London, Wil (USA) (1997)																	<i>Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Men's 400m</i>			
Semi-Final 1 - 2017 IAAF World Championships (London, GBR)																				
date	06-Aug-17	time	10.88			21.42	32.36	38.36	44.94	45.12	4 / 5									
reaction time	0.181	interval				10.54	10.94	6.00	6.58		# of strides	10.88	10.54	10.94	12.58	21.42	23.52	2.10		
		velocity	9.19			9.49	9.14	8.33	7.60	8.87	182.2	9.19	9.49	9.14	7.95	9.34	8.50			
Sito, Luca (ITA) (2003)																	<i>European Athletics (2024) - 2024 european athletics championships - results book</i>			
Heat 3 - 2024 European Athletics Championships (Roma, ITA)																				
date	08-Jun-24	time	11.25			21.72	32.89	45.12	45.12	45.12	3 / 1									
reaction time	0.197	interval				10.47	11.17	12.23			# of strides	11.25	10.47	11.17	12.23	21.72	23.40	1.68		

	velocity	8.89	9.55	8.95	8.18	8.87		8.89	9.55	8.95	8.18	9.21	8.55								
McKiver, Jenoah (USA) (2002)	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place	0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential	<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>																		
Semi-Final 2 - 2024 USA Olympic Trials (Eugene, OR)	date	23-Jun-24	time	10.98	21.19	32.35	45.12	45.12	4 / 5												
	reaction time	interval	velocity	9.11	10.21	11.16	12.77	12.77	# of strides	10.98	10.21	11.16	12.77	21.19	23.93	2.74					
				9.11	9.79	8.96	7.83	8.87		9.11	9.79	8.96	7.83	9.44	8.36						
Powell, Jevaghn (JAM) (2000)	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place	0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential	<i>Paris 2024 Olympic Games - Results Book (2024)</i>																		
Heat 6 - 2024 Olympic Games (Paris, FRA)	date	04-Aug-24	time	6.13	10.95	15.94	21.20	26.70	32.46	38.56	45.12	45.12	3 / 3								
	reaction time	interval	velocity	8.16	10.37	10.02	9.51	9.09	8.68	8.20	7.62	8.87	# of strides	10.95	10.25	11.26	12.66	21.20	23.92	2.72	
				8.16	10.37	10.02	9.51	9.09	8.68	8.20	7.62	8.87	177.2	9.13	9.76	8.88	7.90	9.43	8.36		
Asati, Charles (KEN) (1946)	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place	0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential	<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																		
FINAL - 1972 Olympic Games (Munich, FRG)	date	07-Sep-72	time		21.7	32.9	45.2	45.13	45.13	8 / 4											
	reaction time	interval	velocity		9.22	8.93	8.13	8.86	8.86	# of strides		21.70	11.20	12.30	21.70	23.50	1.80				
					9.22	8.93	8.13	8.86	8.86		9.22	8.93	8.13	9.22	8.51						
Chambers, Ricardo (JAM) (1984)	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place	0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential	<i>Graubner (2009) - biomechanical analyses at the 12th IAAF world championships</i>																		
Semi-Final 3 - 2009 IAAF World Championships (Berlin, GER)	date	19-Aug-09	time	11.28	22.00	32.88	45.13	45.13	45.13	7 / 3											
	reaction time	interval	velocity		0.167	10.72	10.88	12.25	12.25	# of strides	11.28	10.72	10.88	12.25	22.00	23.13	1.13				
					8.87	9.33	9.19	8.16	8.86		8.87	9.33	9.19	8.16	9.09	8.65					
Cedenio, Machel (TTO) (1995)	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place	0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential	<i>Maho (2014) - race analysis of men's 400m run in the 2014 season</i>																		
FINAL - 2014 IAAF World Junior Championships (Eugene, OR)	date	24-Jul-14	time	6.11	11.22	16.45	21.86	27.55	33.35	39.10	45.13	45.13	4 / 1								
	reaction time	interval	velocity		0.204	5.11	5.23	5.41	5.69	5.80	5.75	6.03	NJR / PB	# of strides	11.22	10.64	11.49	11.78	21.86	23.27	1.41
					8.18	9.78	9.56	9.24	8.79	8.62	8.70	8.29	8.86		8.91	9.40	8.70	8.49	9.15	8.59	
Benjamin, Rai (USA) (1997)	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place	0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential	<i>Omega Timing (2019) - diamond league race analysis</i>																		
FINAL - 2019 Bauhaus Galan (Stockholm, SWE)	date	30-May-19	time	11.1	21.7	32.6	45.13	45.13	45.13	6 / 2											
	reaction time	interval	velocity		0.179	10.6	10.9	12.5	12.5	# of strides	11.10	10.60	10.90	12.53	21.70	23.43	1.73				
					9.01	9.43	9.17	7.98	8.86		9.01	9.43	9.17	7.98	9.22	8.54					
Cherry, Michael (USA) (1995)	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place	0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential	<i>Omega Timing (2019) - diamond league race analysis</i>																		
FINAL - 2019 The Match - Europe v USA (Minsk, BLR)	date	09-Sep-19	time	10.99	21.24	32.55	45.13	45.13	45.13	3 / 1											
	reaction time	interval	velocity		0.163	10.25	11.31	12.58	12.58	# of strides	10.99	10.25	11.31	12.58	21.24	23.89	2.65				
					9.10	9.76	8.84	7.95	8.86		9.10	9.76	8.84	7.95	9.42	8.37					
Walsh, Julian Jrummi (JPN) (1996)	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place	0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential	<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>																		
Semi-Final 3 - 2019 IAAF World Championships (Doha, QAT)	date	02-Oct-19	time	6.14	11.16	16.33	21.72	27.22	32.91	38.84	45.13	45.13	5 / 4								
	reaction time	interval	velocity		0.132	5.02	5.17	5.39	5.50	5.69	5.93	6.29	PB	# of strides	11.16	10.56	11.19	12.22	21.72	23.41	1.69
					8.14	9.96	9.67	9.28	9.09	8.79	8.43	7.95	8.86		8.96	9.47	8.94	8.18	9.21	8.54	
Evans, Lee (USA) (1947)	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place	0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential	<i>Drake (1967) - der schnellste sprint der geschichte</i>																		
FINAL - 1967 San Jose State Invitational (San Jose, CA) (yards)	date	20-May-67	time	10.9	21.4	33.6	45.0	45.0	45.0	4 / 1											
	reaction time	interval	velocity			10.5	12.2	11.4	(45.3/440y)	# of strides	10.90	10.50	12.20	11.40	21.40	23.60	2.20				
					9.17	9.52	8.20	8.77	8.89		9.17	9.52	8.20	8.77	9.35	8.47					
Mackowiak, Robert (POL) (1970)	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place	0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential	<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																		
FINAL - 2000 Olympic Games (Sydney, AUS)	date	25-Sep-00	time	11.7	22.0	33.2	45.1	45.14	45.14	1 / 5											
	reaction time	interval	velocity			10.30	11.20	11.90	11.90	# of strides	11.70	10.30	11.20	11.90	22.00	23.10	1.10				
					8.55	9.71	8.93	8.40	8.86		8.55	9.71	8.93	8.40	9.09	8.66					
Schultz, Ingo (GER) (1975)	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place	0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential	<i>Graubner (2009) - http://www.fgs.uni-halle.de</i>																		
FINAL - 2002 European Championships (Munich, GER)	date	08-Aug-02	time	11.18	21.34	32.58	45.14	45.14	45.14	1 / 1											
	reaction time	interval	velocity		0.180	10.16	11.24	12.56	12.56	# of strides	11.18	10.16	11.24	12.56	21.34	23.80	2.46				
					8.94	9.84	8.90	7.96	8.86		8.94	9.84	8.90	7.96	9.37	8.40					
Henry, Tabarie (ISV) (1987)	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place	0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential	<i>Graubner (2009) - biomechanical analyses at the 12th IAAF world championships</i>																		
Heat 7 - 2009 IAAF World Championships (Berlin, GER)	date	18-Aug-09	time	11.07	21.67	32.84	45.14	45.14	45.14	5 / 1											
	reaction time	interval	velocity		0.137	10.60	11.17	12.30	12.30	# of strides	11.07	10.60	11.17	12.30	21.67	23.47	1.80				
					9.03	9.43	8.95	8.13	8.86		9.03	9.43	8.95	8.13	9.23	8.52					
Solomon, Steven (AUS) (1993)	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place	0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential	<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																		
FINAL - 2012 Olympic Games (London, GBR)	date	06-Aug-12	time		21.9	32.9	45.1	45.14	45.14	3 / 8											
	reaction time	interval	velocity		0.143	11.00	12.20	12.20	12.20	# of strides		21.90	11.00	12.20	21.90	23.20	1.30				
						9.13	9.09	8.20	8.86		4.57	9.09	8.20	9.13	8.62						
Guo Zhongze (CHN) (1996)	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place	0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential	<i>Xu (2018) - a comparative analysis of the kinematic characteristics of Guo Zhongze and Wayde van Niekerk</i>																		
FINAL - 2017 Chinese National Games (Tianjin, CHN)	date	03-Sep-17	time	10.7	21.5	33.0	45.2	45.14	45.14	1 / 1											
	reaction time	interval	velocity			10.80	11.50	12.20	12.20	# of strides	10.70	10.80	11.50	12.20	21.50	23.70	2.20				
					9.35	9.26	8.70	8.20	8.86		9.35	9.26	8.70	8.20	9.30	8.44					
Abubaker, Abbas (BRN) (1996)	50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place	0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																			

FINAL - 2019 Asian Athletics Championships (Doha, QAT)																		<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>																	
date	22-Apr-19	time	6.20	11.15	16.23	21.56	27.03	32.62	38.49	45.14	45.14	7 / 2																							
reaction time	0.170	interval	4.95	5.08	5.33	5.47	5.59	5.87	6.65	8.86	# of strides	11.15	10.41	11.06	12.52	21.56	23.58	2.02																	
		velocity	8.06	10.10	9.84	9.38	9.14	8.94	8.52	7.52	8.86	175.0	8.97	9.61	9.04	7.99	9.28	8.48																	
Scotch, Leungo (BOT) (1996)																		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2023 Memorial van Damme (Brussels, BEL)																		<i>Omega Timing (2023) - diamond league race analysis</i>																	
date	08-Sep-23	time	6.07	10.96	16.01	21.30	26.85	32.63	38.63	45.14	45.14	7 / 4																							
reaction time	0.153	interval	4.89	5.05	5.29	5.55	5.78	6.00	6.51	8.86	# of strides	10.96	10.34	11.33	12.51	21.30	23.84	2.54																	
		velocity	8.24	10.22	9.90	9.45	9.01	8.65	8.33	7.68	8.86	180.0	9.12	9.67	8.83	7.99	9.39	8.39																	
Kebinatshipi, Collen (BOT) (2004)																		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2024 Golden Gala Pietro Mennea (Roma, ITA)																		<i>Omega Timing (2024) - diamond league race analysis</i>																	
date	30-Aug-24	time	6.08	11.02	16.19	21.64	27.29	33.02	38.85	45.14	45.14	3 / 8																							
reaction time	0.167	interval	4.94	5.17	5.45	5.65	5.73	5.83	6.29	8.86	# of strides	11.02	10.62	11.38	12.12	21.64	23.50	1.86																	
		velocity	8.22	10.12	9.67	9.17	8.85	8.73	8.58	7.95	8.86	185.0	9.07	9.42	8.79	8.25	9.24	8.51																	
Al-Masrahi, Youssef (KSA) (1987)																		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2015 IAAF World Championships (Beijing, CHN)																		<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>																	
date	26-Aug-15	time	6.25	11.11	16.15	21.41	26.90	32.63	38.55	45.15	45.15	9 / 8																							
reaction time	0.163	interval	4.86	5.04	5.26	5.49	5.73	5.92	6.60	8.86	# of strides	11.11	10.30	11.22	12.52	21.41	23.74	2.33																	
		velocity	8.00	10.29	9.92	9.51	9.11	8.73	8.45	7.58	8.86	9.00	9.71	8.91	7.99	9.34	8.42																		
Nakajima, Yuki Joseph (JPN) (2002)																		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2023 Japanese National Championships (Osaka, JPN)																		<i>Yamanaka (2024) - analysis of men's and women's 400m and 300m runs in the 2023 season</i>																	
date	04-Jun-23	time	6.22	11.20	16.28	21.54	26.97	32.72	38.77	45.15	45.15	7 / 1																							
reaction time	0.175	interval	4.98	5.08	5.26	5.43	5.75	6.05	6.38	8.86	# of strides	11.20	10.34	11.18	12.43	21.54	23.61	2.07																	
		velocity	8.04	10.04	9.84	9.51	9.21	8.70	8.26	7.84	8.86	172.5	8.93	9.67	8.94	8.05	9.29	8.47																	
Richards, Jereem (TTO) (1994)																		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Heat 3 - 2023 World Athletics Championships (Budapest, HUN)																		<i>Seiko Timing (2023) - world championship race analysis</i>																	
date	20-Aug-23	time	11.39			21.92		33.17		45.15	45.15	2 / 3																							
reaction time	0.153	interval	10.53			11.25		11.98		8.86	# of strides	11.39	10.53	11.25	11.98	21.92	23.23	1.31																	
		velocity	8.78			9.50		8.89		8.35	8.86	169.5	8.78	9.50	8.89	8.35	9.12	8.61																	
Nakajima, Yuki Joseph (JPN) (2002)																		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Heat 5 - 2023 World Athletics Championships (Budapest, HUN)																		<i>Yamanaka (2024) - analysis of men's and women's 400m and 300m runs in the 2023 season</i>																	
date	20-Aug-23	time	6.26	11.32	16.49	21.77	27.19	32.86	38.74	45.15	45.15	4 / 3																							
reaction time	0.181	interval	5.06	5.17	5.28	5.42	5.67	5.88	6.41	8.86	# of strides	11.32	10.45	11.09	12.29	21.77	23.38	1.61																	
		velocity	7.99	9.88	9.67	9.47	9.23	8.82	8.50	7.80	8.86	166.5	8.83	9.57	9.02	8.14	9.19	8.55																	
Robinson, Justin (USA) (2002)																		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Heat 2 - 2024 USA Olympic Trials (Eugene, OR)																		<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>																	
date	21-Jun-24	time	11.26			21.53		32.86		45.15	45.15	8 / 3																							
reaction time		interval	10.27			11.33		12.29		8.86	# of strides	11.26	10.27	11.33	12.29	21.53	23.62	2.09																	
		velocity	8.88			9.74		8.83		8.14	8.86	167.0	8.88	9.74	8.83	8.14	9.29	8.47																	
Boling, Matthew (USA) (2000)																		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2024 USA Olympic Trials (Eugene, OR)																		<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>																	
date	24-Jun-24	time	10.68			20.92		32.32		45.15	45.15	3 / 8																							
reaction time		interval	10.24			11.40		12.83		8.86	# of strides	10.68	10.24	11.40	12.83	20.92	24.23	3.31																	
		velocity	9.36			9.77		8.77		7.79	8.86	177.0	9.36	9.77	8.77	7.79	9.56	8.25																	
Williamson, Darold (USA) (1983)																		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Semi-Final 1 - 2008 USA Olympic Trials (Eugene, OR)																		<i>USATF Women's Sprint Development with HPC (2008)</i>																	
date	30-Jun-08	time	11.27			21.95		27.32		33.13	38.95	45.16	45.16	8 / 2																					
reaction time		interval	10.68			5.37		5.81		5.82	6.21	8.86	# of strides	11.27	10.68	11.18	12.03	21.95	23.21	1.26															
		velocity	8.87			9.36		9.31		8.61	8.59	8.05	8.86	8.87	9.36	8.94	8.31	9.11	8.62																
Husillos, Óscar (ESP) (1993)																		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Semi-Final 1 - 2017 IAAF World Championships (London, GBR)																		<i>Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Men's 400m</i>																	
date	06-Aug-17	time	10.93			21.25		32.41		38.48	45.00	45.16	45.16	3 / 6																					
reaction time	0.130	interval	10.32			11.16		6.07		6.52	8.86	# of strides	10.93	10.32	11.16	12.59	21.25	23.75	2.50																
		velocity	9.15			9.69		8.96		8.24	7.67	8.86	181.7	9.15	9.69	8.96	7.94	9.41	8.42																
Walton, Jamal (CAY) (1998)																		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Semi-Final 3 - 2017 IAAF World Championships (London, GBR)																		<i>Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Men's 400m</i>																	
date	06-Aug-17	time	10.98			21.21		32.25		38.37	45.01	45.16	45.16	9 / 4																					
reaction time	0.153	interval	10.23			11.04		6.12		6.64	8.86	# of strides	10.98	10.23	11.04	12.76	21.21	23.80	2.59																
		velocity	9.11			9.78		9.06		8.17	7.53	8.86	183.4	9.11	9.78	9.06	7.84	9.43	8.40																
Scotch, Leungo (BOT) (1996)																		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Semi-Final 3 - 2024 Olympic Games (Paris, FRA)																		<i>Paris 2024 Olympic Games - Results Book (2024)</i>																	
date	06-Aug-24	time	6.14	11.06	16.10	21.31	26.88	32.72	38.73	45.16	45.16	2 / 7																							
reaction time	0.177	interval	4.92	5.04	5.21	5.57	5.84	6.01	6.43	8.86	# of strides	11.06	10.25	11.41	12.44	21.31	23.85	2.54																	
		velocity	8.14	10.16	9.92	9.60	8.98	8.56	8.32	7.78	8.86	177.0	9.04	9.76	8.76	8.04	9.39	8.39																	
Milazar, Eric (MRI) (1975)																		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2003 IAAF World Championships (Paris, FRA)																		<i>Bonvin (2003) - Compte-rendu 400m et relais 4x 400m</i>																	
date	26-Aug-03	time				21.3		32.30		45.17	45.17	1 / 5																							
reaction time	0.168	interval				9.39		11.0		12.9	8.86	# of strides			11.00	12.87	21.30	23.87	2.57																
		velocity				9.09		9.09		7.77	8.86				9.09	7.77	9.39	8.38																	
Benjamin, Tim (GBR) (1982)																		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2005 DLV-DKB (Ulm, GER)																		<i>Graubner (2009) - http://www.fgs.uni-halle.de</i>																	
date	12-Jun-05	time	11.29			21.70		32.88		45.17	45.17	/ 1																							
reaction time	0.198	interval				10.41		11.18		12.29	8.86	# of strides	11.29	10.41	11.18	12.29	21.70	23.47	1.77																

	velocity	8.86	9.61	8.94	8.14	8.86		8.86	9.61	8.94	8.14	9.22	8.52					
Strother, Nathan (USA) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2018 Müller Anniversary Games (London, GBR)																		
date	21-Jul-18	time	11.6	22.1	33.1	45.17	45.17	3 / 8										
reaction time	0.170	interval	10.5	11.0	12.1	12.1	12.1	# of strides	172.7	11.60	10.50	11.00	12.07	22.10	23.07	0.97		
velocity	8.62	9.52	9.09	8.29	8.86					8.62	9.52	9.09	8.29	9.05	8.67			
Omega Timing (2018) - diamond league race analysis																		
London, Wil (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2021 Athletissima (Lausanne, SUI)																		
date	26-Aug-21	time	6.1	11.1	16.4	21.8	27.3	33.0	38.9	45.17	45.17	8 / 1						
reaction time	0.136	interval	5.00	5.30	5.40	5.50	5.70	5.90	6.27	6.27	# of strides	11.10	10.70	11.20	12.17	21.80	23.37	1.57
velocity	8.20	10.00	9.43	9.26	9.09	8.77	8.47	7.97	8.86	8.86	181.0	9.01	9.35	8.93	8.22	9.17	8.56	
Omega Timing (2021) - diamond league race analysis																		
Haydock-Wilson, Alex (GBR) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2022 European Athletics Championships (Munich, GER)																		
date	17-Aug-22	time	11.10	21.50	32.70	45.17	45.17	6 / 3										
reaction time	0.192	interval	10.40	11.20	12.47	12.47	12.47	# of strides	179.0	11.10	10.40	11.20	12.47	21.50	23.67	2.17		
velocity	9.01	9.62	8.93	8.02	8.86					9.01	9.62	8.93	8.02	9.30	8.45			
European Athletics (2022) - european athletics championships race analysis																		
Bonevacia, Liemarvin (NED) (1989)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2022 European Athletics Championships (Munich, GER)																		
date	17-Aug-22	time	11.13	21.36	32.66	45.17	45.17	5 / 4										
reaction time	0.177	interval	10.23	11.30	12.51	12.51	12.51	# of strides	181.0	11.13	10.23	11.30	12.51	21.36	23.81	2.45		
velocity	8.98	9.78	8.85	7.99	8.86					8.98	9.78	8.85	7.99	9.36	8.40			
European Athletics (2022) - european athletics championships race analysis																		
Nene, Zakhiti (RSA) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2023 FBK Games (Hengelo, NED)																		
date	04-Jun-23	time	6.10	11.08	16.28	21.69	27.26	32.92	38.73	45.17	45.17	6 / 3						
reaction time	0.142	interval	4.98	5.20	5.41	5.57	5.66	5.81	6.44	6.44	# of strides	11.08	10.61	11.23	12.25	21.69	23.48	1.79
velocity	8.20	10.04	9.62	9.24	8.98	8.83	8.61	7.76	8.86	8.86	178.0	9.03	9.43	8.90	8.16	9.22	8.52	
Omega Timing (2023) - continental tour race analysis																		
Bonevacia, Liemarvin (NED) (1989)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 3 - 2024 European Athletics Championships (Roma, ITA)																		
date	09-Jun-24	time	11.11	21.45	32.69	45.17	45.17	6 / 2										
reaction time	0.160	interval	10.34	11.24	12.48	12.48	12.48	# of strides	181.2	11.11	10.34	11.24	12.48	21.45	23.72	2.27		
velocity	9.00	9.67	8.90	8.01	8.86					9.00	9.67	8.90	8.01	9.32	8.43			
European Athletics (2024) - 2024 european athletics championships - results book																		
Noiro, Oliver (FRA) (1969)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 1991 European Cup (Frankfurt, GER)																		
date	29-Jun-91	time	11.20	21.55	32.87	45.18	45.18	1 / 2										
reaction time	interval	10.35	11.32	12.31	12.31	12.31	# of strides	181.2	11.20	10.35	11.32	12.31	21.55	23.63	2.08			
velocity	8.93	9.66	8.83	8.12	8.85					8.93	9.66	8.83	8.12	9.28	8.46			
Federle (2003) - http://www.fgs.uni-halle.de																		
Diagana, Stéphane (FRA) (1969)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 1992 French National Championships (Narbonne, FRA)																		
date	28-Jun-92	time	11.40	21.68	32.84	45.18	45.18	1 / 1										
reaction time	interval	10.28	11.16	12.34	12.34	12.34	# of strides	181.2	11.40	10.28	11.16	12.34	21.68	23.50	1.82			
velocity	8.77	9.73	8.96	8.10	8.85					8.77	9.73	8.96	8.10	9.23	8.51			
Belloc (1992) - Diagana: 45.18 / 48.13 : 3" d'ecart; incompressibles?																		
Takano, Susumu (JPN) (1961)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 1992 Olympic Games (Barcelona, ESP)																		
date	05-Aug-92	time	21.9	32.9	45.2	45.18	45.18	8 / 8										
reaction time	interval	11.00	12.30	12.30	12.30	12.30	# of strides	181.2	21.90	11.00	12.30	21.90	23.30	1.40				
velocity	9.13	9.09	8.13	8.85						9.13	9.09	8.13	9.13	8.58				
Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016																		
Maybank, Anthuan (USA) (1969)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 1 - 1996 USA Olympic Trials (Atlanta, GA)																		
date	17-Jun-96	time	11.28	21.72	33.13	39.05	45.18	45.18	1 / 4									
reaction time	interval	10.44	11.41	5.92	6.13	6.13	# of strides	181.2	11.28	10.44	11.41	12.05	21.72	23.46	1.74			
velocity	8.87	9.58	8.76	8.45	8.16	8.85				8.87	9.58	8.76	8.30	9.21	8.53			
USATF Women's Sprint Development (1996)																		
Baulch, Jamie (GBR) (1973)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 1999 IAAF World Championships (Sevilla, ESP)																		
date	26-Aug-99	time	6.14	11.06	16.04	21.29	26.76	32.45	38.53	45.18	45.18	8 / 6						
reaction time	0.148	interval	4.92	4.98	5.25	5.47	5.69	6.08	6.65	6.65	# of strides	11.06	10.23	11.16	12.73	21.29	23.89	2.60
velocity	8.14	10.16	10.04	9.52	9.14	8.79	8.22	7.52	8.85	8.85	9.04	9.78	8.96	7.86	9.39	8.37		
Ferro (2001) - biomechanical analysis of the 7th world championships in athletics seville 1999																		
Dedewo, Paul (USA) (1991)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2018 Weltklasse (Zürich, SUI)																		
date	30-Aug-18	time	11.4	21.8	33.0	45.18	45.18	7 / 4										
reaction time	0.157	interval	10.4	11.2	12.2	12.2	# of strides	181.2	11.40	10.40	11.20	12.18	21.80	23.38	1.58			
velocity	8.77	9.62	8.93	8.21	8.85					8.77	9.62	8.93	8.21	9.17	8.55			
Omega Timing (2018) - diamond league race analysis																		
Stewart, Trevor (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2022 Meeting de Paris (Paris, FRA)																		
date	16-Jun-22	time	6.32	11.41	16.68	22.12	27.67	33.33	39.11	45.18	45.18	2 / 4						
reaction time	0.158	interval	5.09	5.27	5.44	5.55	5.66	5.78	6.07	6.07	# of strides	11.41	10.71	11.21	11.85	22.12	23.06	0.94
velocity	7.91	9.82	9.49	9.19	9.01	8.83	8.65	8.24	8.85	8.85	178.0	8.76	9.34	8.92	8.44	9.04	8.67	
Omega Timing (2022) - diamond league race analysis																		
van Niekerk, Wayde (RSA) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Heat 1 - 2022 World Athletics Championships (Eugene, OR)																		
date	17-Jul-22	time	10.96	21.39	32.73	45.18	45.18	6 / 1										
reaction time	0.200	interval	10.43	11.34	12.45	12.45	# of strides	164.0	10.96	10.43	11.34	12.45	21.39	23.79	2.40			
velocity	9.12	9.59	8.82	8.03	8.85					9.12	9.59	8.82	8.03	9.35	8.41			
Timing by Seiko (2022) - world athletics championships race analysis																		
Scotch, Leungo (BOT) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	

FINAL - 2023 Prefontaine Classic (Eugene, OR)																			<i>Omega Timing (2023) - diamond league race analysis</i>				
date	16-Sep-23	time	6.25	11.33	16.47	21.77	27.20	32.86	38.74	45.18	45.18	9 / 6											
reaction time	0.165	interval	5.08	5.14	5.30	5.43	5.66	5.88	6.44			# of strides	11.33	10.44	11.09	12.32	21.77	23.41	1.64				
		velocity	8.00	9.84	9.73	9.43	9.21	8.83	8.50	7.76	8.85		8.83	9.58	9.02	8.12	9.19	8.54					
Pettigrew, Antonio (USA) (1967)																			<i>USATF Women's Sprint Development (1996)</i>				
Semi-Final 1 - 1996 USA Olympic Trials (Atlanta, GA)																							
date	17-Jun-96	time	11.72			22.12			33.30	39.04	45.19	45.19	4 / 5										
reaction time		interval				10.40			11.18	5.74	6.15		# of strides	11.72	10.40	11.18	11.89	22.12	23.07	0.95			
		velocity				8.53			9.62	8.94	8.71	8.13	8.85	8.53	9.62	8.94	8.41	9.04	8.67				
Molnár, Attila (HUN) (2002)																			<i>Omega Timing (2023) - diamond league race analysis</i>				
FINAL - 2023 Xiamen Diamond League (Xiamen, CHN)																							
date	02-Sep-23	time	6.28	11.24	16.38	21.75	27.29	33.00	38.87	45.19	45.19	3 / 6											
reaction time	0.157	interval	4.96	5.14	5.37	5.54	5.71	5.87	6.32			# of strides	11.24	10.51	11.25	12.19	21.75	23.44	1.69				
		velocity	7.96	10.08	9.73	9.31	9.03	8.76	8.52	7.91	8.85	174.0	8.90	9.51	8.89	8.20	9.20	8.53					
Nakajima, Yuki Joseph (JPN) (2002)																			<i>Omega Timing (2023) - diamond league race analysis</i>				
FINAL - 2023 Xiamen Diamond League (Xiamen, CHN)																							
date	02-Sep-23	time	6.29	11.29	16.48	21.85	27.29	33.01	38.90	45.19	45.19	8 / 7											
reaction time	0.179	interval	5.00	5.19	5.37	5.44	5.72	5.89	6.29			# of strides	11.29	10.56	11.16	12.18	21.85	23.34	1.49				
		velocity	7.95	10.00	9.63	9.31	9.19	8.74	8.49	7.95	8.85	170.0	8.86	9.47	8.96	8.21	9.15	8.57					
Nixon, Greg (USA) (1981)																			<i>USATF Women's Sprint Development with HPC (2008)</i>				
Semi-Final 2 - 2008 USA Olympic Trials (Eugene, OR)																							
date	30-Jun-08	time	11.32			21.76	27.10	32.83	38.64	45.20	45.20	8 / 4											
reaction time		interval				10.44	5.34	5.73	5.81	6.56	PB	# of strides	11.32	10.44	11.07	12.37	21.76	23.44	1.68				
		velocity				8.83	9.58	9.36	8.73	8.61	7.62	8.85	8.83	9.58	9.03	8.08	9.19	8.53					
Djhane, Leslie (FRA) (1981)																			<i>Graubner (2009) - biomechanical analyses at the 12th IAAF world championships</i>				
Heat 5 - 2009 IAAF World Championships (Berlin, GER)																							
date	18-Aug-09	time	11.42			21.86			32.94	45.20	45.20	7 / 2											
reaction time	0.165	interval				10.44			11.08	12.26		# of strides	11.42	10.44	11.08	12.26	21.86	23.34	1.48				
		velocity				8.76			9.58	9.03	8.16	8.85	8.76	9.58	9.03	8.16	9.15	8.57					
Gordon, Lalonde (TTO) (1988)																			<i>Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Men's 400m</i>				
Semi-Final 2 - 2017 IAAF World Championships (London, GBR)																							
date	06-Aug-17	time	10.84			20.88			32.04	38.25	45.06	45.20	4 / 5										
reaction time	0.151	interval				10.04			11.16	6.21	6.81	# of strides	10.84	10.04	11.16	13.02	20.88	24.18	3.30				
		velocity				9.23			9.96	8.96	8.05	7.34	8.85	163.4	9.23	9.96	8.96	7.68	9.58	8.27			
Makwala, Isaac (BOT) (1986)																			<i>Omega Timing (2021) - diamond league race analysis</i>				
FINAL - 2021 Athletissima (Lausanne, SUI)																							
date	26-Aug-21	time	6.2	11.3	16.5	21.9	27.4	32.9	38.8	45.20	45.20	6 / 2											
reaction time	0.182	interval	5.10	5.20	5.40	5.50	5.50	5.90	6.40			# of strides	11.30	10.60	11.00	12.30	21.90	23.30	1.40				
		velocity	8.06	9.80	9.62	9.26	9.09	9.09	8.47	7.81	8.85	8.85	9.43	9.09	8.13	9.13	8.58						
Norwood, Vernon (USA) (1992)																			<i>Omega Timing (2022) - diamond league race analysis</i>				
FINAL - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL)																							
date	06-Aug-22	time	6.22	11.25	16.47	21.84	27.29	32.92	38.76	45.20	45.20	3 / 4											
reaction time	0.157	interval	5.03	5.22	5.37	5.45	5.63	5.84	6.44			# of strides	11.25	10.59	11.08	12.28	21.84	23.36	1.52				
		velocity	8.04	9.94	9.58	9.31	9.17	8.88	8.56	7.76	8.85	179.5	8.89	9.44	9.03	8.14	9.16	8.56					
Scotch, Leungo (BOT) (1996)																			<i>Seiko Timing (2023) - world championship race analysis</i>				
Heat 4 - 2023 World Athletics Championships (Budapest, HUN)																							
date	20-Aug-23	time	11.15			21.46			32.88	45.20	45.20	2 / 5											
reaction time	0.169	interval				10.31			11.42	12.32		# of strides	11.15	10.31	11.42	12.32	21.46	23.74	2.28				
		velocity				8.97			9.70	8.76	8.12	8.85	181.0	8.97	9.70	8.76	8.12	9.32	8.42				
Quow, Rennie (TTO) (1987)																			<i>Graubner (2009) - biomechanical analyses at the 12th IAAF world championships</i>				
Heat 2 - 2009 IAAF World Championships (Berlin, GER)																							
date	18-Aug-09	time	11.72			22.30			33.10	45.21	45.21	4 / 1											
reaction time	0.202	interval				10.58			10.80	12.11		# of strides	11.72	10.58	10.80	12.11	22.30	22.91	0.61				
		velocity				8.53			9.45	9.26	8.26	8.85	8.53	9.45	9.26	8.26	8.97	8.73					
Walsh, Julian Jrummi (JPN) (1996)																			<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>				
FINAL - 2019 Japanese World Championships Trials (Fujiyoshida, JPN)																							
date	01-Sep-19	time	6.13	11.01	16.10	21.43	27.00	32.84	38.87	45.21	45.21	5 / 1											
reaction time		interval	4.88	5.09	5.33	5.57	5.84	6.03	6.34	PB	# of strides	11.01	10.42	11.41	12.37	21.43	23.78	2.35					
		velocity	8.16	10.25	9.82	9.38	8.98	8.56	8.29	7.89	8.85	172.7	9.08	9.60	8.76	8.08	9.33	8.41					
Deadmon, Bryce (USA) (1997)																			<i>USATF and Karmarsh (2024) - USA Olympic trials results and race analysis</i>				
Heat 3 - 2024 USA Olympic Trials (Eugene, OR)																							
date	21-Jun-24	time	10.94			21.21			32.76	45.21	45.21	8 / 2											
reaction time		interval				10.27			11.55	12.45		# of strides			11.55	12.45	21.21	24.00	2.79				
		velocity				9.14			9.74	8.66	8.03	8.85	165.5		8.66	8.03	9.43	8.33					
Franks, Michael (USA) (1963)																			<i>Butler (2013) - IAAF world championships statistics handbook- moscow 2013</i>				
FINAL - 1983 IAAF World Championships (Helsinki, FIN)																							
date	10-Aug-83	time				21.7			45.22	45.22	5 / 2												
reaction time		interval							23.52		# of strides						21.70	23.52	1.82				
		velocity				9.22			8.50	8.85	179.0						9.22	8.50					
Baulch, Jamie (GBR) (1973)																			<i>Ritzdorf (1997) - biomechanical research project at the VI th world championships in athletics, Athens 1997</i>				
FINAL - 1997 IAAF World Championships (Athens, GRE)																							
date	05-Aug-97	time	6.08	10.96	15.96	21.16	26.62	32.46	38.46	45.06	45.22	1 / 7											
reaction time	0.158	interval	4.88	5.00	5.20	5.46	5.84	6.00	6.60		# of strides	10.96	10.20	11.30	12.60	21.16	23.90	2.74					

		velocity	8.22	10.25	10.00	9.62	9.16	8.56	8.33	7.58	8.85		9.12	9.80	8.85	7.94	9.45	8.37
Quow, Rennie (TTO) (1987)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2008 Olympic Games (Beijing, CHN)																		
<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																		
date	21-Aug-08	time			21.7			32.6	45.2	45.22		2 / 7						
reaction time	0.201	interval						10.90	12.60		# of strides		21.70	10.90	12.60	21.70	23.50	1.80
		velocity			9.22			9.17	7.94	8.85		190.5	9.22	9.17	7.94	9.22	8.51	
Kobayashi, Naoki (JPN) (1990)																		
Heat 1 - 2015 Japanese National Championships (Niigata, JPN)																		
<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>																		
date	27-Jun-15	time	6.37	11.39	16.49	21.69	27.17	32.87	38.89	45.22	45.22	5 / 1						
reaction time	0.167	interval		5.02	5.10	5.20	5.48	5.70	6.02	6.33		# of strides	11.39	10.30	11.18	12.35	21.69	23.53
		velocity	7.85	9.96	9.80	9.62	9.12	8.77	8.31	7.90	8.85	179.2	8.78	9.71	8.94	8.10	9.22	8.50
Popelka, Logan (USA) (2003)																		
Heat 3 - 2024 USA Olympic Trials (Eugene, OR)																		
<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>																		
date	21-Jun-24	time		11.00		21.48		32.75		45.22	45.22	7 / 3						
reaction time		interval				10.48		11.27		12.47	PB	# of strides		11.27	12.47	21.48	23.74	2.26
		velocity		9.09		9.54		8.87		8.02	8.85	175.0		8.87	8.02	9.31	8.42	
Merritt, LaShawn (USA) (1986)																		
Heat 4 - 2009 IAAF World Championships (Berlin, GER)																		
<i>Graubner (2009) - biomechanical analyses at the 12th IAAF world championships</i>																		
date	18-Aug-09	time		11.03		21.66		32.71		45.23	45.23	4 / 1						
reaction time	0.151	interval				10.63		11.05		12.52		# of strides	11.03	10.63	11.05	12.52	21.66	23.57
		velocity		9.07		9.41		9.05		7.99	8.84	9.07	9.41	9.05	7.99	9.23	8.49	1.91
James, Kirani (GRN) (1992)																		
Heat 2 - 2012 Olympic Games (London, GBR)																		
<i>Hadley (2012) - uka 2012 olympic games report: 400m, 4x 400m</i>																		
date	04-Aug-12	time			21.96					45.23	45.23	6 / 1						
reaction time	0.173	interval								23.27		# of strides				21.96	23.27	1.31
		velocity			9.11					8.59	8.84	158.7				9.11	8.59	
Borlée, Jonathan (BEL) (1988)																		
Semi-Final 3 - 2017 IAAF World Championships (London, GBR)																		
<i>Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Men's 400m</i>																		
date	06-Aug-17	time		10.91		21.19		32.47		38.55	45.03	45.23	3 / 5					
reaction time	0.203	interval				10.28		11.28		6.08	6.48	# of strides	10.91	10.28	11.28	12.56	21.19	23.84
		velocity		9.17		9.73		8.87		8.22	7.72	179.3	9.17	9.73	8.87	7.96	9.44	8.39
Kerley, Fred (USA) (1995)																		
FINAL - 2017 IAAF World Championships (London, GBR)																		
<i>Yamanaka (2017) - male and female 400m analysis in the 2017 season</i>																		
date	08-Aug-17	time	6.09	11.01	16.02	21.19	26.63	32.35	38.47	45.23	45.23	2 / 7						
reaction time	0.142	interval		4.92	5.01	5.17	5.44	5.72	6.12	6.76		# of strides	11.01	10.18	11.16	12.88	21.19	24.04
		velocity	8.21	10.16	9.98	9.67	9.19	8.74	8.17	7.40	8.84	176.4	9.08	9.82	8.96	7.76	9.44	8.32
Thebe, Baboloki (BOT) (1997)																		
FINAL - 2019 Müller Anniversary Games (London, GBR)																		
<i>Omega Timing (2019) - diamond league race analysis</i>																		
date	21-Jul-19	time		11.2		21.6		32.7		45.23	45.23	4 / 6						
reaction time	0.156	interval				10.4		11.1		12.5		# of strides	11.20	10.40	11.10	12.53	21.60	23.63
		velocity		8.93		9.62		9.01		7.98	8.84	180.0	8.93	9.62	9.01	7.98	9.26	8.46
Bonevacia, Liemarvin (NED) (1989)																		
Semi-Final 2 - 2023 World Athletics Championships (Budapest, HUN)																		
<i>Seiko Timing (2023) - world championship race analysis</i>																		
date	22-Aug-23	time		11.32		21.45		32.78		45.23	45.23	4 / 5						
reaction time	0.175	interval				10.13		11.33		12.45		# of strides	11.32	10.13	11.33	12.45	21.45	23.78
		velocity		8.83		9.87		8.83		8.03	8.84	181.0	8.83	9.87	8.83	8.03	9.32	8.41
Larrabee, Mike (USA) (1933)																		
FINAL - 1964 Olympic Games (Toyko, JPN)																		
<i>Sultanov (1982) - probleme der vorbereitung für den 400m-lauf</i>																		
date	19-Sep-64	time		11.0		21.6		32.7		45.1	45.1	5 / 1						
reaction time		interval				10.6		11.1		12.4	(45.15)	# of strides	11.00	10.60	11.10	12.40	21.60	23.50
		velocity		9.09		9.43		9.01		8.06	8.87	9.09	9.43	9.01	8.06	9.26	8.51	1.90
Nallet, Jean-Claude (FRA) (1947)																		
FINAL - 1970 French National Championships (Colombes, FRA)																		
<i>Robinson (1974) - modern techniques of track and field</i>																		
date	19-Jul-70	time			21.9					45.1	45.1	/ 1						
reaction time		interval								23.2	NR	# of strides				21.90	23.20	1.30
		velocity			9.13					8.62	8.87					9.13	8.62	
Evans, Lee (USA) (1947)																		
FINAL - 1972 USA Olympic Trials (Eugene, OR)																		
<i>Hymans (2008) - history of the US olympic trials - track and field</i>																		
date	09-Jul-72	time			21.6					45.1	45.1	6 / 4						
reaction time		interval								23.5		# of strides				21.60	23.50	1.90
		velocity			9.26					8.51	8.87					9.26	8.51	
Parks, Maxie (USA) (1951)																		
FINAL - 1976 Olympic Games (Montreal, CAN)																		
<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																		
date	29-Jul-76	time			21.8			32.7		45.3	45.24	7 / 5						
reaction time		interval						10.90		12.60		# of strides		21.80	10.90	12.60	21.80	23.50
		velocity			9.17			9.17		7.94	8.84	160.5		9.17	9.17	7.94	9.17	8.51
Nix, Sunder (USA) (1961)																		
FINAL - 1983 IAAF World Championships (Helsinki, FIN)																		
<i>Butler (2013) - IAAF world championships statistics handbook- moscow 2013</i>																		
date	10-Aug-83	time			22.2					45.24	45.24	1 / 3						
reaction time		interval								23.04		# of strides				22.20	23.04	0.84
		velocity			9.01					8.68	8.84					9.01	8.68	
Canal, David (ESP) (1978)																		

FINAL - 2002 European Championships (Munich, GER)																	<i>Graubner (2009) - http://www.fgs.uni-halle.de</i>		
date	08-Aug-02	time	11.88	21.86	33.04	45.24	45.24	/ 2											
reaction time	0.148	interval		9.98	11.18	12.20		# of strides	11.88	9.98	11.18	12.20	21.86	23.38	1.52				
		velocity	8.42	10.02	8.94	8.20	8.84		8.42	10.02	8.94	8.20	9.15	8.55					
Young, Jerome (USA) (1976)																	<i>USATF Women's Sprint Development (2003)</i>		
Semi-Final 1 - 2003 USATF National Championships (Palo Alto, CA)																			
date	20-Jun-03	time	21.61	32.82	38.59	45.24	45.24	6 / 2											
reaction time		interval		11.21	5.77	6.65	DV	# of strides			11.21	12.42	21.61	23.63	2.02				
		velocity		9.25	8.92	8.67	7.52	8.84			8.92	8.05	9.25	8.46					
Wariner, Jeremy (USA) (1984)																	<i>Hymans (2020) - history of the US olympic trials - track and field</i>		
FINAL - 2012 USA Olympic Trials (Eugene, OR)																			
date	24-Jun-12	time	21.8	33.2	45.24	45.24	2 / 6												
reaction time	0.231	interval		11.40	12.04		# of strides		21.80	11.40	12.04	21.80	23.44	1.64					
		velocity	9.17	8.77	8.31	8.84			4.59	8.77	8.31	9.17	8.53						
Masiák, Pavel (CZE) (1991)																	<i>Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Men's 400m</i>		
Semi-Final 3 - 2017 IAAF World Championships (London, GBR)																			
date	06-Aug-17	time	11.05	21.33	32.57	38.58	45.09	45.24	2 / 6										
reaction time	0.146	interval		10.28	11.24	6.01	6.51	# of strides	11.05	10.28	11.24	12.52	21.33	23.76	2.43				
		velocity	9.05	9.73	8.90	8.32	7.68	8.84	182.8	9.05	9.73	8.90	7.99	9.38	8.42				
Cherry, Michael (USA) (1995)																	<i>Omega Timing (2022) - diamond league race analysis</i>		
FINAL - 2022 Golden Gala Pietro Mennea (Rome, ITA)																			
date	09-Jun-22	time	6.05	11.05	16.20	21.48	26.93	32.62	38.60	45.24	45.24	4 / 3							
reaction time	0.178	interval		5.00	5.15	5.28	5.45	5.69	5.98	6.64	# of strides	11.05	10.43	11.14	12.62	21.48	23.76		
		velocity	8.26	10.00	9.71	9.47	9.17	8.79	8.36	7.53	8.84	9.05	9.59	8.98	7.92	9.31	8.42		
Nene, Zakhiti (RSA) (1998)																	<i>Timing by Seiko (2022) - world athletics championships race analysis</i>		
Semi-Final 1 - 2022 World Athletics Championships (Eugene, OR)																			
date	20-Jul-22	time	10.92	21.28	32.68	45.24	45.24	7 / 4											
reaction time	0.121	interval		10.36	11.40	12.56	# of strides	10.92	10.36	11.40	12.56	21.28	23.96	2.68					
		velocity	9.16	9.65	8.77	7.96	8.84	178.0	9.16	9.65	8.77	7.96	9.40	8.35					
Borée, Dylan (BEL) (1992)																	<i>Seiko Timing (2023) - world championship race analysis</i>		
Heat 3 - 2023 World Athletics Championships (Budapest, HUN)																			
date	20-Aug-23	time	11.25	21.44	32.85	45.24	45.24	6 / 4											
reaction time	0.160	interval		10.19	11.41	12.39	# of strides	11.25	10.19	11.41	12.39	21.44	23.80	2.36					
		velocity	8.89	9.81	8.76	8.07	8.84	175.5	8.89	9.81	8.76	8.07	9.33	8.40					
Molnár, Attila (HUN) (2002)																	<i>Paris 2024 Olympic Games - Results Book (2024)</i>		
Heat 2 - 2024 Olympic Games (Paris, FRA)																			
date	04-Aug-24	time	6.28	11.17	16.18	21.40	26.86	32.57	38.62	45.24	45.24	4 / 6							
reaction time	0.163	interval		4.89	5.01	5.22	5.46	5.71	6.05	6.62	# of strides	11.17	10.23	11.17	12.67	21.40	23.84		
		velocity	7.96	10.22	9.98	9.58	9.16	8.76	8.26	7.55	8.84	8.95	9.78	8.95	7.89	9.35	8.39		
Pillay, Lythe (RSA) (2003)																	<i>Paris 2024 Olympic Games - Results Book (2024)</i>		
Semi-Final 2 - 2024 Olympic Games (Paris, FRA)																			
date	06-Aug-24	time	6.23	11.23	16.31	21.57	27.03	32.78	38.77	45.24	45.24	3 / 7							
reaction time	0.145	interval		5.00	5.08	5.26	5.46	5.75	5.99	6.47	# of strides	11.23	10.34	11.21	12.46	21.57	23.67		
		velocity	8.03	10.00	9.84	9.51	9.16	8.70	8.35	7.73	8.84	8.90	9.67	8.92	8.03	9.27	8.45		
Smith, Miles (USA) (1984)																	<i>USATF Women's Sprint Development (2005)</i>		
FINAL - 2005 USATF National Championships (Carson, CA)																			
date	25-Jun-05	time	11.51	16.52	21.78	27.15	32.90	38.93	45.25	45.25	2 / 6								
reaction time		interval		5.01	5.26	5.37	5.75	6.03	6.32	# of strides	11.51	10.27	11.12	12.35	21.78	23.47	1.69		
		velocity	8.69	9.98	9.51	9.31	8.70	8.29	7.91	8.84	8.69	9.74	8.99	8.10	9.18	8.52			
Litvin, Mikhail (KAZ) (1996)																	<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>		
FINAL - 2019 Asian Athletics Championships (Doha, QAT)																			
date	22-Apr-19	time	6.30	11.39	16.53	21.92	27.45	33.15	39.02	45.25	45.25	9 / 3							
reaction time	0.162	interval		5.09	5.14	5.39	5.53	5.70	5.87	6.23	NR PB	# of strides	11.39	10.53	11.23	12.10	21.92	23.33	
		velocity	7.94	9.82	9.73	9.28	9.04	8.77	8.52	8.03	8.84	164.0	8.78	9.50	8.90	8.26	9.12	8.57	
Morales-Williams, Christopher (CAN)																	<i>Paris 2024 Olympic Games - Results Book (2024)</i>		
Semi-Final 3 - 2024 Olympic Games (Paris, FRA)																			
date	06-Aug-24	time	6.04	10.93	15.92	21.21	26.91	32.85	38.91	45.25	45.25	8 / 8							
reaction time	0.164	interval		4.89	4.99	5.29	5.70	5.94	6.06	6.34	# of strides	10.93	10.28	11.64	12.40	21.21	24.04	2.83	
		velocity	8.28	10.22	10.02	9.45	8.77	8.42	8.25	7.89	8.84	164.0	9.15	9.73	8.59	8.06	9.43	8.32	
Sito, Luca (ITA) (2003)																	<i>Omega Timing (2024) - diamond league race analysis</i>		
FINAL - 2024 Golden Gala Pietro Mennea (Roma, ITA)																			
date	30-Aug-24	time	6.19	11.17	16.23	21.49	27.15	32.99	38.87	42.25	45.25	9 / 9							
reaction time	0.185	interval		4.98	5.06	5.26	5.66	5.84	5.88	3.38	# of strides	11.17	10.32	11.50	9.26	21.49	20.76	-0.73	
		velocity	8.08	10.04	9.88	9.51	8.83	8.56	8.50	14.79	8.84	173.0	8.95	9.69	8.70	10.80	9.31	9.63	
Mokganyetsi, Hendrick (RSA) (1975)																	<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>		
FINAL - 2000 Olympic Games (Sydney, AUS)																			
date	25-Sep-00	time	11.8	22.3	33.1	45.3	45.26	7 / 6											
reaction time		interval		10.50	10.80	12.20	# of strides	11.80	10.50	10.80	12.20	22.30	23.00	0.70					
		velocity	8.47	9.52	9.26	8.20	8.84	8.47	9.52	9.26	8.20	8.97	8.70						
van Niekerk, Wayde (RSA) (1992)																	<i>(2016.08.15) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en</i>		
Heat 3 - 2016 Olympic Games (Rio de Janeiro, BRA)																			
date	13-Aug-16	time	11.04	22.02	33.04	45.26	45.26	7 / 1											
reaction time	0.147	interval		10.98	11.02	12.22	# of strides	11.04	10.98	11.02	12.22	22.02	23.24	1.22					

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
velocity		9.06	9.11	9.07	8.18	8.84	9.06	9.11	9.07	8.18	9.08	8.61									
Borlée, Kevin (BEL) (1988)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Semi-Final 3 - 2022 World Athletics Championships (Eugene, OR)		Timing by Seiko (2022) - world athletics championships race analysis																			
date	20-Jul-22	time	11.39	21.81	33.00	45.26	45.26	2 / 5			11.39	10.42	11.19	12.26	21.81	23.45	1.64				
reaction time	0.139	interval	10.42	11.19	12.26	8.16	8.84	# of strides			8.78	9.60	8.94	8.16	9.17	8.53					
velocity	8.78	8.78	9.60	8.94	8.16	8.84															
Re, Davide (ITA) (1993)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 2 - 2022 European Athletics Championships (Munich, GER)		European Athletics (2022) - european athletics championships race analysis																			
date	15-Aug-22	time	11.33	21.69	32.84	45.26	45.26	5 / 1			11.33	10.36	11.15	12.42	21.69	23.57	1.88				
reaction time	0.231	interval	10.36	11.15	12.42	8.05	8.84	# of strides			8.83	9.65	8.97	8.05	9.22	8.49					
velocity	8.83	8.83	9.65	8.97	8.05	8.84															
Petrucciani, Ricky (SUI) (2000)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 2 - 2022 European Athletics Championships (Munich, GER)		European Athletics (2022) - european athletics championships race analysis																			
date	15-Aug-22	time	11.19	21.65	32.87	45.26	45.26	7 / 2			11.19	10.46	11.22	12.39	21.65	23.61	1.96				
reaction time	0.198	interval	10.46	11.22	12.39	8.07	8.84	# of strides			8.94	9.56	8.91	8.07	9.24	8.47					
velocity	8.94	8.94	9.56	8.91	8.07	8.84															
Sato, Fuga (JPN) (1996)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2023 Japanese National Championships (Osaka, JPN)		Yamanaka (2024) - analysis of men's and women's 400m and 300m runs in the 2023 season																			
date	04-Jun-23	time	6.06	11.11	16.22	21.47	26.90	32.62	38.74	45.26	45.26	6 / 2			11.11	10.36	11.15	12.64	21.47	23.79	2.32
reaction time	0.199	interval	5.05	5.11	5.25	5.43	5.72	6.12	6.52	PB	# of strides			11.11	10.36	11.15	12.64	21.47	23.79	2.32	
velocity	8.25	8.25	9.90	9.78	9.52	9.21	8.74	8.17	7.67	8.84	# of strides			11.11	10.36	11.15	12.64	21.47	23.79	2.32	
Biron, Gilles (FRA) (1995)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2023 Memorial van Damme (Brussels, BEL)		Omega Timing (2023) - diamond league race analysis																			
date	08-Sep-23	time	6.16	11.14	16.23	21.58	27.08	32.73	38.75	45.26	45.26	8 / 5			11.14	10.44	11.15	12.53	21.58	23.68	2.10
reaction time	0.185	interval	4.98	5.09	5.35	5.50	5.65	6.02	6.51	# of strides			11.14	10.44	11.15	12.53	21.58	23.68	2.10		
velocity	8.12	8.12	10.04	9.82	9.35	9.09	8.85	8.31	7.68	8.84	# of strides			11.14	10.44	11.15	12.53	21.58	23.68	2.10	
McKiver, Jenoa (USA) (2002)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 1 - 2024 USA Olympic Trials (Eugene, OR)		USATF and Karmarush (2024) - USA Olympic trials results and race analysis																			
date	21-Jun-24	time	11.00	21.15	32.45	45.26	45.26	3 / 4			11.00	10.15	11.30	12.81	21.15	24.11	2.96				
reaction time		interval	10.15	11.30	12.81	8.84	# of strides			11.00	10.15	11.30	12.81	21.15	24.11	2.96					
velocity	9.09	9.09	9.85	8.85	7.81	8.84															
Sito, Luca (ITA) (2003)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2024 Herculis Meeting International d'Athlétisme (Monaco, MON)		Omega Timing (2024) - diamond league race analysis																			
date	12-Jul-24	time	6.19	11.13	16.17	21.42	27.01	32.75	38.65	45.26	45.26	2 / 7			11.13	10.29	11.33	12.51	21.42	23.84	2.42
reaction time	0.169	interval	4.94	5.04	5.25	5.59	5.74	5.90	6.61	# of strides			11.13	10.29	11.33	12.51	21.42	23.84	2.42		
velocity	8.08	8.08	10.12	9.92	9.52	8.94	8.71	8.47	7.56	8.84	# of strides			11.13	10.29	11.33	12.51	21.42	23.84	2.42	
de Souza, Gerson (BRA) (1959)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Semi-Final 1 - 1988 Olympic Games (Seoul, KOR)		Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988																			
date	26-Sep-88	time	11.38	21.78	32.83	45.27	45.27	7 / 7			11.38	10.40	11.05	12.44	21.78	23.49	1.71				
reaction time		interval	10.40	11.05	12.44	8.84	# of strides			11.38	10.40	11.05	12.44	21.78	23.49	1.71					
velocity	8.79	8.79	9.62	9.05	8.04	8.84															
Kanemaru, Yuzo (JPN) (1987)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2009 Shizuoka International Athletics Meeting (Fukuori, JPN)		Matsuo (2010) - 63rd high school championships: JAF scientific committee - biomechanics data																			
date	03-May-09	time	6.21	11.20	16.25	21.55	27.07	32.91	38.89	45.27	45.27	1 / 1			11.20	10.35	11.36	12.36	21.55	23.72	2.17
reaction time		interval	4.99	5.05	5.30	5.52	5.84	5.98	6.38	# of strides			11.20	10.35	11.36	12.36	21.55	23.72	2.17		
velocity	8.05	8.05	10.02	9.90	9.43	9.06	8.56	8.36	7.84	8.84	# of strides			11.20	10.35	11.36	12.36	21.55	23.72	2.17	
London, Wil (USA) (1997)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2016 IAAF World Junior Championships (Bydgoszcz, POL)		Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016																			
date	22-Jul-16	time	6.18	11.30	16.60	22.04	27.59	33.13	39.02	45.27	45.27	7 / 2			11.30	10.74	11.09	12.14	22.04	23.23	1.19
reaction time	0.143	interval	5.12	5.30	5.44	5.55	5.54	5.89	6.25	PB	# of strides			11.30	10.74	11.09	12.14	22.04	23.23	1.19	
velocity	8.09	8.09	9.77	9.43	9.19	9.01	9.03	8.49	8.00	8.84	# of strides			11.30	10.74	11.09	12.14	22.04	23.23	1.19	
Caines, Daniel (GBR) (1979)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2002 European Championships (Munich, GER)		Graubner (2009) - http://www.fgs.uni-halle.de																			
date	08-Aug-02	time	11.20	21.58	32.81	45.28	45.28	/ 3			11.20	10.38	11.23	12.47	21.58	23.70	2.12				
reaction time	0.141	interval	10.38	11.23	12.47	8.83	# of strides			11.20	10.38	11.23	12.47	21.58	23.70	2.12					
velocity	8.93	8.93	9.63	8.90	8.02	8.83															
Harrison, Calvin (USA) (1974)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Semi-Final 1 - 2003 USATF National Championships (Palo Alto, CA)		USATF Women's Sprint Development (2003)																			
date	20-Jun-03	time	22.11	33.47	39.06	45.28	45.28	4 / 3			11.36	11.81	22.11	23.17	1.06						
reaction time		interval	11.36	5.59	6.22	8.83	# of strides			11.36	11.81	22.11	23.17	1.06							
velocity		9.05	8.80	8.94	8.04	8.83															
Borlée, Kevin (BEL) (1988)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Semi-Final 3 - 2009 IAAF World Championships (Berlin, GER)		Graubner (2009) - biomechanical analyses at the 12th IAAF world championships																			
date	19-Aug-09	time	11.40	22.28	33.34	45.28	45.28	8 / 4			11.40	10.88	11.06	11.94	22.28	23.00	0.72				
reaction time	0.143	interval	10.88	11.06	11.94	8.83	# of strides			8.77	9.19	9.04	8.38	8.98	8.70						
velocity	8.77	8.77	9.19	8.94	8.38	8.83															
Norwood, Vernon (USA) (1992)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2022 FBK Games (Hengelo, NED)		Omega Timing (2022) - continental tour race analysis																			
date	06-Jun-22	time	6.1	11.2	16.4	22.0	27.6	33.3	39.0	45.28	45.28	6 / 1			11.20	10.80	11.30	11.98	22.00	23.28	1.28
reaction time	0.158	interval	5.10	5.20	5.60	5.60	5.70	5.70	6.28	# of strides			11.20	10.80	11.30	11.98	22.00	23.28	1.28		
velocity	8.20	8.20	9.80	9.62	8.93	8.93	8.77	8.77	7.96	8.83	# of strides			11.20	10.80	11.30	11.98	22.00	23.28		

Semi-Final 2 - 2022 World Athletics Championships (Eugene, OR)																<i>Timing by Seiko (2022) - world athletics championships race analysis</i>					
date	20-Jul-22	time	11.23	21.85	32.92	45.28	45.28		5 / 4												
reaction time	0.143	interval		10.62	11.07	12.36		# of strides	11.23	10.62	11.07	12.36	21.85	23.43	1.58						
		velocity	8.90	9.42	9.03	8.09	8.83	159.7	8.90	9.42	9.03	8.09	9.15	8.54							
Ingvalsen, Håvard Bentsdal (NOR) (20C) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																					
FINAL - 2023 Weltklasse (Zürich, SUI)																					
date	31-Aug-23	time	6.32	11.37	16.58	21.92	27.43	33.17	39.08	45.28	45.28		6 / 1								
reaction time	0.201	interval		5.05	5.21	5.34	5.51	5.74	5.91	6.20		# of strides	11.37	10.55	11.25	12.11	21.92	23.36	1.44		
		velocity	7.91	9.90	9.60	9.36	9.07	8.71	8.46	8.06	8.83	183.0	8.92	9.46	8.84	8.26	9.12	8.56			
Spitz, Lionel (SUI) (2001) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																					
Semi-Final 2 - 2024 European Athletics Championships (Roma, ITA)																					
date	09-Jun-24	time	11.21	21.78		33.09		45.28	45.28		9 / 3										
reaction time	0.166	interval		10.57		11.31		12.19		# of strides	11.21	10.57	11.31	12.19	21.78	23.50	1.72				
		velocity	8.92	9.46		8.84		8.20	8.83	183.0	8.92	9.46	8.84	8.20	9.18	8.51					
Scotch, Leungo (BOT) (1996) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																					
Heat 5 - 2024 Olympic Games (Paris, FRA)																					
date	04-Aug-24	time	6.06	11.02	16.14	21.47	26.99	32.79	38.72	45.28	45.28		7 / 5								
reaction time	0.167	interval		4.96	5.12	5.33	5.52	5.80	5.93	6.56		# of strides	11.02	10.45	11.32	12.49	21.47	23.81	2.34		
		velocity	8.25	10.08	9.77	9.38	9.06	8.62	8.43	7.62	8.83	176.2	9.07	9.57	8.83	8.01	9.32	8.40			
Potter, Mitchell (USA) (1980) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																					
FINAL - 2003 USATF National Championships (Palo Alto, CA)																					
date	21-Jun-03	time		21.86		33.07	38.85	45.29	45.29		8 / 3										
reaction time		interval				11.21	5.78	6.44		# of strides		11.21	12.22	21.86	23.43	1.57					
		velocity			9.15	8.92	8.65	7.76	8.83			8.92	8.18	9.15	8.54						
Rooney, Martyn (GBR) (1987) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																					
Semi-Final 3 - 2015 IAAF World Championships (Beijing, CHN)																					
date	24-Aug-15	time	6.23	11.21	16.33	21.65	27.18	32.69	38.66	45.29	45.29		8 / 6								
reaction time	0.153	interval		4.98	5.12	5.32	5.53	5.51	5.97	6.63		# of strides	11.21	10.44	11.04	12.60	21.65	23.64	1.99		
		velocity	8.03	10.04	9.77	9.40	9.04	9.07	8.38	7.54	8.83	161.2	8.92	9.58	9.06	7.94	9.24	8.46			
James, Kirani (GRN) (1992) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																					
Heat 5 - 2022 World Athletics Championships (Eugene, OR)																					
date	17-Jul-22	time	11.42	21.96		33.12		45.29	45.29		4 / 2										
reaction time	0.152	interval		10.54		11.16		12.17		# of strides	11.42	10.54	11.16	12.17	21.96	23.33	1.37				
		velocity	8.76	9.49		8.96		8.22	8.83	160.2	8.76	9.49	8.96	8.22	9.11	8.57					
Ndori, Bayapo (BOT) (1999) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																					
FINAL - 2022 World Athletics Championships (Eugene, OR)																					
date	22-Jul-22	time	11.05	21.45		32.62		45.29	45.29		8 / 6										
reaction time	0.137	interval		10.40		11.17		12.67		# of strides	11.05	10.40	11.17	12.67	21.45	23.84	2.39				
		velocity	9.05	9.62		8.95		7.89	8.83	178.0	9.05	9.62	8.95	7.89	9.32	8.39					
Re, Davide (ITA) (1993) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																					
Semi-Final 3 - 2023 World Athletics Championships (Budapest, HUN)																					
date	22-Aug-23	time	11.33	21.69		33.19		45.29	45.29		3 / 4										
reaction time	0.165	interval		10.36		11.50		12.10		# of strides	11.33	10.36	11.50	12.10	21.69	23.60	1.91				
		velocity	8.83	9.65		8.70		8.26	8.83		8.83	9.65	8.70	8.26	9.22	8.47					
Barnes, Zandrión (JAM) (2001) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																					
FINAL - 2023 Xiamen Diamond League (Xiamen, CHN)																					
date	02-Sep-23	time	6.28	11.26	16.36	21.70	27.25	33.02	38.98	45.29	45.29		2 / 8								
reaction time	0.155	interval		4.98	5.10	5.34	5.55	5.77	5.96	6.31		# of strides	11.26	10.44	11.32	12.27	21.70	23.59	1.89		
		velocity	7.96	10.04	9.80	9.36	9.01	8.67	8.39	7.92	8.83	8.88	9.58	8.83	8.15	9.22	8.48				
Scotch, Leungo (BOT) (1996) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																					
FINAL - 2024 Seashore Doha Meeting (Doha, QAT)																					
date	10-May-24	time	6.24	11.35	16.68	22.09	27.63	33.39	39.14	45.29	45.29		8 / 3								
reaction time	0.156	interval		5.11	5.33	5.41	5.54	5.76	5.75	6.15		# of strides	11.35	10.74	11.30	11.90	22.09	23.20	1.11		
		velocity	8.01	9.78	9.38	9.24	9.03	8.68	8.70	8.13	8.83	8.81	9.31	8.85	8.40	9.05	8.62				
Nene, Zakhiti (RSA) (1998) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																					
FINAL - 2024 Bauhaus Galan (Stockholm, SWE)																					
date	02-Jun-24	time	6.14	11.00	16.05	21.34	26.90	32.63	38.61	45.29	45.29		7 / 3								
reaction time	0.153	interval		4.86	5.05	5.29	5.56	5.73	5.98	6.68		# of strides	11.00	10.34	11.29	12.66	21.34	23.95	2.61		
		velocity	8.14	10.29	9.90	9.45	8.99	8.73	8.36	7.49	8.83	9.09	9.67	8.86	7.90	9.37	8.35				
Markin, Viktor (URS) (1957) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																					
FINAL - 1982 European Championships (Athens, GRE)																					
date	09-Sep-82	time	11.58	22.16		33.20		45.30	45.30		3 / 3										
reaction time		interval		10.58		11.04		12.10		# of strides	11.58	10.58	11.04	12.10	22.16	23.14	0.98				
		velocity	8.64	9.45		9.06		8.26	8.83		8.64	9.45	9.06	8.26	9.03	8.64					
McQuay, Tony (USA) (1990) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																					
FINAL - 2016 USA Olympic Trials (Eugene, OR)																					
date	03-Jul-16	time		21.6		32.6		45.30	45.30		7 / 5										
reaction time	0.203	interval				11.00		12.70		# of strides		21.60	11.00	12.70	21.60	23.70	2.10				
		velocity		9.26		9.09		7.87	8.83			4.63	9.09	7.87	9.26	8.44					
Anas, Y. Muhammed (IND) (1994) 50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																					
Semi-Final 2 - 2018 Asian Games (Jakarta, INA)																					
date	25-Aug-18	time	6.15	11.16	16.32	21.76	27.29	32.97	38.93	45.30	45.30		3 / 1								
reaction time	0.150	interval		5.01	5.16	5.44	5.53	5.68	5.96	6.37		# of strides	11.16	10.60	11.21	12.33	21.76	23.54	1.78		

		velocity	8.13	9.98	9.69	9.19	9.04	8.80	8.39	7.85	8.83			8.96	9.43	8.92	8.11	9.19	8.50	
Cedenio, Machel (TTO) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2019 IAAF World Championships (Doha, QAT)																				
date	04-Oct-19	time	6.01	10.78	15.67	20.73	26.07	31.83	38.05	45.30	45.30	6 / 7								
reaction time	0.221	interval	4.77	4.89	5.06	5.34	5.76	6.22	7.25		# of strides	10.78	9.95	11.10	13.47	20.73	24.57	3.84		
		velocity	8.32	10.48	10.22	9.88	9.36	8.68	8.04	6.90	8.83	167.5	9.28	10.05	9.01	7.42	9.65	8.14		
Taylor, Christopher (JAM) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2022 World Athletics Championships (Eugene, OR)																				
date	22-Jul-22	time	10.91		21.43		32.81		45.30	45.30	1 / 7									
reaction time	0.169	interval			10.52		11.38		12.49		# of strides	10.91	10.52	11.38	12.49	21.43	23.87	2.44		
		velocity			9.17		8.79		8.01	8.83	173.5	9.17	9.51	8.79	8.01	9.33	8.38			
Nene, Zakhiti (RSA) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2023 Bauhaus Galan (Stockholm, SWE)																				
date	02-Jul-23	time	6.21	11.20	16.39	21.79	27.32	33.05	38.89	45.30	45.30	7 / 1								
reaction time	0.163	interval	4.99	5.19	5.40	5.53	5.73	5.84	6.41		# of strides	11.20	10.59	11.26	12.25	21.79	23.51	1.72		
		velocity	8.05	10.02	9.63	9.26	9.04	8.73	8.56	7.80	8.83	8.93	9.44	8.88	8.16	9.18	8.51			
Benson, James (USA) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Semi-Final 2 - 2024 USA Olympic Trials (Eugene, OR)																				
date	23-Jun-24	time	10.94		21.33		32.66		45.30	45.30	3 / 6									
reaction time		interval			10.39		11.33		12.64		# of strides	10.94	10.39	11.33	12.64	21.33	23.97	2.64		
		velocity			9.14		9.62		8.83	7.91	8.83	9.14	9.62	8.83	7.91	9.38	8.34			
Norman, Michael (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Semi-Final 3 - 2024 USA Olympic Trials (Eugene, OR)																				
date	23-Jun-24	time	10.85		21.35		32.67		45.30	45.30	5 / 1									
reaction time		interval			10.50		11.32		12.63		# of strides	10.85	10.50	11.32	12.63	21.35	23.95	2.60		
		velocity			9.22		9.52		8.83	7.92	8.83	175.2	9.22	9.52	8.83	7.92	9.37	8.35		
Spitz, Lionel (SUI) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2024 Weltklasse (Zürich, SUI)																				
date	05-Sep-24	time	6.33	11.56	16.87	22.20	27.64	33.25	39.07	45.30	45.30	4 / 1								
reaction time	0.130	interval	5.23	5.31	5.33	5.44	5.61	5.82	6.23		# of strides	11.56	10.64	11.05	12.05	22.20	23.10	0.90		
		velocity	7.90	9.56	9.42	9.38	9.19	8.91	8.59	8.03	8.83	8.65	9.40	9.05	8.30	9.01	8.66			
Schloske, Horst-Rüdiger (FRG) (1946)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 1972 Olympic Games (Munich, FRG)																				
date	07-Sep-72	time			21.7		33.0		45.4	45.31	7 / 5									
reaction time		interval			11.30		12.40		8.83		# of strides	21.70	11.30	12.40	21.70	23.70	2.00			
		velocity			9.22		8.85		8.06	8.83	9.22	9.22	8.85	8.06	9.22	8.44				
Wroe, Sean (AUS) (1985)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 7 - 2009 IAAF World Championships (Berlin, GER)																				
date	18-Aug-09	time	11.13		21.57		32.90		45.31	45.31	8 / 2									
reaction time	0.166	interval	10.44		11.33		12.41		8.83		# of strides	11.13	10.44	11.33	12.41	21.57	23.74	2.17		
		velocity	8.98		9.58		8.83		8.06	8.83	8.98	9.58	8.83	8.06	9.27	8.42				
Montgomery, Kahmari (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2019 Memorial van Damme (Brussels, BEL)																				
date	06-Sep-19	time	6.0	10.8	15.9	21.1	26.6	32.4	38.5	45.31	45.31	2 / 5								
reaction time	0.186	interval	4.8	5.1	5.2	5.5	5.8	6.1	12.9		# of strides	10.80	10.30	11.30	12.91	21.10	24.21	3.11		
		velocity	8.33	10.42	9.80	9.62	9.09	8.62	8.20	7.75	8.83	9.26	9.71	8.85	7.75	9.48	8.26			
Petrucciani, Ricky (SUI) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2022 Weltklasse (Zürich, SUI)																				
date	08-Sep-22	time	6.18	11.28	16.46	21.79	27.26	32.94	38.89	45.31	45.31	8 / 5								
reaction time	0.188	interval	5.10	5.18	5.33	5.47	5.68	5.95	6.42		# of strides	11.28	10.51	11.15	12.37	21.79	23.52	1.73		
		velocity	8.09	9.80	9.65	9.38	9.14	8.80	8.40	7.79	8.83	174.5	8.87	9.51	8.97	8.08	9.18	8.50		
Nakajima, Yuki Joseph (JPN) (2002)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2023 Seiko Golden Grand Prix (Yokohama, JPN)																				
date	21-May-23	time	6.15	11.16	16.28	21.55	26.99	32.75	38.83	45.31	45.31	6 / 1								
reaction time	0.171	interval	5.01	5.12	5.27	5.44	5.76	6.08	6.48	PB	# of strides	11.16	10.39	11.20	12.56	21.55	23.76	2.21		
		velocity	8.13	9.98	9.77	9.49	9.19	8.68	8.22	7.72	8.83	172.5	8.96	9.62	8.93	7.96	9.28	8.42		
Norman, Michael (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 5 - 2024 USA Olympic Trials (Eugene, OR)																				
date	21-Jun-24	time	10.93		21.36		32.76		45.31	45.31	5 / 1									
reaction time		interval			10.43		11.40		12.55		# of strides	10.93	10.43	11.40	12.55	21.36	23.95	2.59		
		velocity			9.15		9.59		8.77	7.97	8.83	173.5	9.15	9.59	8.77	7.97	9.36	8.35		
Minor, Deon (USA) (1973)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Semi-Final 2 - 1996 USA Olympic Trials (Atlanta, GA)																				
date	17-Jun-96	time	11.11		21.99		33.10		38.68	45.32	45.32	4 / 6								
reaction time		interval			10.88		11.11		5.58	6.64	# of strides	11.11	10.88	11.11	12.22	21.99	23.33	1.34		
		velocity			9.00		9.19		9.00	8.96	8.83	9.00	9.19	9.00	8.18	9.10	8.57			
Wroe, Sean (AUS) (1985)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Semi-Final 2 - 2009 IAAF World Championships (Berlin, GER)																				
date	19-Aug-09	time	11.03		21.52		32.81		45.32	45.32	6 / 4									
reaction time	0.160	interval	10.49		11.29		12.51		8.83		# of strides	11.03	10.49	11.29	12.51	21.52	23.80	2.28		
		velocity	9.07		9.53		8.86		7.99	8.83	9.07	9.53	8.86	7.99	9.29	8.40				
Hudson-Smith, Matthew (GBR) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			

FINAL - 2022 Müller Birmingham Diamond League (Birmingham, GBR)																	<i>Omega Timing (2022) - diamond league race analysis</i>		
date	21-May-22	time	6.06	11.00	16.18	21.56	27.07	32.48	38.80	45.32	45.32	6 / 1							
reaction time	0.144	interval	4.94	5.18	5.38	5.51	5.41	6.32	6.52		# of strides	11.00	10.56	10.92	12.84	21.56	23.76	2.20	
		velocity	8.25	10.12	9.65	9.29	9.07	9.24	7.91	7.67	8.83	164.2	9.09	9.47	9.16	7.79	9.28	8.42	
Kent, Nathan (USA) (2003)																	<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>		
Semi-Final 1 - 2024 USA Olympic Trials (Eugene, OR)																			
date	23-Jun-24	time		11.10		21.38		32.88		45.32	45.32	9 / 5							
reaction time		interval				10.28		11.50		12.44	PB	# of strides	11.10	10.28	11.50	12.44	21.38	23.94	2.56
		velocity		9.01		9.73		8.70		8.04	8.83		9.01	9.73	8.70	8.04	9.35	8.35	
Jellinghaus, Martin (FRG) (1944)																	<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>		
FINAL - 1968 Olympic Games (Mexico City, MEX) (Altitude)																			
date	18-Oct-68	time				22.0		33.2		45.3	45.33	3 / 5							
reaction time		interval						11.20		12.10		# of strides		22.00	11.20	12.10	22.00	23.30	1.30
		velocity				9.09		8.93		8.26	8.82			9.09	8.93	8.26	9.09	8.58	
Scotch, Leungo (BOT) (1996)																	<i>Paris 2024 Olympic Games - Results Book (2024)</i>		
Repechage 3 - 2024 Olympic Games (Paris, FRA)																			
date	05-Aug-24	time	6.20	11.30	16.50	21.89	27.33	32.96	38.86	45.33	45.33	6 / 2							
reaction time	0.172	interval		5.10	5.20	5.39	5.44	5.63	5.90	6.47		# of strides	11.30	10.59	11.07	12.37	21.89	23.44	1.55
		velocity	8.06	9.80	9.62	9.28	9.19	8.88	8.47	7.73	8.82	179.0	8.85	9.44	9.03	8.08	9.14	8.53	
Jones, Louis (USA) (1932)																	<i>Hymans (2008) - history of the US olympic trials - track and field</i>		
FINAL - 1956 USA Olympic Trials (Los Angeles, CA)																			
date	30-Jun-56	time				21.3				45.2	45.2	8 / 1							
reaction time		interval								23.9	WR	# of strides					21.30	23.90	2.60
		velocity				9.39				8.37	8.85						9.39	8.37	
Mottley, Wendell (TTO) (1941)																	<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>		
FINAL - 1964 Olympic Games (Tokyo, JPN)																			
date	19-Sep-64	time				21.6		33.2		45.2	45.2	7 / 2							
reaction time		interval						11.60		12.00	(45.24)	# of strides		21.60	11.60	12.00	21.60	23.60	2.00
		velocity				9.26		8.62		8.33	8.85			9.26	8.62	8.33	9.26	8.47	
Kitur, David (KEN) (1962)																	<i>Moravec (1990) - time analysis of the sprints - Rome 1987 Scientific Report (2nd ed)</i>		
FINAL - 1987 IAAF World Championship (Rome, ITA)																			
date	03-Sep-87	time		11.41		21.73		32.76		45.34	45.34	5 / 6							
reaction time		interval				10.32		11.03		12.58		# of strides	11.41	10.32	11.03	12.58	21.73	23.61	1.88
		velocity		8.76		9.69		9.07		7.95	8.82		8.76	9.69	9.07	7.95	9.20	8.47	
Carvalho, Lucas (BRA) (1993)																	<i>Seiko Timing (2023) - world championship race analysis</i>		
Heat 6 - 2023 World Athletics Championships (Budapest, HUN)																			
date	20-Aug-23	time		11.30		21.67		32.95		45.34	45.34	7 / 4							
reaction time	0.175	interval				10.37		11.28		12.39		# of strides	11.30	10.37	11.28	12.39	21.67	23.67	2.00
		velocity		8.85		9.64		8.87		8.07	8.82		8.85	9.64	8.87	8.07	9.23	8.45	
Sanders, Manuel (GER) (1998)																	<i>Seiko Timing (2023) - world championship race analysis</i>		
Heat 6 - 2023 World Athletics Championships (Budapest, HUN)																			
date	20-Aug-23	time		11.61		21.90		33.31		45.34	45.34	6 / 4							
reaction time	0.187	interval				10.29		11.41		12.03		# of strides	11.61	10.29	11.41	12.03	21.90	23.44	1.54
		velocity		8.61		9.72		8.76		8.31	8.82		8.61	9.72	8.76	8.31	9.13	8.53	
Haydock-Wilson, Alex (GBR) (1999)																	<i>Omega Timing (2023) - diamond league race analysis</i>		
FINAL - 2023 Xiamen Diamond League (Xiamen, CHN)																			
date	02-Sep-23	time	6.20	11.13	16.26	21.58	27.03	32.76	38.79	45.34	45.34	1 / 9							
reaction time	0.149	interval		4.93	5.13	5.32	5.45	5.73	6.03	6.55		# of strides	11.13	10.45	11.18	12.58	21.58	23.76	2.18
		velocity	8.06	10.14	9.75	9.40	9.17	8.73	8.29	7.63	8.82		8.98	9.57	8.94	7.95	9.27	8.42	
Pillay, Lythe (RSA) (2003)																	<i>Omega Timing (2024) - diamond league race analysis</i>		
FINAL - 2024 Bislett Games (Oslo, NOR)																			
date	30-May-24	time	6.23	11.15	16.26	21.61	27.25	33.04	39.03	45.34	45.34	1 / 6							
reaction time	0.156	interval		4.92	5.11	5.35	5.64	5.79	5.99	6.31		# of strides	11.15	10.46	11.43	12.30	21.61	23.73	2.12
		velocity	8.03	10.16	9.78	9.35	8.87	8.64	8.35	7.92	8.82	175.0	8.97	9.56	8.75	8.13	9.25	8.43	
Bynum, Emmanuel (USA) (2000)																	<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>		
Heat 2 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time		11.53		21.91		33.12		45.34	45.34	9 / 5							
reaction time		interval				10.38		11.21		12.22		# of strides	11.53	10.38	11.21	12.22	21.91	23.43	1.52
		velocity		8.67		9.63		8.92		8.18	8.82		8.67	9.63	8.92	8.18	9.13	8.54	
Popelka, Logan (USA) (2003)																	<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>		
Semi-Final 1 - 2024 USA Olympic Trials (Eugene, OR)																			
date	23-Jun-24	time		11.28		21.76		32.97		45.34	45.34	4 / 6							
reaction time		interval				10.48		11.21		12.37		# of strides	11.28	10.48	11.21	12.37	21.76	23.58	1.82
		velocity		8.87		9.54		8.92		8.08	8.82		8.87	9.54	8.92	8.08	9.19	8.48	
Egbunike, Innocent (NGR) (1961)																	<i>Adams (1984) - 1984 olympic games - 200m & 400m</i>		
FINAL - 1984 Olympic Games (Los Angeles, CA)																			
date	08-Aug-84	time				21.7				45.35	45.35	3 / 7							
reaction time	0.192	interval								23.65		# of strides					21.70	23.65	1.95
		velocity				9.22				8.46	8.82						9.22	8.46	
Caines, Daniel (GBR) (1979)																	<i>Graubner (2009) - http://www.fgs.uni-halle.de</i>		
Semi-Final 1 - 2002 European Championships (Munich, GER)																			
date	07-Aug-02	time		11.10		21.63		32.94		45.35	45.35	/ 1							
reaction time	0.144	interval				10.53		11.31		12.41		# of strides	11.10	10.53	11.31	12.41	21.63	23.72	2.09

velocity	9.01	9.50	8.84	8.06	8.82	9.01	9.50	8.84	8.06	9.25	8.43
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Walsh, Julian Jrummi (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2016 Japanese National Championships (Nagoya, JPN)											<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>									
date	25-Jun-16	time	6.01	10.97	16.07	21.44	27.02	32.84	38.92	45.35	45.35	5 / 1								
reaction time	0.170	interval		4.96	5.10	5.37	5.58	5.82	6.08	6.43	PB	# of strides	10.97	10.47	11.40	12.51	21.44	23.91	2.47	
		velocity	8.32	10.08	9.80	9.31	8.96	8.59	8.22	7.78	8.82		9.12	9.55	8.77	7.99	9.33	8.36		
Bonevacia, Liemarvin (NED) (1989)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2021 Weltklasse (Zürich, SUI)											<i>Omega Timing (2021) - diamond league race analysis</i>									
date	09-Sep-21	time	6.4	11.3	16.4	21.6	27.1	32.8	38.9	45.35	45.35	3 / 5								
reaction time	0.156	interval		4.90	5.10	5.20	5.50	5.70	6.10	6.45	8.82	# of strides	11.30	10.30	11.20	12.55	21.60	23.75	2.15	
		velocity	7.81	10.20	9.80	9.62	9.09	8.77	8.20	7.75	8.82		8.85	9.71	8.93	7.97	9.26	8.42		
Makwala, Isaac (BOT) (1986)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2022 Prefontaine Classic (Eugene, OR)											<i>Omega Timing (2022) - diamond league race analysis</i>									
date	28-May-22	time	6.33	11.38	16.54	21.77	27.14	32.71	38.71	45.35	45.35	9 / 7								
reaction time	0.198	interval		5.05	5.16	5.23	5.37	5.57	6.00	6.64	8.82	# of strides	11.38	10.39	10.94	12.64	21.77	23.58	1.81	
		velocity	7.90	9.90	9.69	9.56	9.31	8.98	8.33	7.53	8.82		185.7	8.79	9.62	9.14	7.91	9.19	8.48	
Deadmon, Bryce (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2022 Prefontaine Classic (Eugene, OR)											<i>Omega Timing (2022) - diamond league race analysis</i>									
date	28-May-22	time	6.19	11.32	16.44	21.79	27.28	32.91	38.84	45.35	45.35	3 / 8								
reaction time	0.149	interval		5.13	5.12	5.35	5.49	5.63	5.93	6.51	8.82	# of strides	11.32	10.47	11.12	12.44	21.79	23.56	1.77	
		velocity	8.08	9.75	9.77	9.35	9.11	8.88	8.43	7.68	8.82		173.0	8.83	9.55	8.99	8.04	9.18	8.49	
Allison, Champion (USA) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL)											<i>Omega Timing (2022) - diamond league race analysis</i>									
date	06-Aug-22	time	6.13	11.09	16.20	21.45	27.00	32.77	38.81	45.35	45.35	4 / 5								
reaction time	0.150	interval		4.96	5.11	5.25	5.55	5.77	6.04	6.54	8.82	# of strides	11.09	10.36	11.32	12.58	21.45	23.90	2.45	
		velocity	8.16	10.08	9.78	9.52	9.01	8.67	8.28	7.65	8.82		171.0	9.02	9.65	8.83	7.95	9.32	8.37	
Coelho, João (POR) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 6 - 2024 Olympic Games (Paris, FRA)											<i>Paris 2024 Olympic Games - Results Book (2024)</i>									
date	04-Aug-24	time	6.46	11.54	16.69	22.04	27.50	33.12	38.98	45.35	45.35	9 / 4								
reaction time	0.216	interval		5.08	5.15	5.35	5.46	5.62	5.86	6.37	8.82	# of strides	11.54	10.50	11.08	12.23	22.04	23.31	1.27	
		velocity	7.74	9.84	9.71	9.35	9.16	8.90	8.53	7.85	8.82		179.2	8.67	9.52	9.03	8.18	9.07	8.58	
Brown, Chris (BAH) (1978)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2008 IAAF World Athletic Final (Stuttgart, GER)											<i>Graubner (2009) - http://www.fgs.uni-halle.de</i>									
date	13-Sep-08	time		11.08		21.59		32.85		45.36	45.36	3 / 3								
reaction time	0.133	interval				10.51		11.26		12.51	8.82	# of strides	11.08	10.51	11.26	12.51	21.59	23.77	2.18	
		velocity		9.03		9.51		8.88		7.99	8.82		9.03	9.51	8.88	7.99	9.26	8.41		
Verburg, David (USA) (1991)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2012 USA Olympic Trials (Eugene, OR)											<i>Hymans (2020) - history of the US olympic trials - track and field</i>									
date	24-Jun-12	time				21.7		33.1		45.36	45.36	1 / 7								
reaction time	0.230	interval						11.40		12.26	8.82	# of strides		21.70	11.40	12.26	21.70	23.66	1.96	
		velocity				9.22		8.77		8.16	8.82			4.61	8.77	8.16	9.22	8.45		
Bloomfield, Akeem (JAM) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2019 IAAF World Championships (Doha, QAT)											<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>									
date	04-Oct-19	time	6.33	11.15	16.15	21.40	26.84	32.66	38.74	45.36	45.36	2 / 8								
reaction time	0.196	interval		4.82	5.00	5.25	5.44	5.82	6.08	6.62	8.82	# of strides	11.15	10.25	11.26	12.70	21.40	23.96	2.56	
		velocity	7.90	10.37	10.00	9.52	9.19	8.59	8.22	7.55	8.82		164.0	8.97	9.76	8.88	7.87	9.35	8.35	
Coelho, João (POR) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Semi-Final 2 - 2024 European Athletics Championships (Roma, ITA)											<i>European Athletics (2024) - 2024 european athletics championships - results book</i>									
date	09-Jun-24	time		11.18				21.62		32.93	45.36	45.36	6 / 4							
reaction time	0.176	interval						10.44		11.31	12.43	8.82	# of strides	11.18	10.44	11.31	12.43	21.62	23.74	2.12
		velocity		8.94				9.58		8.84	8.05	8.82		180.0	8.94	9.58	8.84	8.05	9.25	8.42
Sombe, David (FRA) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Semi-Final 2 - 2024 European Athletics Championships (Roma, ITA)											<i>European Athletics (2024) - 2024 european athletics championships - results book</i>									
date	09-Jun-24	time		11.40		22.12		33.43		45.36	45.36	4 / 5								
reaction time	0.204	interval				10.72		11.31		11.93	8.82	# of strides	11.40	10.72	11.31	11.93	22.12	23.24	1.12	
		velocity		8.77		9.33		8.84		8.38	8.82		170.2	8.77	9.33	8.84	8.38	9.04	8.61	
Dedewo, Paul (USA) (1991)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Semi-Final 1 - 2024 USA Olympic Trials (Eugene, OR)											<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>									
date	23-Jun-24	time		11.19		21.33		32.69		45.36	45.36	2 / 7								
reaction time		interval				10.14		11.36		12.67	8.82	# of strides	11.19	10.14	11.36	12.67	21.33	24.03	2.70	
		velocity		8.94		9.86		8.80		7.89	8.82		8.94	9.86	8.80	7.89	9.38	8.32		
Borlée, Dylan (BEL) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 3 - 2024 Olympic Games (Paris, FRA)											<i>Paris 2024 Olympic Games - Results Book (2024)</i>									
date	04-Aug-24	time	6.22	11.23	16.30	21.56	27.07	32.86	38.90	45.36	45.36	7 / 5								
reaction time	0.158	interval		5.01	5.07	5.26	5.51	5.79	6.04	6.46	8.82	# of strides	11.23	10.33	11.30	12.50	21.56	23.80	2.24	
		velocity	8.04	9.98	9.86	9.51	9.07	8.64	8.28	7.74	8.82		173.0	8.90	9.68	8.85	8.00	9.28	8.40	
Larregina, Elián (ARG) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Repechage 1 - 2024 Olympic Games (Paris, FRA)											<i>Paris 2024 Olympic Games - Results Book (2024)</i>									
date	05-Aug-24	time	6.33	11.51	16.67	22.02	27.58	33.24	39.10	45.36	45.36	4 / 1								
reaction time	0.143	interval		5.18	5.16	5.35	5.56	5.66	5.86	6.26	8.82	# of strides	11.51	10.51	11.22	12.12	22.02	23.34	1.32	
		velocity	7.90	9.65	9.69	9.35	8.99	8.83	8.53	7.99	8.82		168.0	8.69	9.51	8.91	8.25	9.08	8.57	
Skamrahl, Erwin (FRG) (1958)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			

FINAL - 1983 IAAF World Championships (Helsinki, FIN)										<i>Butler (2013) - IAAF world championships statistics handbook- moscow 2013</i>										
date	10-Aug-83	time							21.4	45.37	45.37	7 / 4								
reaction time		interval								23.97		# of strides		21.40	23.97	2.57				
		velocity							9.35	8.34	8.82			9.35	8.34					
Taylor, Angelo (USA) (1978)																				
FINAL - 2008 IAAF World Athletic Final (Stuttgart, GER)										<i>Graubner (2009) - http://www.fgs.uni-halle.de</i>										
date	13-Sep-08	time	11.15	21.73	33.22	45.37	45.37	6 / 4												
reaction time	0.161	interval		10.58	11.49	12.15		# of strides		11.15	10.58	11.49	12.15	21.73	23.64	1.91				
		velocity	8.97	9.45	8.70	8.23	8.82			8.97	9.45	8.70	8.23	9.20	8.46					
Steffensen, John (AUS) (1982)																				
Heat 4 - 2009 IAAF World Championships (Berlin, GER)										<i>Graubner (2009) - biomechanical analyses at the 12th IAAF world championships</i>										
date	18-Aug-09	time	11.18	21.51	32.78	45.37	45.37	3 / 2												
reaction time	0.150	interval		10.33	11.27	12.59		# of strides		11.18	10.33	11.27	12.59	21.51	23.86	2.35				
		velocity	8.94	9.68	8.87	7.94	8.82			8.94	9.68	8.87	7.94	9.30	8.38					
Omelko, Rafał (POL) (1989)																				
Semi-Final 1 - 2017 IAAF World Championships (London, GBR)										<i>Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Men's 400m</i>										
date	06-Aug-17	time	11.05	21.45	32.61	38.57	45.17	45.37	2 / 7											
reaction time	0.201	interval		10.40	11.16	5.96	6.60		# of strides	11.05	10.40	11.16	12.56	21.45	23.72	2.27				
		velocity	9.05	9.62	8.96	8.39	7.58	8.82		9.05	9.62	8.96	7.96	9.32	8.43					
Norman, Michael (USA) (1997)																				
Heat 2 - 2022 World Athletics Championships (Eugene, OR)										<i>Timing by Seiko (2022) - world athletics championships race analysis</i>										
date	17-Jul-22	time	11.25	22.05	33.23	45.37	45.37	3 / 1												
reaction time	0.140	interval		10.80	11.18	12.14		# of strides		11.25	10.80	11.18	12.14	22.05	23.32	1.27				
		velocity	8.89	9.26	8.94	8.24	8.82			8.89	9.26	8.94	8.24	9.07	8.58					
Jordier, Thomas (FRA) (1994)																				
Semi-Final 2 - 2022 European Athletics Championships (Munich, GER)										<i>European Athletics (2022) - european athletics championships race analysis</i>										
date	16-Aug-22	time	11.15	21.51	32.88	45.37	45.37	4 / 1												
reaction time	0.174	interval		10.36	11.37	12.49	PB	# of strides		11.15	10.36	11.37	12.49	21.51	23.86	2.35				
		velocity	8.97	9.65	8.80	8.01	8.82			8.97	9.65	8.80	8.01	9.30	8.38					
Pohorilko, Oleksandr (UKR) (2000)																				
Heat 3 - 2023 World Athletics Championships (Budapest, HUN)										<i>Seiko Timing (2023) - world championship race analysis</i>										
date	20-Aug-23	time	11.80	22.21	33.13	45.37	45.37	3 / 5												
reaction time	0.233	interval		10.41	10.92	12.24		# of strides		11.80	10.41	10.92	12.24	22.21	23.16	0.95				
		velocity	8.47	9.61	9.16	8.17	8.82			8.47	9.61	9.16	8.17	9.00	8.64					
Spitz, Lionel (SUI) (2001)																				
Heat 2 - 2024 European Athletics Championships (Roma, ITA)										<i>European Athletics (2024) - 2024 european athletics championships - results book</i>										
date	08-Jun-24	time	11.34	21.75	33.06	45.37	45.37	3 / 1												
reaction time	0.166	interval		10.41	11.31	12.31		# of strides		11.34	10.41	11.31	12.31	21.75	23.62	1.87				
		velocity	8.82	9.61	8.84	8.12	8.82			8.82	9.61	8.84	8.12	9.20	8.47					
Ingvalsen, Håvard Bental (NOR) (2001)																				
Semi-Final 1 - 2024 European Athletics Championships (Roma, ITA)										<i>European Athletics (2024) - 2024 european athletics championships - results book</i>										
date	09-Jun-24	time	11.23	21.49	32.75	45.37	45.37	6 / 4												
reaction time	0.210	interval		10.26	11.26	12.62		# of strides		11.23	10.26	11.26	12.62	21.49	23.88	2.39				
		velocity	8.90	9.75	8.88	7.92	8.82			8.90	9.75	8.88	7.92	9.31	8.38					
Haydock-Wilson, Alex (GBR) (1999)																				
National FINAL - 2024 London Athletics Meet (London, GBR)										<i>Omega Timing (2024) - diamond league race analysis</i>										
date	20-Jul-24	time	6.21	11.14	16.08	21.24	26.74	32.52	38.58	45.37	45.37	4 / 2								
reaction time	0.153	interval		4.93	4.94	5.16	5.50	5.78	6.06	6.79		# of strides		11.14	10.10	11.28	12.85	21.24	24.13	2.89
		velocity	8.05	10.14	10.12	9.69	9.09	8.65	8.25	7.36	8.82			8.98	9.90	8.87	7.78	9.42	8.29	
Nakajima, Yuki Joseph (JPN) (2002)																				
Heat 3 - 2024 Olympic Games (Paris, FRA)										<i>Paris 2024 Olympic Games - Results Book (2024)</i>										
date	04-Aug-24	time	6.32	11.33	16.47	21.81	27.34	33.00	38.94	45.37	45.37	9 / 6								
reaction time	0.194	interval		5.01	5.14	5.34	5.53	5.66	5.94	6.43		# of strides		11.33	10.48	11.19	12.37	21.81	23.56	1.75
		velocity	7.91	9.98	9.73	9.36	9.04	8.83	8.42	7.78	8.82			8.83	9.54	8.94	8.08	9.17	8.49	
Taylor, Christopher (JAM) (1999)																				
FINAL - 2018 IAAF World Junior Championships (Tampere, FIN)										<i>Koyama (2018) - research on athlete performance and technique- 2018 data book</i>										
date	13-Jul-18	time	6.05	10.90	15.81	21.05	26.55	32.41	38.65	45.38	45.38	6 / 2								
reaction time	0.197	interval		4.85	4.91	5.24	5.50	5.86	6.24	6.73		# of strides		10.90	10.15	11.36	12.97	21.05	24.33	3.28
		velocity	8.26	10.31	10.18	9.54	9.09	8.53	8.01	7.43	8.81			9.17	9.85	8.80	7.71	9.50	8.22	
Coelho, João (POR) (1999)																				
Heat 3 - 2023 World Athletics Championships (Budapest, HUN)										<i>Seiko Timing (2023) - world championship race analysis</i>										
date	20-Aug-23	time	11.50	21.83	33.00	45.38	45.38	9 / 6												
reaction time	0.273	interval		10.33	11.17	12.38		# of strides		11.50	10.33	11.17	12.38	21.83	23.55	1.72				
		velocity	8.70	9.68	8.95	8.08	8.81			8.70	9.68	8.95	8.08	9.16	8.49					
Barnes, Zandron (JAM) (2001)																				
Semi-Final 2 - 2023 World Athletics Championships (Budapest, HUN)										<i>Seiko Timing (2023) - world championship race analysis</i>										
date	22-Aug-23	time	11.16	21.48	32.70	45.38	45.38	9 / 6												
reaction time	0.171	interval		10.32	11.22	12.68		# of strides		11.16	10.32	11.22	12.68	21.48	23.90	2.42				
		velocity	8.96	9.69	8.91	7.89	8.81			8.96	9.69	8.91	7.89	9.31	8.37					
Segers, Daniel (BEL) (2001)																				
Invitational - 2024 Memorial van damme (Brussels, BEL)										<i>Omega Timing (2024) - diamond league race analysis</i>										
date	13-Sep-24	time	6.31	11.41	16.55	21.86	27.36	33.05	38.98	45.38	45.38	8 / 1								
reaction time	0.168	interval		5.10	5.14	5.31	5.50	5.69	5.93	6.40	PB	# of strides		11.41	10.45	11.19	12.33	21.86	23.52	1.66

velocity	7.92	9.80	9.73	9.42	9.09	8.79	8.43	7.81	8.81		8.76	9.57	8.94	8.11	9.15	8.50
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		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Takano, Susumu (JPN) (1961)																		
FINAL - 1991 IAAF World Championships (Tokyo, JPN)																		
date	29-Aug-91	time			21.41				45.39	45.39	7 / 7							
reaction time		interval							23.98		# of strides					21.41	23.98	2.57
		velocity			9.34				8.34	8.81						9.34	8.34	
Wisman, Johan (SWE) (1982)																		
FINAL - 2008 Olympic Games (Beijing, CHN)																		
date	21-Aug-08	time			21.4		32.3		45.4	45.39	3 / 8							
reaction time	0.218	interval					10.90		13.10		# of strides		21.40	10.90	13.10	21.40	24.00	2.60
		velocity			9.35		9.17		7.63	8.81			9.35	9.17	7.63	9.35	8.33	
Clemons, Kyle (USA) (1990)																		
FINAL - 2016 USA Olympic Trials (Eugene, OR)																		
date	03-Jul-16	time			21.9		33.0		45.39	45.39	2 / 6							
reaction time	0.206	interval					11.10		12.39		# of strides		21.90	11.10	12.39	21.90	23.49	1.59
		velocity			9.13		9.01		8.07	8.81			4.57	9.01	8.07	9.13	8.51	
London, Wil (USA) (1997)																		
FINAL - 2019 The Match - Europe v USA (Minsk, BLR)																		
date	09-Sep-19	time			21.96		33.20		45.39	45.39	5 / 2							
reaction time	0.204	interval					11.24		12.19		# of strides		11.41	10.55	11.24	12.19	21.96	23.43
		velocity			8.76		9.48		8.90	8.20			8.76	9.48	8.90	8.20	9.11	8.54
Jordier, Thomas (FRA) (1994)																		
Heat 4 - 2022 European Athletics Championships (Munich, GER)																		
date	15-Aug-22	time			11.36		21.57		32.86	45.39	45.39	3 / 1						
reaction time	0.190	interval					10.21		11.29	12.53	PB	# of strides		11.36	10.21	11.29	12.53	21.57
		velocity			8.80		9.79		8.86	7.98	8.81			8.80	9.79	8.86	7.98	9.27
Borlée, Dylan (BEL) (1992)																		
FINAL - 2022 European Athletics Championships (Munich, GER)																		
date	17-Aug-22	time			11.25		21.66		32.98	45.39	45.39	7 / 5						
reaction time	0.157	interval					10.41		11.32	12.41		# of strides		11.25	10.41	11.32	12.41	21.66
		velocity			8.89		9.61		8.83	8.06	8.81			8.89	9.61	8.83	8.06	9.23
Willie, Ryan (USA) (2002)																		
FINAL - 2023 London Athletics Meet (London, GBR)																		
date	23-Jul-23	time			6.19		11.12		16.21	21.42	26.88	32.54	38.59	45.39	45.39	7 / 6		
reaction time	0.160	interval					4.93		5.09	5.21	5.46	5.66	6.05	6.80		# of strides		
		velocity			8.08		10.14		9.82	9.60	9.16	8.83	8.26	7.35	8.81		11.12	10.30
Borlée, Dylan (BEL) (1992)																		
FINAL - 2023 Memorial van Damme (Brussels, BEL)																		
date	08-Sep-23	time			6.14		11.09		16.16	21.35	26.85	32.66	38.81	45.39	45.39	3 / 6		
reaction time	0.160	interval					4.95		5.07	5.19	5.50	5.81	6.15	6.58		# of strides		
		velocity			8.14		10.10		9.86	9.63	9.09	8.61	8.13	7.60	8.81		11.09	10.26
Mitchell, Richard (AUS) (1955)																		
FINAL - 1976 Olympic Games (Montreal, CAN)																		
date	29-Jul-76	time			22.2				33.6	45.4	45.40	6 / 6						
reaction time		interval							11.40	11.80		# of strides		22.20	11.40	11.80	22.20	23.20
		velocity			9.01				8.77	8.47	8.81			9.01	8.77	8.47	9.01	8.62
Plawgo, Marek (POL) (1981)																		
FINAL - 2002 European Championships (Munich, GER)																		
date	08-Aug-02	time			11.30		21.80		32.98	45.40	45.40	4						
reaction time	0.145	interval					10.50		11.18	12.42		# of strides		11.30	10.50	11.18	12.42	21.80
		velocity			8.85		9.52		8.94	8.05	8.81			8.85	9.52	8.94	8.05	9.17
Djhane, Leslie (FRA) (1981)																		
FINAL - 2006 European Championships (Göteborg, SWE)																		
date	09-Aug-06	time			22.6				33.1	45.40	45.40	3						
reaction time		interval					10.50		12.30		# of strides		22.60	10.50	12.30	22.60	22.80	0.20
		velocity			8.85				19.05	8.13	8.81			4.42	9.52	8.13	8.85	8.77
Moncur, Avard (BAH) (1978)																		
FINAL - 2007 IAAF World Championships (Osaka, JPN)																		
date	31-Aug-07	time			6.24		11.06		15.93	21.10	26.59	32.43	38.61	45.40	45.40	2 / 8		
reaction time	0.164	interval					4.82		4.87	5.17	5.49	5.84	6.18	6.79		# of strides		
		velocity			8.01		10.37		10.27	9.67	9.11	8.56	8.09	7.36	8.81		11.06	10.04
Bonevacija, Liemarvin (NED) (1989)																		
FINAL - 2006 European Championships (Göteborg, SWE)																		
date	16-Aug-22	time			11.44		21.79		32.99	45.40	45.40	6 / 1						
reaction time	0.179	interval					10.35		11.20	12.41		# of strides		11.44	10.35	11.20	12.41	21.79
		velocity			8.74		9.66		8.93	8.06	8.81			8.74	9.66	8.93	8.06	9.18
Norwood, Vernon (USA) (1992)																		
Heat 4 - 2024 USA Olympic Trials (Eugene, OR)																		
date	21-Jun-24	time			11.34		22.04		33.38	45.40	45.40	4 / 1						
reaction time		interval					10.70		11.34	12.02		# of strides		11.34	10.70	11.34	12.02	22.04
		velocity			8.82		9.35		8.82	8.32	8.81			8.82	9.35	8.82	8.32	9.07
Pillay, Lythe (RSA) (2003)																		
Repechage 2 - 2024 Olympic Games (Paris, FRA)																		
date		time										# of strides						
		velocity																

date	05-Aug-24	time	6.29	11.33	16.58	22.00	27.51	33.15	39.08	45.40	45.40	5 / 1									
reaction time	0.161	interval		5.04	5.25	5.42	5.51	5.64	5.93	6.32		# of strides	11.33	10.67	11.15	12.25	22.00	23.40			1.40
		velocity	7.95	9.92	9.52	9.23	9.07	8.87	8.43	7.91	8.81		173.7	8.83	9.37	8.97	8.16	9.09	8.55		
Bredau, Jean Paul (GER) (1999)																					
Repechage 4 - 2024 Olympic Games (Paris, FRA)																					
date	05-Aug-24	time	6.25	11.29	16.45	21.84	27.48	33.28	39.21	45.40	45.40	6 / 3									
reaction time	0.163	interval		5.04	5.16	5.39	5.64	5.80	5.93	6.19		# of strides	11.29	10.55	11.44	12.12	21.84	23.56			1.72
		velocity	8.00	9.92	9.69	9.28	8.87	8.62	8.43	8.08	8.81		172.0	8.86	9.48	8.74	8.25	9.16	8.49		
Brenes, Nery (CRC) (1985)																					
Semi-Final 2 - 2015 IAAF World Championships (Beijing, CHN)																					
date	24-Aug-15	time	6.09	10.98	15.97	21.23	26.77	32.39	38.55	45.41	45.41	2 / 8	Yamamoto (2015) - race analysis of 15th World Championships 400m - focusing on men's semis and women's prelims								
reaction time	0.168	interval		4.89	4.99	5.26	5.54	5.62	6.16	6.86		# of strides	10.98	10.25	11.16	13.02	21.23	24.18			2.95
		velocity	8.21	10.22	10.02	9.51	9.03	8.90	8.12	7.29	8.81		9.11	9.76	8.96	7.68	9.42	8.27			
Thebe, Baboloki (BOT) (1997)																					
FINAL - 2018 Weltklasse (Zürich, SUI)																					
date	30-Aug-18	time		11.0		21.3		32.5		45.41	45.41	2 / 5	Omega Timing (2018) - diamond league race analysis								
reaction time	0.149	interval				10.3		11.2		12.9		# of strides	11.00	10.30	11.20	12.91		21.30	24.11		2.81
		velocity		9.09		9.71		8.93		7.75	8.81		9.09	9.71	8.93	7.75		9.39	8.30		
Bonevacija, Liemarvin (NED) (1989)																					
FINAL - 2021 Athletissima (Lausanne, SUI)																					
date	26-Aug-21	time	6.3	11.5	16.7	22.0	27.5	33.1	39.1	45.41	45.41	5 / 3	Omega Timing (2021) - diamond league race analysis								
reaction time	0.142	interval		5.20	5.20	5.30	5.50	5.60	6.00	6.31		# of strides	11.50	10.50	11.10	12.31	22.00	23.41			1.41
		velocity	7.94	9.62	9.62	9.43	9.09	8.93	8.33	7.92	8.81		8.70	9.52	9.01	8.12	9.09	8.54			
Makwala, Isaac (BOT) (1986)																					
FINAL - 2021 Weltklasse (Zürich, SUI)																					
date	09-Sep-21	time	6.2	11.2	16.2	21.4	26.7	32.3	38.4	45.41	45.41	7 / 6	Omega Timing (2021) - diamond league race analysis								
reaction time	0.198	interval		5.00	5.00	5.20	5.30	5.60	6.10	7.01		# of strides	11.20	10.20	10.90	13.11	21.40	24.01			2.61
		velocity	8.06	10.00	10.00	9.62	9.43	8.93	8.20	7.13	8.81		8.93	9.80	9.17	7.63	9.35	8.33			
Borlée, Dylan (BEL) (1992)																					
Semi-Final 1 - 2022 World Athletics Championships (Eugene, OR)																					
date	20-Jul-22	time		11.33		21.82		33.01		45.41	45.41	4 / 5	Timing by Seiko (2022) - world athletics championships race analysis								
reaction time	0.163	interval				10.49		11.19		12.40		# of strides	11.33	10.49	11.19	12.40	21.82	23.59			1.77
		velocity		8.83		9.53		8.94		8.06	8.81		174.0	8.83	9.53	8.94	8.06	9.17	8.48		
Pohorilko, Oleksandr (UKR) (2000)																					
Semi-Final 1 - 2024 European Athletics Championships (Roma, ITA)																					
date	09-Jun-24	time		11.43		21.73		32.83		45.41	45.41	7 / 5	European Athletics (2024) - 2024 european athletics championships - results book								
reaction time	0.207	interval				10.30		11.10		12.58		# of strides	11.43	10.30	11.10	12.58	21.73	23.68			1.95
		velocity		8.75		9.71		9.01		7.95	8.81		175.0	8.75	9.71	9.01	7.95	9.20	8.45		
Faust, Brian (USA) (1999)																					
Semi-Final 2 - 2024 USA Olympic Trials (Eugene, OR)																					
date	23-Jun-24	time		10.81		21.21		32.94		45.41	45.41	9 / 7	USATF and Karmarush (2024) - USA Olympic trials results and race analysis								
reaction time		interval				10.40		11.73		12.47		# of strides	10.81	10.40	11.73	12.47	21.21	24.20			2.99
		velocity		9.25		9.62		8.53		8.02	8.81		9.25	9.62	8.53	8.02	9.43	8.26			
Haydock-Wilson, Alex (GBR) (1999)																					
FINAL - 2024 Weltklasse (Zürich, SUI)																					
date	05-Sep-24	time	6.28	11.29	16.48	21.81	27.39	33.11	39.05	45.41	45.41	3 / 2	Omega Timing (2024) - diamond league race analysis								
reaction time	0.140	interval		5.01	5.19	5.33	5.58	5.72	5.94	6.36		# of strides	11.29	10.52	11.30	12.30	21.81	23.60			1.79
		velocity	7.96	9.98	9.63	9.38	8.96	8.74	8.42	7.86	8.81		8.86	9.51	8.85	8.13	9.17	8.47			
Bezabeh, Tegegne (ETH) (1941)																					
FINAL - 1968 Olympic Games (Mexico City, MEX) (Altitude)																					
date	18-Oct-68	time				21.9		33.1		45.4	45.42	4 / 6	Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016								
reaction time		interval						11.20		12.30		# of strides		21.90	11.20	12.30	21.90	23.50			1.60
		velocity				9.13		8.93		8.13	8.81			9.13	8.93	8.13	9.13	8.51			
Badenski, Andrzej (POL) (1943)																					
FINAL - 1968 Olympic Games (Mexico City, MEX) (Altitude)																					
date	18-Oct-68	time				21.7		33.2		45.4	45.42	7 / 7	Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016								
reaction time		interval						11.50		12.20	PB	# of strides		21.70	11.50	12.20	21.70	23.70			2.00
		velocity				9.22		8.70		8.20	8.81			9.22	8.70	8.20	9.22	8.44			
Pettigrew, Antonio (USA) (1967)																					
FINAL - 2000 Olympic Games (Sydney, AUS)																					
date	25-Sep-00	time		11.7		22.1		33.0		45.4	45.42	3 / 7	Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016								
reaction time		interval				10.40		10.90		12.40	DV	# of strides	11.70	10.40	10.90	12.40	22.10	23.30			1.20
		velocity		8.55		9.62		9.17		8.06	8.81		8.55	9.62	9.17	8.06	9.05	8.58			
Henry, Tabarie (ISV) (1987)																					
FINAL - 2009 IAAF World Championships (Berlin, GER)																					
date	21-Aug-09	time		11.18		21.83		33.17		45.42	45.42	7 / 4	Graubner (2009) - biomechanical analyses at the 12th IAAF world championships								
reaction time	0.162	interval				10.65		11.34		12.25		# of strides	11.18	10.65	11.34	12.25	21.83	23.59			1.76
		velocity		8.94		9.39		8.82		8.16	8.81		8.94	9.39	8.82	8.16	9.16	8.48			
Matthews, Peter (JAM) (1989)																					
Semi-Final 1 - 2015 IAAF World Championships (Beijing, CHN)																					
date	24-Aug-15	time	6.04	10.85	15.82	21.04	26.61	32.44	38.67	45.42	45.42	3 / 8	Yamamoto (2015) - race analysis of 15th World Championships 400m - focusing on men's semis and women's prelims								
reaction time	0.178	interval		4.81	4.97	5.22	5.57	5.83	6.23	6.75		# of strides	10.85	10.19	11.40	12.98	21.04	24.38			3.34
		velocity	8.28	10.40	10.06	9.58	8.98	8.58	8.03	7.41	8.81		9.22	9.81	8.77	7.70	9.51	8.20			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Gregan, Brian (IRL) (1989)																			
Semi-Final 2 - 2017 IAAF World Championships (London, GBR)																			
date	06-Aug-17	time	11.31		21.37		33.08	39.01	45.23	45.42	8 / 6								
reaction time	0.188	interval			10.06		11.71	5.93	6.22		# of strides	11.31	10.06	11.71	12.15	21.37	23.86	2.49	
		velocity	8.84		9.94		8.54	8.43	8.04	8.81	166	8.84	9.94	8.54	8.23	9.36	8.38		
Makwala, Isaac (BOT) (1986)																			
FINAL - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL)																			
date	06-Aug-22	time	6.23	11.24	16.39	21.70	27.19	32.82	38.80	45.42	45.42	9 / 6							
reaction time	0.207	interval		5.01	5.15	5.31	5.49	5.63	5.98	6.62		# of strides	11.24	10.46	11.12	12.60	21.70	23.72	2.02
		velocity	8.03	9.98	9.71	9.42	9.11	8.88	8.36	7.55	8.81	183.0	8.90	9.56	8.99	7.94	9.22	8.43	
Larregina, Elián (ARG) (2000)																			
Heat 2 - 2023 World Athletics Championships (Budapest, HUN)																			
date	20-Aug-23	time	11.15		21.37		32.78		45.42	45.42	8 / 6-5								
reaction time	0.181	interval			10.22		11.41		12.64		# of strides	11.15	10.22	11.41	12.64	21.37	24.05	2.68	
		velocity	8.97		9.78		8.76		7.91	8.81	169.0	8.97	9.78	8.76	7.91	9.36	8.32		
Kent, Nathan (USA) (2003)																			
Heat 3 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time	10.86		21.08		32.75		45.42	45.42	5 / 4								
reaction time		interval			10.22		11.67		12.67	PB	# of strides			11.67	12.67	21.08	24.34	3.26	
		velocity	9.21		9.78		8.57		7.89	8.81	169.0			8.57	7.89	9.49	8.22		
Klein Ikink, Isaya (NED) (2003)																			
FINAL - 2024 Weltklasse (Zürich, SUI)																			
date	05-Sep-24	time	6.23	11.36	16.62	22.08	27.69	33.41	39.28	45.42	45.42	7 / 3							
reaction time	0.172	interval		5.13	5.26	5.46	5.61	5.72	5.87	6.14		# of strides	11.36	10.72	11.33	12.01	22.08	23.34	1.26
		velocity	8.03	9.75	9.51	9.16	8.91	8.74	8.52	8.14	8.81	8.80	9.33	8.83	8.33	9.06	8.57		
Akubusi, Kriss (GBR) (1958)																			
Heat 10 - 1984 Olympic Games (Los Angeles, CA) (TV Analysis)																			
date	05-Aug-84	time			21.95				45.43	45.43	3 / 3								
reaction time		interval							23.48		# of strides					21.95	23.48	1.53	
		velocity			9.11				8.52	8.80						9.11	8.52		
Smith, Calvin (USA) (1987)																			
Semi-Final 1 - 2008 USA Olympic Trials (Eugene, OR)																			
date	30-Jun-08	time	11.44	16.62	22.08	27.56	33.40	39.22	45.43	45.43	7 / 3								
reaction time		interval		5.18	5.46	5.48	5.84	5.82	6.21		# of strides	11.44	10.64	11.32	12.03	22.08	23.35	1.27	
		velocity	8.74	9.65	9.16	9.12	8.56	8.59	8.05	8.80	8.74	9.40	8.83	8.31	9.06	8.57			
Mathieu, Michael (BAH) (1984)																			
Semi-Final 3 - 2015 IAAF World Championships (Beijing, CHN)																			
date	24-Aug-15	time	6.03	10.98	16.07	21.40	26.96	32.58	38.73	45.43	45.43	3 / 7							
reaction time	0.157	interval		4.95	5.09	5.33	5.56	5.62	6.15	6.70		# of strides	10.98	10.42	11.18	12.85	21.40	24.03	2.63
		velocity	8.29	10.10	9.82	9.38	8.99	8.90	8.13	7.46	8.80	182.2	9.11	9.60	8.94	7.78	9.35	8.32	
Jenkins, David (GBR) (1952)																			
FINAL - 1971 European Championships (Helsinki, FIN)																			
date	13-Aug-71	time			21.3		32.4		45.45	45.45	1 / 1								
reaction time		interval					11.1		13.1	CR/NR/PB	# of strides		21.30	11.10	13.05	21.30	24.15	2.85	
		velocity			9.39		9.01		7.66	8.80			4.69	9.01	7.66	9.39	8.28		
Rooney, Martyn (GBR) (1987)																			
Heat 7 - 2009 IAAF World Championships (Berlin, GER)																			
date	18-Aug-09	time	11.48		21.94		33.08		45.45	45.45	1 / 3								
reaction time	0.189	interval			10.46		11.14		12.37		# of strides	11.48	10.46	11.14	12.37	21.94	23.51	1.57	
		velocity	8.71		9.56		8.98		8.08	8.80	8.71	9.56	8.98	8.08	9.12	8.51			
Bartholomew, Rondell (GRN) (1990)																			
FINAL - 2011 IAAF World Championships (Daegu, KOR)																			
date	30-Aug-11	time					32.7		45.45	45.45	2 / 6								
reaction time	0.314	interval					12.8				# of strides				12.75				
		velocity					9.17		7.84	8.80	170.2				7.84				
Norwood, Vernon (USA) (1992)																			
FINAL - 2014 NCAA Championships (Eugene, OR)																			
date	13-Jun-14	time			21.8		33.1		45.5	45.45	3 / 3								
reaction time		interval					11.30		12.40		# of strides			11.30	12.40	21.80	23.70	1.90	
		velocity			9.17		8.85		8.06	8.80				8.85	8.06	9.17	8.44		
Sibanda, Karabo (BOT) (1998)																			
FINAL - 2016 IAAF World Junior Championships (Bydgoszcz, POL)																			
date	22-Jul-16	time	6.08	10.92	15.88	21.08	26.50	32.38	38.60	45.45	45.45	5 / 3							
reaction time	0.149	interval		4.84	4.96	5.20	5.42	5.88	6.22	6.85		# of strides	10.92	10.16	11.30	13.07	21.08	24.37	3.29
		velocity	8.22	10.33	10.08	9.62	9.23	8.50	8.04	7.30	8.80	9.16	9.84	8.85	7.65	9.49	8.21		
Walsh, Julian Jrummi (JPN) (1996)																			
Heat 1 - 2019 Japanese National Championships (Fukuoka, JPN)																			
date	27-Jun-19	time	6.18	11.25	16.45	21.81	27.40	33.15	39.10	45.45	45.45	6 / 1							
reaction time	0.148	interval		5.07	5.20	5.36	5.59	5.75	5.95	6.35		# of strides	11.25	10.56	11.34	12.30	21.81	23.64	1.83
		velocity	8.09	9.86	9.62	9.33	8.94	8.70	8.40	7.87	8.80	8.89	9.47	8.82	8.13	9.17	8.46		
Taylor, Christopher (JAM) (1999)																			
FINAL - 2022 FBK Games (Hengelo, NED)																			

date	06-Jun-22	time	6.0	11.0	15.9	21.5	27.2	33.1	39.0	45.45	45.45	7 / 2							
reaction time	0.155	interval		5.00	4.90	5.60	5.70	5.90	5.90	6.45		# of strides	11.00	10.50	11.60	12.35	21.50	23.95	2.45
		velocity	8.33	10.00	10.20	8.93	8.77	8.47	8.47	7.75	8.80		182.0	9.09	9.52	8.62	8.10	9.30	8.35
Makwala, Isaac (BOT) (1986)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2022 Bislett Games (Oslo, NOR)															Omega Timing (2022) - diamond league race analysis				
date	16-Jun-22	time	6.24	11.33	16.57	21.92	27.32	32.91	38.83	45.45	45.45	7 / 2							
reaction time	0.201	interval		5.09	5.24	5.35	5.40	5.59	5.92	6.62		# of strides	11.33	10.59	10.99	12.54	21.92	23.53	1.61
		velocity	8.01	9.82	9.54	9.35	9.26	8.94	8.45	7.55	8.80		183.0	8.83	9.44	9.10	7.97	9.12	8.50
Cherry, Michael (USA) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL)															Omega Timing (2022) - diamond league race analysis				
date	06-Aug-22	time	6.14	11.11	16.24	21.55	27.09	32.88	38.95	45.45	45.45	7 / 7							
reaction time	0.171	interval		4.97	5.13	5.31	5.54	5.79	6.07	6.50		# of strides	11.11	10.44	11.33	12.57	21.55	23.90	2.35
		velocity	8.14	10.06	9.75	9.42	9.03	8.64	8.24	7.69	8.80		162.2	9.00	9.58	8.83	7.96	9.28	8.37
Haydock-Wilson, Alex (GBR) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 2 - 2022 European Athletics Championships (Munich, GER)															European Athletics (2022) - european athletics championships race analysis				
date	16-Aug-22	time	11.14		21.69		32.83		45.45	45.45	5 / 2								
reaction time	0.176	interval			10.55		11.14		12.62		# of strides	11.14	10.55	11.14	12.62	21.69	23.76	2.07	
		velocity			8.98		9.48		8.98	7.92	8.80		179.0	8.98	9.48	8.98	7.92	9.22	8.42
Sombe, David (FRA) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 3 - 2024 European Athletics Championships (Roma, ITA)															European Athletics (2024) - 2024 european athletics championships - results book				
date	08-Jun-24	time	11.51		22.17		33.54		45.45	45.45	4 / 2								
reaction time	0.221	interval			10.66		11.37		11.91		# of strides	11.51	10.66	11.37	11.91	22.17	23.28	1.11	
		velocity			8.69		9.38		8.80	8.40	8.80		8.69	9.38	8.80	8.40	9.02	8.59	
Molnár, Attila (HUN) (2002)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Repechage 3 - 2024 Olympic Games (Paris, FRA)															Paris 2024 Olympic Games - Results Book (2024)				
date	05-Aug-24	time	6.31	11.25	16.41	21.74	27.21	32.91	38.95	45.45	45.45	3 / 3							
reaction time	0.166	interval		4.94	5.16	5.33	5.47	5.70	6.04	6.50		# of strides	11.25	10.49	11.17	12.54	21.74	23.71	1.97
		velocity	7.92	10.12	9.69	9.38	9.14	8.77	8.28	7.69	8.80		8.89	9.53	8.95	7.97	9.20	8.44	
Egbunike, Innocent (NGR) (1961)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Quarter-Final 3 - 1987 IAAF World Championship (Rome, ITA)															Moravec (1990) - time analysis of the sprints - Rome 1987 Scientific Report (2nd ed)				
date	31-Aug-87	time	11.09		21.23		32.57		45.46	45.46	1 / 1								
reaction time		interval			10.14		11.34		12.89		# of strides	11.09	10.14	11.34	12.89	21.23	24.23	3.00	
		velocity			9.02		9.86		8.82	7.76	8.80		9.02	9.86	8.82	7.76	9.42	8.25	
Richardson, Mark (GBR) (1972)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2000 ISTAF (Berlin, GER)															Graubner (2009) - http://www.fgs.uni-halle.de				
date	01-Sep-00	time	11.24		22.06		33.28		45.46	45.46	1 / 2								
reaction time		interval			10.82		11.22		12.18		# of strides	11.24	10.82	11.22	12.18	22.06	23.40	1.34	
		velocity			8.90		9.24		8.91	8.21	8.80		8.90	9.24	8.91	8.21	9.07	8.55	
Kanemaru, Yuzo (JPN) (1987)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2014 Shizuoka International Athletics Meeting (Fukuori, JPN)															Maho (2014) - race analysis of men's 400m run in the 2014 season				
date	03-May-14	time	6.18	11.25	16.35	21.63	27.22	33.08	39.11	45.46	45.46	1 / 1							
reaction time		interval		5.07	5.10	5.28	5.59	5.86	6.03	6.35		# of strides	11.25	10.38	11.45	12.38	21.63	23.83	2.20
		velocity	8.09	9.86	9.80	9.47	8.94	8.53	8.29	7.87	8.80		8.89	9.63	8.73	8.08	9.25	8.39	
Feliz, Lidio Andres (DOM) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2022 Golden Gala Pietro Mennea (Rome, ITA)															Omega Timing (2022) - diamond league race analysis				
date	09-Jun-22	time	6.31	11.32	16.43	21.73	27.34	33.14	39.01	45.46	45.46	8 / 4							
reaction time	0.195	interval		5.01	5.11	5.30	5.61	5.80	5.87	6.45		# of strides	11.32	10.41	11.41	12.32	21.73	23.73	2.00
		velocity	7.92	9.98	9.78	9.43	8.91	8.62	8.52	7.75	8.80		175.7	8.83	9.61	8.76	8.12	9.20	8.43
Jones, Jonathan (BAR) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 1 - 2022 World Athletics Championships (Eugene, OR)															Timing by Seiko (2022) - world athletics championships race analysis				
date	17-Jul-22	time	11.34		21.93		33.02		45.46	45.46	3 / 2								
reaction time	0.169	interval			10.59		11.09		12.44		# of strides	11.34	10.59	11.09	12.44	21.93	23.53	1.60	
		velocity			8.82		9.44		9.02	8.04	8.80		8.82	9.44	9.02	8.04	9.12	8.50	
Spitz, Lionel (SUI) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 1 - 2022 European Athletics Championships (Munich, GER)															European Athletics (2022) - european athletics championships race analysis				
date	15-Aug-22	time	11.15		21.71		32.92		45.46	45.46	8 / 1								
reaction time	0.193	interval			10.56		11.21		12.54		# of strides	11.15	10.56	11.21	12.54	21.71	23.75	2.04	
		velocity			8.97		9.47		8.92	7.97	8.80		8.97	9.47	8.92	7.97	9.21	8.42	
Borlée, Dylan (BEL) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 2 - 2024 European Athletics Championships (Roma, ITA)															European Athletics (2024) - 2024 european athletics championships - results book				
date	09-Jun-24	time	11.23		21.73		33.03		45.46	45.46	7 / 6								
reaction time	0.163	interval			10.50		11.30		12.43		# of strides	11.23	10.50	11.30	12.43	21.73	23.73	2.00	
		velocity			8.90		9.52		8.85	8.05	8.80		8.90	9.52	8.85	8.05	9.20	8.43	
Patterson, Jacory (USA) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 2 - 2024 USA Olympic Trials (Eugene, OR)															USATF and Karmarush (2024) - USA Olympic trials results and race analysis				
date	21-Jun-24	time	11.12		21.49		32.92		45.46	45.46	5 / 6								
reaction time		interval			10.37		11.43		12.54		# of strides	11.12	10.37	11.43	12.54	21.49	23.97	2.48	
		velocity			8.99		9.64		8.75	7.97	8.80		174.0	8.99	9.64	8.75	7.97	9.31	8.34
Ingvalsen, Håvard Bentsdal (NOR) (2004)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 1 - 2024 Olympic Games (Paris, FRA)															Paris 2024 Olympic Games - Results Book (2024)				
date	04-Aug-24	time	6.36	11.34	16.38	21.61	27.09	32.80	38.83	45.46	45.46	4 / 3							
reaction time	0.204	interval		4.98	5.04	5.23	5.48	5.71	6.03	6.63		# of strides	11.34	10.27	11.19	12.66	21.61	23.85	2.24
		velocity	7.86	10.04	9.92	9.56	9.12	8.76	8.29	7.54	8.80		182.7	8.82	9.74	8.94	7.90	9.25	8.39

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Petrucciani, Ricky (SUI) (2000)																			
FINAL - 2024 Weltklasse (Zürich, SUI)																			
date	05-Sep-24	time	6.13	11.28	16.57	21.95	27.51	33.22	39.14	45.46	45.46								
reaction time	0.142	interval		5.15	5.29	5.38	5.56	5.71	5.92	6.32		# of strides	11.28	10.67	11.27	12.24	21.95	23.51	1.56
		velocity	8.16	9.71	9.45	9.29	8.99	8.76	8.45	7.91	8.80		8.87	9.37	8.87	8.17	9.11	8.51	
Garner, Mark (AUS) (1969)																			
FINAL - 1991 IAAF World Championships (Tokyo, JPN)																			
date	29-Aug-91	time				21.39				45.47	45.47								
reaction time		interval								24.08		# of strides					21.39	24.08	2.69
		velocity				9.35				8.31	8.80		186.7				9.35	8.31	
Kanemaru, Yuzo (JPN) (1987)																			
FINAL - 2005 Seiko Super Grand Prix (Yokohama, JPN)																			
date	19-Sep-05	time	11.33			22.02		33.23	39.12	45.47	45.47								
reaction time		interval				10.69		11.21	5.89	6.35	PB	# of strides	11.33	10.69	11.21	12.24	22.02	23.45	1.43
		velocity	8.83			9.35		8.92	8.49	7.87	8.80		8.83	9.35	8.92	8.17	9.08	8.53	
Brown, Chris (BAH) (1978)																			
FINAL - 2009 IAAF World Championships (Berlin, GER)																			
date	21-Aug-09	time	10.98			21.31		32.53		45.47	45.47								
reaction time	0.161	interval				10.33		11.22		12.94		# of strides	10.98	10.33	11.22	12.94	21.31	24.16	2.85
		velocity	9.11			9.68		8.91		7.73	8.80		9.11	9.68	8.91	7.73	9.39	8.28	
Taylor, Christopher (JAM) (1999)																			
FINAL - 2022 Golden Gala Pietro Mennea (Rome, ITA)																			
date	09-Jun-22	time	6.03	11.01	16.22	21.59	27.14	32.93	38.95	45.47	45.47								
reaction time	0.148	interval		4.98	5.21	5.37	5.55	5.79	6.02	6.52		# of strides	11.01	10.58	11.34	12.54	21.59	23.88	2.29
		velocity	8.29	10.04	9.60	9.31	9.01	8.64	8.31	7.67	8.80		9.08	9.45	8.82	7.97	9.26	8.38	
Sato, Kentaro (JPN) (1994)																			
FINAL - 2023 Japanese National Championships (Osaka, JPN)																			
date	04-Jun-23	time	6.16	11.16	16.28	21.55	26.97	32.80	38.95	45.47	45.47								
reaction time	0.232	interval		5.00	5.12	5.27	5.42	5.83	6.15	6.52		# of strides	11.16	10.39	11.25	12.67	21.55	23.92	2.37
		velocity	8.12	10.00	9.77	9.49	9.23	8.58	8.13	7.67	8.80		8.96	9.62	8.89	7.89	9.28	8.36	
Boers, Isayah (NED) (1999)																			
B Race - 2023 Memorial van Damme (Brussels, BEL)																			
date	08-Sep-23	time	6.10	10.98	16.08	21.49	27.15	32.97	39.03	45.47	45.47								
reaction time	0.167	interval		4.88	5.10	5.41	5.66	5.82	6.06	6.44		# of strides	10.98	10.51	11.48	12.50	21.49	23.98	2.49
		velocity	8.20	10.25	9.80	9.24	8.83	8.59	8.25	7.76	8.80		9.11	9.51	8.71	8.00	9.31	8.34	
Petrucciani, Ricky (SUI) (2000)																			
Semi-Final 1 - 2024 European Athletics Championships (Roma, ITA)																			
date	09-Jun-24	time				11.10		21.63		32.94	45.47	45.47							
reaction time	0.158	interval				10.53		11.31		12.53		# of strides	11.10	10.53	11.31	12.53	21.63	23.84	2.21
		velocity				9.01		8.84		7.98	8.80		9.01	9.50	8.84	7.98	9.25	8.39	
Davis, Howard (JAM) (1967)																			
Semi-Final 2 - 1988 Olympic Games (Seoul, KOR)																			
date	26-Sep-88	time	11.34			22.00		33.28		45.48	45.48								
reaction time	0.177	interval				10.66		11.28		12.20		# of strides	11.34	10.66	11.28	12.20	22.00	23.48	1.48
		velocity	8.82			9.38		8.87		8.20	8.80		8.82	9.38	8.87	8.20	9.09	8.52	
Maćkowiak, Robert (POL) (1970)																			
FINAL - 2001 European Cup (Bremen, GER)																			
date	23-Jun-01	time	11.29			21.94		33.18		45.48	45.48								
reaction time		interval				10.65		11.24		12.30		# of strides	11.29	10.65	11.24	12.30	21.94	23.54	1.60
		velocity	8.86			9.39		8.90		8.13	8.80		8.86	9.39	8.90	8.13	9.12	8.50	
Francique, Alleyne (GRN) (1976)																			
FINAL - 2003 IAAF World Championships (Paris, FRA)																			
date	26-Aug-03	time				21.4		32.6		45.48	45.48								
reaction time	0.270	interval				11.2		12.9		12.9		# of strides			11.20	12.88	21.40	24.08	2.68
		velocity				9.35		8.93		7.76	8.80				8.93	7.76	9.35	8.31	
Gehret, Brady (USA) (1992)																			
FINAL - 2012 USA Olympic Trials (Eugene, OR)																			
date	24-Jun-12	time				21.3		32.4		45.48	45.48								
reaction time	0.219	interval				11.10		13.08		13.08		# of strides		21.30	11.10	13.08	21.30	24.18	2.88
		velocity				9.39		9.01		7.65	8.80			4.69	9.01	7.65	9.39	8.27	
Glass, Najee (USA) (1994)																			
FINAL - 2016 USA Olympic Trials (Eugene, OR)																			
date	03-Jul-16	time				21.9		32.8		45.48	45.48								
reaction time	0.190	interval				10.90		12.68		12.68		# of strides		21.90	10.90	12.68	21.90	23.58	1.68
		velocity				9.13		9.17		7.89	8.80			4.57	9.17	7.89	9.13	8.48	
Kitagawa, Takamasa (JPN) (1996)																			
Heat 1 - 2017 Japanese National Championships (Osaka, JPN)																			
date	23-Jun-17	time	11.39			21.69		32.97		45.48	45.48								
reaction time	0.168	interval				10.30		11.28		12.51	PB	# of strides	11.39	10.30	11.28	12.51	21.69	23.79	2.10
		velocity	8.78			9.71		8.87		7.99	8.80		8.78	9.71	8.87	7.99	9.22	8.41	
Cherry, Michael (USA) (1995)																			
FINAL - 2019 Shanghai (Shanghai, CHN)																			

date	18-May-19	time	11.5	21.8	32.8	45.48	45.48	8 / 2											
reaction time	0.197	interval		10.3	11.0	12.7		# of strides	11.50	10.30	11.00	12.68	21.80	23.68	1.88				
		velocity	8.70	9.71	9.09	7.89	8.80	163.0	8.70	9.71	9.09	7.89	9.17	8.45					
Bamidele, Emmanuel (NGR) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 2023 Bauhaus Galan (Stockholm, SWE)</i>																		
	<i>Omega Timing (2023) - diamond league race analysis</i>																		
date	02-Jul-23	time	6.34	11.23	16.24	21.47	27.01	32.84	38.91	45.48	45.48	5 / 2							
reaction time	0.194	interval		4.89	5.01	5.23	5.54	5.83	6.07	6.57		# of strides	11.23	10.24	11.37	12.64	21.47	24.01	2.54
		velocity	7.89	10.22	9.98	9.56	9.03	8.58	8.24	7.61	8.80	8.90	9.77	8.80	7.91	9.32	8.33		
Kukkoaho, Markku (FIN) (1946)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 1972 Olympic Games (Munich, FRG)</i>																		
	<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																		
date	07-Sep-72	time		21.8		33.0		45.5	45.49	4 / 6									
reaction time		interval				11.20		12.50				# of strides	21.80	11.20	12.50	21.80	23.70	1.90	
		velocity		9.17		8.93		8.00	8.79			169.5	9.17	8.93	8.00	9.17	8.44		
Weber, Hartmut (FRG) (1960)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 1983 IAAF World Championships (Helsinki, FIN)</i>																		
	<i>Butler (2013) - IAAF world championships statistics handbook- moscow 2013</i>																		
date	10-Aug-83	time		21.6				45.49	45.49	3 / 5									
reaction time		interval						23.89				# of strides				21.60	23.89	2.29	
		velocity		9.26				8.37	8.79						9.26	8.37			
Reynolds, Harry (Butch) (USA) (1964)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Quarter-Final 3 - 1987 IAAF World Championship (Rome, ITA)</i>																		
	<i>Moravec (1990) - time analysis of the sprints - Rome 1987 Scientific Report (2nd ed)</i>																		
date	31-Aug-87	time	11.58		22.05		33.46		45.49	45.49	/ 3								
reaction time		interval			10.47		11.41		12.03			# of strides	11.58	10.47	11.41	12.03	22.05	23.44	1.39
		velocity	8.64		9.55		8.76		8.31	8.79		8.64	9.55	8.76	8.31	9.07	8.53		
Schultz, Ingo (GER) (1975)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Semi-Final 1 - 2002 European Championships (Munich, GER)</i>																		
	<i>Graubner (2009) - http://www.fgs.uni-halle.de</i>																		
date	07-Aug-02	time	11.30		21.60		32.85		45.59	45.49	/ 2								
reaction time	0.159	interval			10.30		11.25		12.74			# of strides	11.30	10.30	11.25	12.74	21.60	23.99	2.39
		velocity	8.85		9.71		8.89		7.85	8.79		8.85	9.71	8.89	7.85	9.26	8.34		
Collins, Kyle (USA) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 2017 USATF National Championships (Sacramento, CA)</i>																		
	<i>Lee (& Ferrara) (2017) - speedendurance.com/2017/07/13/400m-splits-from-usa-national-championships/</i>																		
date	24-Jun-17	time	11.27		21.49		32.78		45.49	45.49	8 / 8								
reaction time		interval			10.22		11.29		12.71			# of strides	11.27	10.22	11.29	12.71	21.49	24.00	2.51
		velocity	8.87		9.78		8.86		7.87	8.79		8.87	9.78	8.86	7.87	9.31	8.33		
Janežič, Luka (SLO) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 2019 Müller Anniversary Games (London, GBR)</i>																		
	<i>Omega Timing (2019) - diamond league race analysis</i>																		
date	21-Jul-19	time	11.4		21.7		33.2		45.49	45.49	1 / 7								
reaction time	0.145	interval			10.3		11.5		12.3			# of strides	11.40	10.30	11.50	12.29	21.70	23.79	2.09
		velocity	8.77		9.71		8.70		8.14	8.79		8.77	9.71	8.70	8.14	9.22	8.41		
Hudson-Smith, Matthew (GBR) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Heat 6 - 2022 World Athletics Championships (Eugene, OR)</i>																		
	<i>Timing by Seiko (2022) - world athletics championships race analysis</i>																		
date	17-Jul-22	time	11.13		21.47		32.74		45.49	45.49	2 / 1								
reaction time	0.160	interval			10.34		11.27		12.75			# of strides	11.13	10.34	11.27	12.75	21.47	24.02	2.55
		velocity	8.98		9.67		8.87		7.84	8.79		8.98	9.67	8.87	7.84	9.32	8.33		
Nakajima, Yuki Joseph (JPN) (2002)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Heat 3 - 2023 Japanese National Championships (Osaka, JPN)</i>																		
	<i>Yamanaka (2024) - analysis of men's and women's 400m and 300m runs in the 2023 season</i>																		
date	03-Jun-23	time	6.17	11.12	16.20	21.52	27.07	32.94	39.06	45.49	45.49	5 / 1							
reaction time	0.167	interval		4.95	5.08	5.32	5.55	5.87	6.12	6.43		# of strides	11.12	10.40	11.42	12.55	21.52	23.97	2.45
		velocity	8.10	10.10	9.84	9.40	9.01	8.52	8.17	7.78	8.79	172.0	8.99	9.62	8.76	7.97	9.29	8.34	
Re, Davide (ITA) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 2023 Weltklasse (Zürich, SUI)</i>																		
	<i>Omega Timing (2023) - diamond league race analysis</i>																		
date	31-Aug-23	time	6.33	11.49	16.79	22.20	27.72	33.43	39.32	45.49	45.49	3 / 2							
reaction time	0.161	interval		5.16	5.30	5.41	5.52	5.71	5.89	6.17		# of strides	11.49	10.71	11.23	12.06	22.20	23.29	1.09
		velocity	7.90	9.69	9.43	9.24	9.06	8.76	8.49	8.10	8.79	8.70	9.34	8.90	8.29	9.01	8.59		
Norwood, Vernon (USA) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 2024 Seashore Doha Meeting (Doha, QAT)</i>																		
	<i>Omega Timing (2024) - diamond league race analysis</i>																		
date	10-May-24	time	6.15	11.14	16.48	21.97	27.44	33.11	38.97	45.49	45.49	6 / 4							
reaction time	0.182	interval		4.99	5.34	5.49	5.47	5.67	5.86	6.52		# of strides	11.14	10.83	11.14	12.38	21.97	23.52	1.55
		velocity	8.13	10.02	9.36	9.11	9.14	8.82	8.53	7.67	8.79	175.0	8.98	9.23	8.98	8.08	9.10	8.50	
Zambrano, Anthony (COL) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Heat 2 - 2024 Olympic Games (Paris, FRA)</i>																		
	<i>Paris 2024 Olympic Games - Results Book (2024)</i>																		
date	04-Aug-24	time	6.32	11.41	16.59	21.89	27.32	33.03	38.98	45.49	45.49	7 / 7							
reaction time	0.159	interval		5.09	5.18	5.30	5.43	5.71	5.95	6.51		# of strides	11.41	10.48	11.14	12.46	21.89	23.60	1.71
		velocity	7.91	9.82	9.65	9.43	9.21	8.76	8.40	7.68	8.79	175.0	8.76	9.54	8.98	8.03	9.14	8.47	
Schönlebe, Thomas (GDR) (1965)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 1983 IAAF World Championships (Helsinki, FIN)</i>																		
	<i>Butler (2013) - IAAF world championships statistics handbook- moscow 2013</i>																		
date	10-Aug-83	time		22.0				45.50	45.50	6 / 6									
reaction time		interval						23.50				# of strides				22.00	23.50	1.50	
		velocity		9.09				8.51	8.79						9.09	8.51			
Potter, Mitchell (USA) (1980)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Semi-Final 1 - 2003 USATF National Championships (Palo Alto, CA)</i>																		
	<i>USATF Women's Sprint Development (2003)</i>																		
date	20-Jun-03	time		21.57		32.93	38.87	45.50	45.50	5 / 4-2									
reaction time		interval				11.36	5.94	6.63				# of strides		11.36	12.57	21.57	23.93	2.36	
		velocity		9.27		8.80	8.42	7.54	8.79					8.80	7.96	9.27	8.36		

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Tobin, Robert (GBR) (1983)																			
Heat 1 - 2009 IAAF World Championships (Berlin, GER)																			
date	19-Aug-09	time	11.17		21.55		32.82		45.50	45.50	5 / 1								
reaction time	0.179	interval			10.38		11.27		12.68		# of strides	11.17	10.38	11.27	12.68	21.55	23.95	2.40	
		velocity	8.95		9.63		8.87		7.89	8.79		8.95	9.63	8.87	7.89	9.28	8.35		
Steffensen, John (AUS) (1982)																			
Semi-Final 3 - 2009 IAAF World Championships (Berlin, GER)																			
date	19-Aug-09	time	11.29		21.74		32.85		45.50	45.50	5 / 5								
reaction time	0.153	interval			10.45		11.11		12.65		# of strides	11.29	10.45	11.11	12.65	21.74	23.76	2.02	
		velocity	8.86		9.57		9.00		7.91	8.79		8.86	9.57	9.00	7.91	9.20	8.42		
Bonevacia, Liemarvin (NED) (1989)																			
Semi-Final 3 - 2022 World Athletics Championships (Eugene, OR)																			
date	20-Jul-22	time	11.54		21.77		32.86		45.50	45.50	5 / 6								
reaction time	0.159	interval			10.23		11.09		12.64		# of strides	11.54	10.23	11.09	12.64	21.77	23.73	1.96	
		velocity	8.67		9.78		9.02		7.91	8.79	180.2	8.67	9.78	9.02	7.91	9.19	8.43		
Bonevacia, Liemarvin (NED) (1989)																			
FINAL - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL)																			
date	06-Aug-22	time	6.24	11.19	16.24	21.43	26.90	32.70	38.82	45.50	1 / 8								
reaction time	0.151	interval		4.95	5.05	5.19	5.47	5.80	6.12	6.68	# of strides	11.19	10.24	11.27	12.80	21.43	24.07	2.64	
		velocity	8.01	10.10	9.90	9.63	9.14	8.62	8.17	7.49	8.79	8.94	9.77	8.87	7.81	9.33	8.31		
Vedel, Benjamin Lobo (DEN) (1997)																			
Heat 3 - 2022 European Athletics Championships (Munich, GER)																			
date	15-Aug-22	time	11.26		21.64		32.76		45.50	45.50	7 / 1								
reaction time	0.185	interval			10.38		11.12		12.74	-NR PB	# of strides	11.26	10.38	11.12	12.74	21.64	23.86	2.22	
		velocity	8.88		9.63		8.99		7.85	8.79		8.88	9.63	8.99	7.85	9.24	8.38		
Joseph, Michael (LCA) (2002)																			
Semi-Final 1 - 2023 World Athletics Championships (Budapest, HUN)																			
date	22-Aug-23	time	11.17		21.36		33.01		45.50	45.50	2 / 7								
reaction time	0.161	interval			10.19		11.65		12.49		# of strides	11.17	10.19	11.65	12.49	21.36	24.14	2.78	
		velocity	8.95		9.81		8.58		8.01	8.79		8.95	9.81	8.58	8.01	9.36	8.29		
Sacoor, Jonathan (BEL) (1999)																			
Heat 1 - 2024 European Athletics Championships (Roma, ITA)																			
date	08-Jun-24	time	11.44		22.19		33.42		45.50	45.50	8 / 1								
reaction time	0.174	interval			10.75		11.23		12.08		# of strides	11.44	10.75	11.23	12.08	22.19	23.31	1.12	
		velocity	8.74		9.30		8.90		8.28	8.79		8.74	9.30	8.90	8.28	9.01	8.58		
Jones, William (USA) (2003)																			
Heat 3 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time	11.16		21.47		32.90		45.50	45.50	4 / 5								
reaction time		interval			10.31		11.43		12.60		# of strides			11.43	12.60	21.47	24.03	2.56	
		velocity	8.96		9.70		8.75		7.94	8.79	166.5			8.75	7.94	9.32	8.32		
Bennett, Todd (GBR) (1983)																			
Heat 3 - 1984 Olympic Games (Los Angeles, CA) (TV Analysis)																			
date	05-Aug-84	time			21.70				45.51	45.51	6 / 5								
reaction time		interval							23.81	PB	# of strides					21.70	23.81	2.11	
		velocity			9.22				8.40	8.79						9.22	8.40		
Reynolds, Harry (Butch) (USA) (1964)																			
Heat 1 - 1987 IAAF World Championship (Rome, ITA)																			
date	30-Aug-87	time	11.56		22.50		33.80		45.51	45.51	2 / 1								
reaction time		interval			10.94		11.30		11.71		# of strides	11.56	10.94	11.30	11.71	22.50	23.01	0.51	
		velocity	8.65		9.14		8.85		8.54	8.79		8.65	9.14	8.85	8.54	8.89	8.69		
Steele, Adam (USA) (1980)																			
FINAL - 2003 USATF National Championships (Palo Alto, CA)																			
date	21-Jun-03	time			22.32		33.45	39.21	45.51	45.51	9 / 4								
reaction time		interval					11.13	5.76	6.30		# of strides			11.13	12.06	22.32	23.19	0.87	
		velocity			8.96		8.98	8.68	7.94	8.79				8.98	8.29	8.96	8.62		
Warholm, Karsten (NOR) (1996)																			
FINAL - 2021 Athletissima (Lausanne, SUJ)																			
date	26-Aug-21	time	6.1	11.1	16.2	21.5	27.1	32.9	39.0	45.51	7 / 4								
reaction time	0.136	interval		5.00	5.10	5.30	5.60	5.80	6.10	6.51	# of strides	11.10	10.40	11.40	12.61	21.50	24.01	2.51	
		velocity	8.20	10.00	9.80	9.43	8.93	8.62	8.20	7.68	170.2	9.01	9.62	8.77	7.93	9.30	8.33		
Deadmon, Bryce (USA) (1997)																			
FINAL - 2022 Müller Birmingham Diamond League (Birmingham, GBR)																			
date	21-May-22	time	6.18	11.29	16.50	21.89	27.51	33.26	39.16	45.51	4 / 2								
reaction time	0.151	interval		5.11	5.21	5.39	5.62	5.75	5.90	6.35	# of strides	11.29	10.60	11.37	12.25	21.89	23.62	1.73	
		velocity	8.09	9.78	9.60	9.28	8.90	8.70	8.47	7.87	173.0	8.86	9.43	8.80	8.16	9.14	8.47		
Bonevacia, Liemarvin (NED) (1989)																			
FINAL - 2023 London Athletics Meet (London, GBR)																			
date	23-Jul-23	time	6.25	11.24	16.42	21.76	27.36	33.09	39.03	45.51	8 / 7								
reaction time	0.159	interval		4.99	5.18	5.34	5.60	5.73	5.94	6.48	# of strides	11.24	10.52	11.33	12.42	21.76	23.75	1.99	
		velocity	8.00	10.02	9.65	9.36	8.93	8.73	8.42	7.72	182.0	8.90	9.51	8.83	8.05	9.19	8.42		
Vanderbenden, Robin (BEL) (1994)																			
B Race - 2023 Memorial van Damme (Brussels, BEL)																			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Zalewski, Karol (POL) (1993)																			
Semi-Final 2 - 2022 European Athletics Championships (Munich, GER)																			
date	21-May-23	time	6.04	11.06	16.27	21.63	27.21	33.06	39.13	45.52	45.52	3 / 3							
reaction time	0.209	interval			10.27	11.39	12.94				# of strides	10.92	10.27	11.39	12.94	21.19	24.33	3.14	
		velocity	9.16	9.74	8.78	7.73	8.79				170.7	9.16	9.74	8.78	7.73	9.44	8.22		
Sato, Fuga (JPN) (1996)																			
FINAL - 2023 Seiko Golden Grand Prix (Yokohama, JPN)																			
date	21-May-23	time	6.04	11.06	16.27	21.63	27.21	33.06	39.13	45.52	45.52	4 / 3							
reaction time	0.151	interval		5.02	5.21	5.36	5.58	5.85	6.07	6.39		# of strides	11.06	10.57	11.43	12.46	21.63	23.89	2.26
		velocity	8.28	9.96	9.60	9.33	8.96	8.55	8.24	7.82	8.79	175.0	9.04	9.46	8.75	8.03	9.25	8.37	
Ferlan, Rok (SLO) (1997)																			
Heat 3 - 2024 European Athletics Championships (Roma, ITA)																			
date	08-Jun-24	time			21.74	33.24	45.52	45.52	45.52	45.52	6 / 3								
reaction time	0.172	interval			10.55	11.50	12.28	PB			# of strides	11.19	10.55	11.50	12.28	21.74	23.78	2.04	
		velocity		8.94	9.48	8.70	8.14	8.79			8.94	9.48	8.70	8.14	9.20	8.41			
Okezie, Chidi (NGR) (1993)																			
Heat 1 - 2024 Olympic Games (Paris, FRA)																			
date	04-Aug-24	time	6.25	11.20	16.26	21.63	27.23	32.98	39.04	45.52	45.52	7 / 4							
reaction time	0.192	interval		4.95	5.06	5.37	5.60	5.75	6.06	6.48		# of strides	11.20	10.43	11.35	12.54	21.63	23.89	2.26
		velocity	8.00	10.10	9.88	9.31	8.93	8.70	8.25	7.72	8.79	166.0	8.93	9.59	8.81	7.97	9.25	8.37	
Schultz, Ingo (GER) (1975)																			
FINAL - 2001 European Cup (Bremen, GER)																			
date	23-Jun-01	time		11.08	21.41	32.93	45.53	45.53	45.53	45.53	1 / 4								
reaction time		interval			10.33	11.52	12.60				# of strides	11.08	10.33	11.52	12.60	21.41	24.12	2.71	
		velocity		9.03	9.68	8.68	7.94	8.79			9.03	9.68	8.68	7.94	9.34	8.29			
Brown, Chris (BAH) (1983)																			
Heat 3 - 2009 IAAF World Championships (Berlin, GER)																			
date	18-Aug-09	time		11.10	21.78	33.47	45.53	45.53	45.53	45.53	2 / 1								
reaction time	0.158	interval			10.68	11.69	12.06				# of strides	11.10	10.68	11.69	12.06	21.78	23.75	1.97	
		velocity		9.01	9.36	8.55	8.29	8.79			9.01	9.36	8.55	8.29	9.18	8.42			
Gillick, David (IRL) (1983)																			
FINAL - 2009 IAAF World Championships (Berlin, GER)																			
date	21-Aug-09	time		11.24	21.83	33.18	45.53	45.53	45.53	45.53	2 / 6								
reaction time	0.148	interval			10.59	11.35	12.35				# of strides	11.24	10.59	11.35	12.35	21.83	23.70	1.87	
		velocity		8.90	9.44	8.81	8.10	8.79			8.90	9.44	8.81	8.10	9.16	8.44			
Kimura, Kazushi (JPN) (1993)																			
Heat 2 - 2017 Japanese National Championships (Osaka, JPN)																			
date	23-Jun-17	time		11.34	21.89	32.83	45.53	45.53	45.53	45.53	4 / 1								
reaction time	0.181	interval			10.55	10.94	12.70	PB			# of strides	11.34	10.55	10.94	12.70	21.89	23.64	1.75	
		velocity		8.82	9.48	9.14	7.87	8.79			184.0	8.82	9.48	9.14	7.87	9.14	8.46		
Igbokwe, Obi (USA) (1997)																			
FINAL - 2019 Müller Grand Prix (Birmingham, GBR)																			
date	18-Aug-19	time		11.1	21.5	33.0	45.53	45.53	45.53	45.53	1 / 2								
reaction time	0.136	interval			10.4	11.5	12.5				# of strides	11.10	10.40	11.50	12.53	21.50	24.03	2.53	
		velocity		9.01	9.62	8.70	7.98	8.79			177.7	9.01	9.62	8.70	7.98	9.30	8.32		
Norwood, Vernon (USA) (1992)																			
FINAL - 2022 Müller Birmingham Diamond League (Birmingham, GBR)																			
date	21-May-22	time	6.12	11.09	16.29	21.70	27.13	32.76	38.81	45.53	45.53	5 / 4							
reaction time	0.171	interval		4.97	5.20	5.41	5.43	5.63	6.05	6.72		# of strides	11.09	10.61	11.06	12.77	21.70	23.83	2.13
		velocity	8.17	10.06	9.62	9.24	9.21	8.88	8.26	7.44	8.79	177.7	9.02	9.43	9.04	7.83	9.22	8.39	
Spitz, Lionel (SUI) (2001)																			
National FINAL - 2022 Weltklasse (Zürich, SUI)																			
date	08-Sep-22	time	6.21	11.21	16.38	21.64	27.09	32.84	38.92	45.53	45.53	4 / 3							
reaction time	0.145	interval		5.00	5.17	5.26	5.45	5.75	6.08	6.61		# of strides	11.21	10.43	11.20	12.69	21.64	23.89	2.25
		velocity	8.05	10.00	9.67	9.51	9.17	8.70	8.22	7.56	8.79	8.92	9.59	8.93	7.88	9.24	8.37		
Godwin, Elija (USA) (1999)																			
Heat 1 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time		10.71	21.07	32.53	45.53	45.53	45.53	45.53	8 / 5								
reaction time		interval			10.36	11.46	13.00				# of strides	10.71	10.36	11.46	13.00	21.07	24.46	3.39	
		velocity		9.34	9.65	8.73	7.69	8.79			182.0	9.34	9.65	8.73	7.69	9.49	8.18		
Krsek, Matěj (CZE) (2000)																			
Repechage 2 - 2024 Olympic Games (Paris, FRA)																			
date	05-Aug-24	time	6.27	11.34	16.60	21.98	27.49	33.22	39.19	45.53	45.53	7 / 2							
reaction time	0.145	interval		5.07	5.26	5.38	5.51	5.73	5.97	6.34	PB	# of strides	11.34	10.64	11.24	12.31	21.98	23.55	1.57
		velocity	7.97	9.86	9.51	9.29	9.07	8.73	8.38	7.89	8.79	179.7	8.82	9.40	8.90	8.12	9.10	8.49	
Jones, Louis (USA) (1932)																			
FINAL - 1955 Pan American Games (Mexico City, MEX) (Altitude)																			
date	18-Mar-55	time			21.1			45.4	45.4	45.4	5 / 1								
reaction time		interval						24.3	WR		# of strides					21.10	24.30	3.20	
		velocity			9.48			8.23	8.81						9.48	8.23			
Davis, Glenn (USA) (1934)																			
FINAL - 1958 NCAA Championships (Berkeley, CA) (yards)																			

date	14-Jun-58	time	21.9	45.4	45.4	/ 1													
reaction time		interval		23.5	WR yards	# of strides					21.90	23.50	1.60						
		velocity	9.13	8.51	8.81	(45.7/440y)					9.13	8.51							
Kaufmann, Carl (FRG) (1936)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1960 ???? (Berlin, FRG)																			
date	24-Jul-60	time	21.9	45.4	45.4	/ 1													
reaction time		interval		23.5	AR	# of strides					21.90	45.40	21.90	23.50	1.60				
		velocity	9.13	8.51	8.81						4.57	2.20	9.13	8.51					
Newhouse, Fred (USA) (1948)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1971 USA National Championships (Eugene, OR) (yards)																			
date	26-Jun-71	time	22.0	45.4	45.4	/ 3													
reaction time		interval		23.4	(45.7/440y)	# of strides									22.00	23.40	1.40		
		velocity	9.09	8.55	8.81										9.09	8.55			
Newhouse, Fred (USA) (1948)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1972 USA Olympic Trials (Eugene, OR)																			
date	09-Jul-72	time	20.6	45.4	45.4	7 / 7													
reaction time		interval		24.8	(45.7/440y)	# of strides									20.60	24.80	4.20		
		velocity	9.71	8.06	8.81										9.71	8.06			
Djhane, Leslie (FRA) (1981)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2007 European Cup (Munich, GER)																			
date	23-Jun-07	time	11.70	22.13	33.27	45.54	45.54	/ 1											
reaction time	0.242	interval		10.43	11.14	12.27	8.15	8.78	# of strides		11.70	10.43	11.14	12.27	22.13	23.41	1.28		
		velocity	8.55	9.59	8.98	8.15	8.78				8.55	9.59	8.98	8.15	9.04	8.54			
Bolt, Usain (JAM) (1986)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 4 - 2009 University of West Indies Invitational (Kingston, JAM)																			
date	21-Feb-09	time	10.9	21.6	33.0	45.54	45.54	/ 1											
reaction time		interval		10.7	11.4	12.54	7.97	8.78	# of strides		10.90	10.70	11.40	12.54	21.60	23.94	2.34		
		velocity	9.17	9.35	8.77	8.15	8.78				9.17	9.35	8.77	7.97	9.26	8.35			
Gillick, David (IRL) (1983)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 1 - 2009 IAAF World Championships (Berlin, GER)																			
date	18-Aug-09	time	11.25	21.67	33.00	45.54	45.54	7 / 2											
reaction time	0.169	interval		10.42	11.33	12.54	7.97	8.78	# of strides		11.25	10.42	11.33	12.54	21.67	23.87	2.20		
		velocity	8.89	9.60	8.83	8.15	8.78				8.89	9.60	8.83	7.97	9.23	8.38			
Bingham, Michael (GBR) (1986)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 3 - 2009 IAAF World Championships (Berlin, GER)																			
date	18-Aug-09	time	11.11	21.90	33.34	45.54	45.54	5 / 2											
reaction time	0.149	interval		10.79	11.44	12.20	8.20	8.78	# of strides		11.11	10.79	11.44	12.20	21.90	23.64	1.74		
		velocity	9.00	9.27	8.74	8.20	8.78				9.00	9.27	8.74	8.20	9.13	8.46			
Wariner, Jeremy (USA) (1984)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 6 - 2009 IAAF World Championships (Berlin, GER)																			
date	18-Aug-09	time	11.04	21.30	32.81	45.54	45.54	4 / 1											
reaction time	0.178	interval		10.26	11.51	12.73	7.86	8.78	# of strides		11.04	10.26	11.51	12.73	21.30	24.24	2.94		
		velocity	9.06	9.75	8.69	8.15	8.78				9.06	9.75	8.69	7.86	9.39	8.25			
Strother, Nathan (USA) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2019 Herculis Meeting International d'Athlétisme (Monaco, MON)																			
date	12-Jul-19	time	11.3	21.9	33.2	45.54	45.54	2 / 3											
reaction time	0.179	interval		10.6	11.3	12.3	8.10	8.78	# of strides		11.30	10.60	11.30	12.34	21.90	23.64	1.74		
		velocity	8.85	9.43	8.85	8.10	8.78				8.85	9.43	8.85	8.10	9.13	8.46			
Kerley, Fred (USA) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2018 Müller Grand Prix (Birmingham, GBR)																			
date	18-Aug-18	time	11.3	22.0	33.3	45.54	45.54	6 / 1											
reaction time	0.145	interval		10.7	11.3	12.2	8.17	8.78	# of strides		11.30	10.70	11.30	12.24	22.00	23.54	1.54		
		velocity	8.85	9.35	8.85	8.17	8.78				178.2	8.85	9.35	8.85	8.17	9.09	8.50		
Imaizumi, Kenki (JPN) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2023 Japanese National Championships (Osaka, JPN)																			
date	04-Jun-23	time	6.16	11.18	16.32	21.67	27.21	33.04	39.09	45.54	45.54	5 / 4							
reaction time	0.192	interval		5.02	5.14	5.35	5.54	5.83	6.05	6.45	8.78	177.2	11.18	10.49	11.37	12.50	21.67	23.87	2.20
		velocity	8.12	9.96	9.73	9.35	9.03	8.58	8.26	7.75	8.78		8.94	9.53	8.80	8.00	9.23	8.38	
Solomon, Michael (TRI) (1954)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1980 Olympic Games (Moscow, URS)																			
date	30-Jul-80	time	21.4	45.6	45.55	7 / 6													
reaction time	0.164	interval		11.3	12.90	7.75	8.78												
		velocity	9.35	8.85	7.75	8.78									21.40	24.20	2.80		
McFarlane, Danny (JAM) (1972)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2000 Olympic Games (Sydney, AUS)																			
date	25-Sep-00	time	11.5	22.0	33.0	45.6	45.55	5 / 7											
reaction time		interval		10.50	11.00	12.60	7.94	8.78	# of strides		11.50	10.50	11.00	12.60	22.00	23.60	1.60		
		velocity	8.70	9.52	9.09	7.94	8.78				8.70	9.52	9.09	7.94	9.09	8.47			
Blackwood, Michael (JAM) (1976)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2004 Olympic Games (Athens, GRE)																			
date	23-Aug-04	time	21.6	45.6	45.55	1 / 8													
reaction time	0.218	interval		11.1	12.9	7.75	8.78												
		velocity	9.26	9.01	7.75	8.78									21.60	24.00	2.40		

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Larry, Lionel (USA) (1986)		<i>USATF Women's Sprint Development with HPC (2008)</i>																	
Semi-Final 1 - 2008 USA Olympic Trials (Eugene, OR)																			
date	30-Jun-08	time	11.04	16.25	21.82	27.31	33.23	39.09	45.55	45.55	4 / 4								
reaction time		interval		5.21	5.57	5.49	5.92	5.86	6.46		# of strides	11.04	10.78	11.41	12.32	21.82	23.73	1.91	
		velocity	9.06	9.60	8.98	9.11	8.45	8.53	7.74	8.78		9.06	9.28	8.76	8.12	9.17	8.43		
Butters, LaJerald (USA) (1988)		<i>USATF Women's Sprint Development with HPC (2008)</i>																	
Semi-Final 2 - 2008 USA Olympic Trials (Eugene, OR)																			
date	30-Jun-08	time	11.16	16.19	21.56	27.11	32.98	38.92	45.55	45.55	6 / 5								
reaction time		interval		5.03	5.37	5.55	5.87	5.94	6.63		# of strides	11.16	10.40	11.42	12.57	21.56	23.99	2.43	
		velocity	8.96	9.94	9.31	9.01	8.52	8.42	7.54	8.78		8.96	9.62	8.76	7.96	9.28	8.34		
Yousif, Rabah (SUD) (1986)		<i>Graubner (2009) - biomechanical analyses at the 12th IAAF world championships</i>																	
Heat 1 - 2009 IAAF World Championships (Berlin, GER)																			
date	18-Aug-09	time	11.25		21.66		32.89		45.55	45.55	4 / 3								
reaction time	0.143	interval			10.41		11.23		12.66	PB	# of strides	11.25	10.41	11.23	12.66	21.66	23.89	2.23	
		velocity	8.89		9.61		8.90		7.90	8.78		8.89	9.61	8.90	7.90	9.23	8.37		
Hurtault, Erison (DMA) (1984)		<i>Graubner (2009) - biomechanical analyses at the 12th IAAF world championships</i>																	
Heat 7 - 2009 IAAF World Championships (Berlin, GER)																			
date	18-Aug-09	time	11.09		21.82		33.11		45.55	45.55	6 / 4								
reaction time	0.148	interval			10.73		11.29		12.44		# of strides	11.09	10.73	11.29	12.44	21.82	23.73	1.91	
		velocity	9.02		9.32		8.86		8.04	8.78		9.02	9.32	8.86	8.04	9.17	8.43		
Henry, Tabarie (ISV) (1987)		<i>Butler (2013) - IAAF world athletic results 2008-2011 full results</i>																	
FINAL - 2011 IAAF World Championships (Daegu, KOR)																			
date	30-Aug-11	time					33.1		45.55	45.55	7 / 7								
reaction time	0.167	interval							12.5		# of strides				12.45				
		velocity					9.06		8.03	8.78					8.03				
Ogunode, Femi (QAT) (1991)		<i>Butler (2013) - IAAF world athletic results 2008-2011 full results</i>																	
FINAL - 2011 IAAF World Championships (Daegu, KOR)																			
date	30-Aug-11	time					33.5		45.55	45.55	1 / 8								
reaction time	0.167	interval							12.1		# of strides				12.05				
		velocity					8.96		8.30	8.78					8.30				
Hudson-Smith, Matthew (GBR) (1994)		<i>Omega Timing (2019) - diamond league race analysis</i>																	
FINAL - 2019 Müller Grand Prix (Birmingham, GBR)																			
date	18-Aug-19	time	11.3		21.9		33.1		45.55	45.55	7 / 3								
reaction time	0.165	interval			10.6		11.2		12.5		# of strides	11.30	10.60	11.20	12.45	21.90	23.65	1.75	
		velocity	8.85		9.43		8.93		8.03	8.78		163.7	8.85	9.43	8.93	8.03	9.13	8.46	
Cherry, Michael (USA) (1995)		<i>Omega Timing (2019) - diamond league race analysis</i>																	
FINAL - 2019 Memorial van Damme (Brussels, BEL)																			
date	06-Sep-19	time	6.2	11.0	15.9	21.1	26.6	32.5	38.6	45.55	45.55	8 / 6							
reaction time	0.209	interval		4.8	4.9	5.2	5.5	5.9	6.1	13.1		# of strides	11.00	10.10	11.40	13.05	21.10	24.45	
		velocity	8.06	10.42	10.20	9.62	9.09	8.47	8.20	7.66	8.78		9.09	9.90	8.77	7.66	9.48	8.18	
Walsh, Julian Jrummi (JPN) (1996)		<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>																	
FINAL - 2019 Asian Athletics Championships (Doha, QAT)																			
date	22-Apr-19	time	6.20	11.21	16.37	21.67	27.24	33.09	39.12	45.55	45.55	2 / 5							
reaction time	0.151	interval		5.01	5.16	5.30	5.57	5.85	6.03	6.43		# of strides	11.21	10.46	11.42	12.46	21.67	23.88	
		velocity	8.06	9.98	9.69	9.43	8.98	8.55	8.29	7.78	8.78		8.92	9.56	8.76	8.03	9.23	8.38	
Petrucciani, Ricky (SUI) (2000)		<i>European Athletics (2022) - european athletics championships race analysis</i>																	
Semi-Final 1 - 2022 European Athletics Championships (Munich, GER)																			
date	16-Aug-22	time	11.07		21.49		32.91		45.55	45.55	3 / 2								
reaction time	0.227	interval			10.42		11.42		12.64		# of strides	11.07	10.42	11.42	12.64	21.49	24.06	2.57	
		velocity	9.03		9.60		8.76		7.91	8.78		176.0	9.03	9.60	8.76	7.91	9.31	8.31	
McDonald, Rusheen (JAM) (1992)		<i>Omega Timing (2023) - diamond league race analysis</i>																	
FINAL - 2023 Meeting International Mohammed VI d'athlétisme (Rabat, MAR)																			
date	28-May-23	time	6.28	11.30	16.52	21.96	27.57	33.41	39.29	45.55	45.55	7 / 3							
reaction time	0.203	interval		5.02	5.22	5.44	5.61	5.84	5.88	6.26		# of strides	11.30	10.66	11.45	12.14	21.96	23.59	
		velocity	7.96	9.96	9.58	9.19	8.91	8.56	8.50	7.99	8.78		181.7	8.85	9.38	8.73	8.24	9.11	
Wright, Willington (USA) (2000)		<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>																	
Heat 3 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time	10.76		21.14		32.70		45.55	45.55	3 / 7								
reaction time		interval			10.38		11.56		12.85		# of strides	10.76	10.38	11.56	12.85	21.14	24.41	3.27	
		velocity	9.29		9.63		8.65		7.78	8.78		169.5	9.29	9.63	8.65	7.78	9.46	8.19	
Jenkins, David (GBR) (1952)		<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																	
FINAL - 1980 Olympic Games (Moscow, URS)																			
date	30-Jul-80	time			21.2		32.4		45.6	45.56	8 / 7								
reaction time	0.169	interval					11.2		13.20		# of strides		21.20	11.20	13.20	21.20	24.40	3.20	
		velocity			9.43		8.93		7.58	8.78			9.43	8.93	7.58	9.43	8.20		
Dabrowski, Daniel (POL) (1983)		<i>Behm (2006) - Championnats d'Europe Göteborg 2006... Le 400m avec ou sans obstacles</i>																	
FINAL - 2006 European Championships (Göteborg, SWE)																			
date	09-Aug-06	time			22.4		33.0		45.56	45.56	1 / 4								
reaction time		interval					10.60		12.56		# of strides		22.40	10.60	12.56	22.40	23.16	0.76	
		velocity			8.93		18.87		7.96	8.78			4.46	9.43	7.96	8.93	8.64		
Milburn, Joel (AUS) (1986)		<i>Graubner (2009) - biomechanical analyses at the 12th IAAF world championships</i>																	
Heat 3 - 2009 IAAF World Championships (Berlin, GER)																			

date	18-Aug-09	time	11.31	21.74	33.06	45.56	45.56	8 / 3											
reaction time	0.162	interval		10.43	11.32	12.50		# of strides	11.31	10.43	11.32	12.50	21.74	23.82	2.08				
		velocity	8.84	9.59	8.83	8.00	8.78		8.84	9.59	8.83	8.00	9.20	8.40					
Khouaja, Mohamed Ashour (LBA) (1)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Heat 7 - 2009 IAAF World Championships (Berlin, GER)</i>																		
date	18-Aug-09	time	11.27	21.63	33.02	45.56	45.56	3 / 5											
reaction time	0.207	interval		10.36	11.39	12.54	NR	# of strides	11.27	10.36	11.39	12.54	21.63	23.93	2.30				
		velocity	8.87	9.65	8.78	7.97	8.78		8.87	9.65	8.78	7.97	9.25	8.36					
Bingham, Michael (GBR) (1986)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 2009 IAAF World Championships (Berlin, GER)</i>																		
date	21-Aug-09	time	11.19	21.84	33.02	45.56	45.56	8 / 7											
reaction time	0.172	interval		10.65	11.18	12.54		# of strides	11.19	10.65	11.18	12.54	21.84	23.72	1.88				
		velocity	8.94	9.39	8.94	7.97	8.78		8.94	9.39	8.94	7.97	9.16	8.43					
Allison, Champion (USA) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Heat 4 - 2022 World Athletics Championships (Eugene, OR)</i>																		
date	17-Jul-22	time	11.51	21.91	33.32	45.56	45.56	3 / 1											
reaction time	0.146	interval		10.40	11.41	12.24		# of strides	11.51	10.40	11.41	12.24	21.91	23.65	1.74				
		velocity	8.69	9.62	8.76	8.17	8.78	168.0	8.69	9.62	8.76	8.17	9.13	8.46					
Spitz, Lionel (SUI) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Semi-Final 2 - 2022 European Athletics Championships (Munich, GER)</i>																		
date	16-Aug-22	time	11.08	21.66	33.12	45.56	45.56	7 / 4											
reaction time	0.170	interval		10.58	11.46	12.44		# of strides	11.08	10.58	11.46	12.44	21.66	23.90	2.24				
		velocity	9.03	9.45	8.73	8.04	8.78	177.0	9.03	9.45	8.73	8.04	9.23	8.37					
Makwala, Isaac (BOT) (1986)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 2022 Weltklasse (Zürich, SUI)</i>																		
date	08-Sep-22	time	6.17	11.26	16.52	21.85	27.29	32.87	38.81	45.56	45.56	2 / 6							
reaction time	0.165	interval		5.09	5.26	5.33	5.44	5.58	5.94	6.75		# of strides	11.26	10.59	11.02	12.69	21.85	23.71	1.86
		velocity	8.10	9.82	9.51	9.38	9.19	8.96	8.42	7.41	8.78		8.88	9.44	9.07	7.88	9.15	8.44	
Jenkins, David (GBR) (1952)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 1976 Olympic Games (Montreal, CAN)</i>																		
date	29-Jul-76	time		21.9	32.9	45.6	45.57	5 / 7											
reaction time		interval			11.00	12.70		# of strides			21.90	11.00	12.70	21.90	23.70	1.80			
		velocity		9.13	9.09	7.87	8.78	173.0			9.13	9.09	7.87	9.13	8.44				
Young, Jerome (USA) (1976)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Semi-Final 2 - 1996 USA Olympic Trials (Atlanta, GA)</i>																		
date	17-Jun-96	time	11.60	21.66	33.46	39.29	45.57	45.57	8 / 7										
reaction time		interval		10.06	11.80	5.83	6.28		# of strides	11.60	10.06	11.80	12.11	21.66	23.91	2.25			
		velocity	8.62	9.94	8.47	8.58	7.96	8.78		8.62	9.94	8.47	8.26	9.23	8.36				
Brew, Derrick (USA) (1977)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Semi-Final 2 - 2003 USATF National Championships (Palo Alto, CA)</i>																		
date	20-Jun-03	time	21.67	33.38	39.26	45.57	45.57	4 / 1											
reaction time		interval		11.71	5.88	6.31		# of strides				11.71	12.19	21.67	23.90	2.23			
		velocity	9.23	8.54	8.50	7.92	8.78				8.54	8.20	9.23	8.37					
Smith, Calvin (USA) (1987)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 2008 USA Olympic Trials (Eugene, OR)</i>																		
date	03-Jul-08	time	11.39	16.03	21.93	27.56	33.42	39.47	45.57	45.57	3 / 5								
reaction time		interval		4.64	5.90	5.63	5.86	6.05	6.10		# of strides	11.39	10.54	11.49	12.15	21.93	23.64	1.71	
		velocity	8.78	10.78	8.47	8.88	8.53	8.26	8.20	8.78		8.78	9.49	8.70	8.23	9.12	8.46		
Chambers, Ricardo (JAM) (1984)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Heat 6 - 2009 IAAF World Championships (Berlin, GER)</i>																		
date	18-Aug-09	time	11.22	21.62	32.91	45.57	45.57	5 / 3											
reaction time	0.172	interval		10.40	11.29	12.66		# of strides	11.22	10.40	11.29	12.66	21.62	23.95	2.33				
		velocity	8.91	9.62	8.86	7.90	8.78		8.91	9.62	8.86	7.90	9.25	8.35					
Hudson-Smith, Matthew (GBR) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 2023 Bauhaus Galan (Stockholm, SWE)</i>																		
date	02-Jul-23	time	6.22	11.30	16.47	21.72	27.15	32.90	39.00	45.57	45.57	6 / 3							
reaction time	0.156	interval		5.08	5.17	5.25	5.43	5.75	6.10	6.57	# of strides	11.30	10.42	11.18	12.67	21.72	23.85	2.13	
		velocity	8.04	9.84	9.67	9.52	9.21	8.70	8.20	7.61	8.78		8.85	9.60	8.94	7.89	9.21	8.39	
Doom, Alexander (BEL) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Semi-Final 3 - 2023 World Athletics Championships (Budapest, HUN)</i>																		
date	22-Aug-23	time	11.36	21.56	33.18	45.57	45.57	5 / 4											
reaction time	0.168	interval		10.20	11.62	12.39		# of strides	11.36	10.20	11.62	12.39	21.56	24.01	2.45				
		velocity	8.80	9.80	8.61	8.07	8.78		8.80	9.80	8.61	8.07	9.28	8.33					
Yahia Ibrahim, Ammar Ismail (QAT) (1)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 2024 Seashore Doha Meeting (Doha, QAT)</i>																		
date	10-May-24	time	6.34	11.45	16.73	22.14	27.67	33.46	39.33	45.47	45.57	1 / 5							
reaction time	0.144	interval		5.11	5.28	5.41	5.53	5.79	5.87	6.14	NR	# of strides	11.45	10.69	11.32	12.01	22.14	23.33	1.19
		velocity	7.89	9.78	9.47	9.24	9.04	8.64	8.52	8.14	8.78		8.73	9.35	8.83	8.33	9.03	8.57	
Ndori, Bayapo (BOT) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 2024 Seashore Doha Meeting (Doha, QAT)</i>																		
date	10-May-24	time	6.21	11.26	16.58	22.06	27.58	33.30	39.15	45.57	45.57	7 / 6							
reaction time	0.171	interval		5.05	5.32	5.48	5.52	5.72	5.85	6.42	# of strides	11.26	10.80	11.24	12.27	22.06	23.51	1.45	
		velocity	8.05	9.90	9.40	9.12	9.06	8.74	8.55	7.79	8.78		8.88	9.26	8.90	8.15	9.07	8.51	

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Ingvalsen, Håvard Bentsdal (NOR) (20)																		
FINAL - 2024 Weltklasse (Zürich, SUI)																		
date	05-Sep-24	time	6.33	11.41	16.61	21.94	27.48	33.19	39.15	45.57	45.57							
reaction time	0.176	interval		5.08	5.20	5.33	5.54	5.71	5.96	6.42	# of strides	11.41	10.53	11.25	12.38	21.94	23.63	1.69
		velocity	7.90	9.84	9.62	9.38	9.03	8.76	8.39	7.79	8.78	8.76	9.50	8.89	8.08	9.12	8.46	
Parks, Maxie (USA) (1951)																		
FINAL - 1976 USA Olympic Trials (Eugene, OR)																		
date	25-Jun-76	time			21.6				45.58	45.58	/ 1							
reaction time		interval							24.0		# of strides					21.60	23.98	2.38
		velocity			9.26				8.34	8.78					9.26	8.34		
Kikaya, Gary (COD) (1980)																		
FINAL - 2007 IAAF World Athletic Final (Stuttgart, GER)																		
date	22-Sep-07	time	11.24		21.65		38.77		45.58	45.58	4 / 4							
reaction time	0.155	interval			10.41		17.12		6.81		# of strides	11.24	10.41	17.12	6.81	21.65	23.93	2.28
		velocity	8.90		9.61		5.84		14.68	8.78		8.90	9.61	5.84	14.68	9.24	8.36	
Williamson, Darold (USA) (1983)																		
FINAL - 2008 USA Olympic Trials (Eugene, OR)																		
date	03-Jul-08	time	11.18	16.02	21.94	27.41	33.05	39.21	45.58	45.58	4 / 6							
reaction time		interval		4.84	5.92	5.47	5.64	6.16	6.37		# of strides	11.18	10.76	11.11	12.53	21.94	23.64	1.70
		velocity	8.94	10.33	8.45	9.14	8.87	8.12	7.85	8.78		8.94	9.29	9.00	7.98	9.12	8.46	
Sato, Kentaro (JPN) (1994)																		
Heat 1 - 2015 Japanese National Championships (Niigata, JPN)																		
date	27-Jun-15	time	6.35	11.50	16.59	21.78	27.18	32.89	39.01	45.58	45.58	4 / 3						
reaction time	0.174	interval		5.15	5.09	5.19	5.40	5.71	6.12	6.57	PB	# of strides	11.50	10.28	11.11	12.69	21.78	23.80
		velocity	7.87	9.71	9.82	9.63	9.26	8.76	8.17	7.61	8.78	180.5	8.70	9.73	9.00	7.88	9.18	8.40
Schneider, Patrick (GER) (1992)																		
Heat 4 - 2022 European Athletics Championships (Munich, GER)																		
date	15-Aug-22	time	11.31		21.77		32.91		45.58	45.58	7 / 2							
reaction time	0.141	interval			10.46		11.14		12.67		# of strides	11.31	10.46	11.14	12.67	21.77	23.81	2.04
		velocity	8.84		9.56		8.98		7.89	8.78		8.84	9.56	8.98	7.89	9.19	8.40	
Nene, Zakhiti (RSA) (1998)																		
FINAL - 2023 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR)																		
date	28-May-23	time	6.11	10.99	16.13	21.52	27.06	32.88	38.90	45.58	45.58	8 / 4						
reaction time	0.158	interval		4.88	5.14	5.39	5.54	5.82	6.02	6.68	# of strides	10.99	10.53	11.36	12.70	21.52	24.06	2.54
		velocity	8.18	10.25	9.73	9.28	9.03	8.59	8.31	7.49	8.78	178.2	9.10	9.50	8.80	7.87	9.29	8.31
Pillay, Lythe (RSA) (2003)																		
Heat 5 - 2023 World Athletics Championships (Budapest, HUN)																		
date	20-Aug-23	time	11.20		21.67		33.25		45.58	45.58	7 / 4							
reaction time	0.161	interval			10.47		11.58		12.33		# of strides	11.20	10.47	11.58	12.33	21.67	23.91	2.24
		velocity	8.93		9.55		8.64		8.11	8.78		8.93	9.55	8.64	8.11	9.23	8.36	
Faust, Brian (USA) (1999)																		
Heat 4 - 2024 USA Olympic Trials (Eugene, OR)																		
date	21-Jun-24	time	11.13		21.72		33.30		45.58	45.58	3 / 3							
reaction time		interval			10.59		11.58		12.28		# of strides	11.13	10.59	11.58	12.28	21.72	23.86	2.14
		velocity	8.98		9.44		8.64		8.14	8.78		8.98	9.44	8.64	8.14	9.21	8.38	
Fiasconaro, Marcello (ITA) (1949)																		
FINAL - 1971 European Championships (Helsinki, FIN)																		
date	13-Aug-71	time			22.0				45.5	45.59	/ 2							
reaction time		interval							23.5	NR / PB	# of strides					22.00	23.50	1.50
		velocity			9.09				8.51	8.77					9.09	8.51		
Hurtault, Erison (DMA) (1984)																		
Semi-Final 2 - 2009 IAAF World Championships (Berlin, GER)																		
date	19-Aug-09	time					32.97		45.59	45.59	2 / 5							
reaction time	0.151	interval					12.62		7.92		# of strides					12.62		
		velocity					9.10		7.92	8.77					7.92			
Hudson-Smith, Matthew (GBR) (1994)																		
FINAL - 2018 Müller Grand Prix (Birmingham, GBR)																		
date	18-Aug-18	time	11.3		22.0		33.2		45.59	45.59	5 / 2							
reaction time	0.141	interval			10.7		11.2		12.4		# of strides	11.30	10.70	11.20	12.39	22.00	23.59	1.59
		velocity	8.85		9.35		8.93		8.07	8.77		8.85	9.35	8.93	8.07	9.09	8.48	
Abubaker, Abbas (BRN) (1996)																		
Semi-Final 1 - 2018 Asian Games (Jakarta, INA)																		
date	25-Aug-18	time	6.36	11.41	16.57	22.03	27.63	33.33	39.22	45.59	45.59	3 / 1						
reaction time	0.178	interval		5.05	5.16	5.46	5.60	5.70	5.89	6.37	# of strides	11.41	10.62	11.30	12.26	22.03	23.56	1.53
		velocity	7.86	9.90	9.69	9.16	8.93	8.77	8.49	7.85	8.77	8.76	9.42	8.85	8.16	9.08	8.49	
Montgomery, Kahmari (USA) (1997)																		
FINAL - 2019 Müller Grand Prix (Birmingham, GBR)																		
date	18-Aug-19	time	11.2		21.7		33.1		45.59	45.59	2 / 4							
reaction time	0.213	interval			10.5		11.4		12.5		# of strides	11.20	10.50	11.40	12.49	21.70	23.89	2.19
		velocity	8.93		9.52		8.77		8.01	8.77		8.93	9.52	8.77	8.01	9.22	8.37	
Norwood, Vernon (USA) (1992)																		
FINAL - 2021 Athletissima (Lausanne, SUI)																		

Name (Nationality) (Year)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential				
Ingvalsen, Håvard Bentdal (NOR) (20)																						
Semi-Final 1 - 2024 Olympic Games (Paris, FRA)																						
date	06-Aug-24	time	6.33	11.31	16.44	21.78	27.33	33.17	39.22	45.60	45.60											
reaction time	0.209	interval		4.98	5.13	5.34	5.55	5.84	6.05	6.38		# of strides	11.31	10.47	11.39	12.43	21.78	23.82	2.04			
		velocity	7.90	10.04	9.75	9.36	9.01	8.56	8.26	7.84	8.77		8.84	9.55	8.78	8.05	9.18	8.40				
Pettigrew, Antonio (USA) (1967)																						
FINAL - 2000 ISTAF (Berlin, GER)																						
date	01-Sep-00	time	11.96							22.99	33.82	45.61	45.61		1 / 3							
reaction time		interval								11.03	10.83	11.79	DV		# of strides	11.96	11.03	10.83	11.79	22.99	22.62	-0.37
		velocity	8.36	9.07	9.23	8.48	8.77			8.36	9.07	9.23	8.48	8.70	8.84							
Washington, Tyree (USA) (1976)																						
FINAL - 2005 USATF National Championships (Carson, CA)																						
date	25-Jun-05	time	11.40	16.65	22.11	27.58	33.29	39.34	45.61	45.61	1 / 7											
reaction time		interval		5.25	5.46	5.47	5.71	6.05	6.27		# of strides	11.40	10.71	11.18	12.32	22.11	23.50	1.39				
		velocity	8.77	9.52	9.16	9.14	8.76	8.26	7.97	8.77	8.77	8.77	9.34	8.94	8.12	9.05	8.51					
Brown, Chris (BAH) (1978)																						
FINAL - 2009 ISTAF (Berlin, GER)																						
date	14-Jun-09	time	11.09							21.55	32.93	45.61	45.61		4 / 1							
reaction time	0.277	interval								10.46	11.38	12.68		# of strides	11.09	10.46	11.38	12.68	21.55	24.06	2.51	
		velocity	9.02	9.56	8.79	7.89	8.77			9.02	9.56	8.79	7.89	9.28	8.31							
Borlée, Kevin (BEL) (1988)																						
Heat 2 - 2009 IAAF World Championships (Berlin, GER)																						
date	18-Aug-09	time	11.17							21.70	33.12	45.61	45.61		8 / 3							
reaction time	0.144	interval								10.53	11.42	12.49		# of strides	11.17	10.53	11.42	12.49	21.70	23.91	2.21	
		velocity	8.95	9.50	8.76	8.01	8.77			8.95	9.50	8.76	8.01	9.22	8.36							
Cherry, Michael (USA) (1995)																						
FINAL - 2019 Müller Grand Prix (Birmingham, GBR)																						
date	18-Aug-19	time	11.4							22.3	33.5	45.61	45.61		8 / 5							
reaction time	0.148	interval								10.9	11.2	12.1		# of strides	11.40	10.90	11.20	12.11	22.30	23.31	1.01	
		velocity	8.77	9.17	8.93	8.26	8.77			8.77	164.2	8.77	9.17	8.93	8.26	8.97	8.58					
Sato, Kentaro (JPN) (1994)																						
FINAL - 2021 Ready Steady Tokyo (Tokyo, JPN)																						
date	09-May-21	time	6.04	10.93	15.97	21.33	27.03	32.97	39.11	45.61	45.61											
reaction time	0.176	interval		4.89	5.04	5.36	5.70	5.94	6.14	6.50		# of strides	10.93	10.40	11.64	12.64	21.33	24.28	2.95			
		velocity	8.28	10.22	9.92	9.33	8.77	8.42	8.14	7.69	8.77	178.0	9.15	9.62	8.59	7.91	9.38	8.24				
Allen, Nathon (JAM) (1995)																						
Heat 5 - 2022 World Athletics Championships (Eugene, OR)																						
date	17-Jul-22	time	11.48							22.13	33.45	45.61	45.61		3 / 3							
reaction time	0.142	interval								10.65	11.32	12.16		# of strides	11.48	10.65	11.32	12.16	22.13	23.48	1.35	
		velocity	8.71	9.39	8.83	8.22	8.77			8.71	166.2	8.71	9.39	8.83	8.22	9.04	8.52					
Maybank, Anthuan (USA) (1969)																						
FINAL - 2003 USATF National Championships (Palo Alto, CA)																						
date	21-Jun-03	time	21.67							32.91	39.00	45.62	45.62		3 / 5							
reaction time		interval								11.24	6.09	6.62		# of strides								
		velocity								9.23	8.90	8.21	7.55	8.77		11.24	12.71	21.67	23.95	2.28		
Dabrowski, Daniel (POL) (1983)																						
FINAL - 2005 Seiko Super Grand Prix (Yokohama, JPN)																						
date	19-Sep-05	time	11.45							22.12	33.22	39.21	45.62	45.62		7 / 2						
reaction time		interval								10.67	11.10	5.99	6.41	PB	# of strides	11.45	10.67	11.10	12.40	22.12	23.50	1.38
		velocity	8.73	9.37	9.01	8.35	7.80	8.77		8.73	9.37	9.01	8.06	9.04	8.51							
Dedewo, Paul (USA) (1991)																						
FINAL - 2018 Müller Grand Prix (Birmingham, GBR)																						
date	18-Aug-18	time	11.5							22.1	33.4	45.62	45.62		4 / 3							
reaction time	0.233	interval								10.6	11.3	12.2		# of strides	11.50	10.60	11.30	12.22	22.10	23.52	1.42	
		velocity	8.70	9.43	8.85	8.18	8.77			8.70	179.7	8.70	9.43	8.85	8.18	9.05	8.50					
Haydock-Wilson, Alex (GBR) (1999)																						
Heat 1 - 2022 World Athletics Championships (Eugene, OR)																						
date	17-Jul-22	time	11.45							22.19	33.25	45.62	45.62		7 / 3							
reaction time	0.156	interval								10.74	11.06	12.37		# of strides	11.45	10.74	11.06	12.37	22.19	23.43	1.24	
		velocity	8.73	9.31	9.04	8.08	8.77			8.73	9.31	9.04	8.08	9.01	8.54							
Adoli, Aaron (UGA) (1994)																						
FINAL - 2022 Commonwealth Games (Birmingham, GBR)																						
date	07-Aug-22	time	6.4	11.4	16.5	21.7	27.2	33.0	38.8	45.62	45.62											
reaction time	0.234	interval		5.00	5.10	5.20	5.50	5.80	5.80	6.82	PB	# of strides	11.40	10.30	11.30	12.62	21.70	23.92	2.22			
		velocity	7.81	10.00	9.80	9.62	9.09	8.62	8.62	7.33	8.77	8.77	9.71	8.85	7.92	9.22	8.36					
Zalewski, Karol (POL) (1993)																						
FINAL - 2022 European Athletics Championships (Munich, GER)																						
date	17-Aug-22	time	11.06							21.57	33.07	45.62	45.62		1 / 6							
reaction time	0.178	interval								10.51	11.50	12.55		# of strides	11.06	10.51	11.50	12.55	21.57	24.05	2.48	
		velocity	9.04	9.51	8.70	7.97	8.77			9.04	9.51	8.70	7.97	9.27	8.32							
Ndori, Bayapo (BOT) (1999)																						
FINAL - 2023 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR)																						

date	28-May-23	time	6.06	11.01	16.20	21.60	27.12	32.93	39.03	45.62	45.62	3 / 5								
reaction time	0.164	interval		4.95	5.19	5.40	5.52	5.81	6.10	6.59		# of strides	11.01	10.59	11.33	12.69	21.60	24.02	2.42	
		velocity	8.25	10.10	9.63	9.26	9.06	8.61	8.20	7.59	8.77		177.0	9.08	9.44	8.83	7.88	9.26	8.33	
Sato, Fuga (JPN) (1996)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																				
Heat 1 - 2023 Japanese National Championships (Osaka, JPN)												<i>Yamanaka (2024) - analysis of men's and women's 400m and 300m runs in the 2023 season</i>								
date	03-Jun-23	time	6.13	11.12	16.22	21.53	27.10	32.95	39.06	45.62	45.62	6 / 1								
reaction time	0.180	interval		4.99	5.10	5.31	5.57	5.85	6.11	6.56		# of strides	11.12	10.41	11.42	12.67	21.53	24.09	2.56	
		velocity	8.16	10.02	9.80	9.42	8.98	8.55	8.18	7.62	8.77		175.0	8.99	9.61	8.76	7.89	9.29	8.30	
Borlée, Dylan (BEL) (1992)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																				
Heat 3 - 2024 European Athletics Championships (Roma, ITA)												<i>European Athletics (2024) - 2024 european athletics championships - results book</i>								
date	08-Jun-24	time		11.41		21.88		33.27		45.62	45.62	5 / 4								
reaction time	0.157	interval				10.47		11.39		12.35		# of strides	11.41	10.47	11.39	12.35	21.88	23.74	1.86	
		velocity		8.76		9.55		8.78		8.10	8.77		8.76	9.55	8.78	8.10	9.14	8.42		
Norman, Michael (USA) (1997)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																				
FINAL - 2024 Olympic Games (Paris, FRA)												<i>Paris 2024 Olympc Games - Results Book (2024)</i>								
date	07-Aug-24	time	5.96	10.85	15.85	21.11	26.73	32.59	38.87	45.62	45.62	4 / 8								
reaction time	0.150	interval		4.89	5.00	5.26	5.62	5.86	6.28	6.75		# of strides	10.85	10.26	11.48	13.03	21.11	24.51	3.40	
		velocity	8.39	10.22	10.00	9.51	8.90	8.53	7.96	7.41	8.77		172.0	9.22	9.75	8.71	7.67	9.47	8.16	
Werner, Jan (POL) (1946)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																				
FINAL - 1976 Olympic Games (Montreal, CAN)												<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>								
date	29-Jul-76	time				22.1		33.1		45.7	45.63	1 / 8								
reaction time		interval						11.00		12.60		# of strides		22.10	11.00	12.60	22.10	23.60	1.50	
		velocity				9.05		9.09		7.94	8.77		169.2	9.05	9.09	7.94	9.05	8.47		
Houghton, Gregory (JAM) (1973)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																				
FINAL - 1993 IAAF World Championships (Stuttgart, GER)												<i>Butler (2013) - IAAF world championships statistics handbook- moscow 2013</i>								
date	17-Aug-93	time				21.88				45.63	45.63	2 / 6								
reaction time		interval								23.75		# of strides						21.88	23.75	1.87
		velocity				9.14				8.42	8.77		167.0				9.14	8.42		
Black, Roger (GBR) (1966)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																				
FINAL - 1997 European Cup (Munich, GER)												<i>Jung (2003) - http://www.fgs.uni-halle.de</i>								
date	21-Jun-97	time	11.61			22.41		33.56		45.65	45.63	/ 1								
reaction time		interval				10.80		11.15		12.09		# of strides	11.61	10.80	11.15	12.09	22.41	23.24	0.83	
		velocity	8.61			9.26		8.97		8.27	8.77		8.61	9.26	8.97	8.27	8.92	8.61		
Yousif, Rabah (SUD) (1986)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																				
Semi-Final 2 - 2009 IAAF World Championships (Berlin, GER)												<i>Graubner (2009) - biomechanical analyses at the 12th IAAF world championships</i>								
date	19-Aug-09	time				11.33		21.80		33.07	45.63	7 / 6								
reaction time	0.175	interval				10.47		11.27		12.56		# of strides	11.33	10.47	11.27	12.56	21.80	23.83	2.03	
		velocity				8.83		9.55		8.87	8.77		8.83	9.55	8.87	7.96	9.17	8.39		
Walsh, Julian Jrummi (JPN) (1996)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																				
FINAL - 2018 Seiko Golden Grand Prix (Osaka, JPN)												<i>Yamanaka (2018) - Race analysis of men and women 400m at 2018 competition</i>								
date	20-May-18	time	6.10	11.04	16.10	21.38	26.99	32.90	39.11	45.63	45.63	6 / 1								
reaction time	0.133	interval		4.94	5.06	5.28	5.61	5.91	6.21	6.52		# of strides	11.04	10.34	11.52	12.73	21.38	24.25	2.87	
		velocity	8.20	10.12	9.88	9.47	8.91	8.46	8.05	7.67	8.77		169.5	9.06	9.67	8.68	7.86	9.35	8.25	
Anas, Y. Muhammed (IND) (1994)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																				
Heat 1 - 2018 Asian Games (Jakarta, INA)												<i>Yamanaka (2018) - Race analysis of men and women 400m at 2018 competition</i>								
date	25-Aug-18	time	6.13	11.04	16.16	21.56	27.21	33.06	39.25	45.63	45.63	3 / 1								
reaction time	0.180	interval		4.91	5.12	5.40	5.65	5.85	6.19	6.38		# of strides	11.04	10.52	11.50	12.57	21.56	24.07	2.51	
		velocity	8.16	10.18	9.77	9.26	8.85	8.55	8.08	7.84	8.77		9.06	9.51	8.70	7.96	9.28	8.31		
Hudson-Smith, Matthew (GBR) (1994)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																				
National FINAL - 2019 Memorial van Damme (Brussels, BEL)												<i>Omega Timing (2019) - diamond league race analysis</i>								
date	06-Sep-19	time	6.2	11.2	16.2	21.5	26.9	32.8	38.9	45.63	45.63	6 / 2								
reaction time		interval		5.0	5.0	5.3	5.4	5.9	6.1	12.8		# of strides	11.20	10.30	11.30	12.83	21.50	24.13	2.63	
		velocity	8.06	10.00	10.00	9.43	9.26	8.47	8.20	7.79	8.77		8.93	9.71	8.85	7.79	9.30	8.29		
Litvin, Mikhail (KAZ) (1996)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																				
Semi-Final 3 - 2022 World Athletics Championships (Eugene, OR)												<i>Timing by Seiko (2022) - world athletics championships race analysis</i>								
date	20-Jul-22	time		11.37		21.67		33.04		45.63	45.63	1 / 7								
reaction time	0.189	interval				10.30		11.37		12.59		# of strides	11.37	10.30	11.37	12.59	21.67	23.96	2.29	
		velocity		8.80		9.71		8.80		7.94	8.77		8.80	9.71	8.80	7.94	9.23	8.35		
Ferlan, Rok (SLO) (1997)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																				
Semi-Final 1 - 2024 European Athletics Championships (Roma, ITA)												<i>European Athletics (2024) - 2024 european athletics championships - results book</i>								
date	09-Jun-24	time		11.10		21.76		33.08		45.63	45.63	2 / 7								
reaction time	0.156	interval				10.66		11.32		12.55		# of strides	11.10	10.66	11.32	12.55	21.76	23.87	2.11	
		velocity		9.01		9.38		8.83		7.97	8.77		188.7	9.01	9.38	8.83	7.97	9.19	8.38	
Blockburger, Johnnie (USA) (2002)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																				
Semi-Final 3 - 2024 USA Olympic Trials (Eugene, OR)												<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>								
date	23-Jun-24	time		11.05		21.56		33.11		45.63	45.63	6 / 3								
reaction time		interval				10.51		11.55		12.52		# of strides	11.05	10.51	11.55	12.52	21.56	24.07	2.51	
		velocity		9.05		9.51		8.66		7.99	8.77		171.0	9.05	9.51	8.66	7.99	9.28	8.31	
Lea, Jim (USA) (1932)																				
50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																				
FINAL - 1956 California Relays (Modesto, CA) (yards)												<i>Quercentani (2000). Athletics: A history of modern track and field athletics (1860-2000)</i>								
date	26-May-56	time				22.7				45.5	45.5	/ 1								
reaction time		interval								22.8	WR yards	# of strides						22.70	22.80	0.10
		velocity				8.81				8.77	8.79	(45.8/440y)					8.81	8.77		

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Davis, Glenn (USA) (1934)																		
FINAL - 1958 Big 10 Championships (Lafayette, IN) (yards)																		
date	24-May-58	time			22.3				45.5	45.5	/ 1							
reaction time		interval							23.2	=WR yards	# of strides					22.30	23.20	0.90
		velocity			8.97			8.62	8.79		(45.8/440y)					8.97	8.62	
Davis, Otis (USA) (1932)																		
Semi-Final 1 - 1960 Olympic Games (Rome, ITA)																		
date	06-Sep-60	time			22.5				45.5	45.5	/ 1							
reaction time		interval							23.0	OR	# of strides		22.50		45.50	22.50	23.00	0.50
		velocity			8.89			8.70	8.79		(45.62)		4.44		2.20	8.89	8.70	
Spence, Malcolm (RSA) (1937)																		
FINAL - 1960 Olympic Games (Rome, ITA)																		
date	06-Sep-60	time	11.1		21.4		32.7		45.5	45.5	4 / 3							
reaction time		interval			10.3		11.3		12.8	(45.60)	# of strides	11.10	10.30	11.30	12.80	21.40	24.10	2.70
		velocity	9.01		9.71		8.85		7.81	8.79		9.01	9.71	8.85	7.81	9.35	8.30	
James, Larry (USA) (1947)																		
FINAL - 1969 NCAA Championships (Knoxville, TN) (yards)																		
date	21-Jun-69	time			20.9				45.5	45.5	/ 5							
reaction time		interval							24.6		# of strides					20.90	24.60	3.70
		velocity			9.57			8.13	8.79		(45.8/440y)					9.57	8.13	
Murphy, Miles (AUS) (1967)																		
FINAL - 1986 IAAF World Junior Championships (Athens, GRE)																		
date	18-Jul-86	time		11.15	21.46		32.74		45.64	45.64	/ 1							
reaction time		interval			10.31		11.28		12.90	CR	# of strides	11.15	10.31	11.28	12.90	21.46	24.18	2.72
		velocity		8.97	9.70		8.87		7.75	8.76		8.97	9.70	8.87	7.75	9.32	8.27	
Hernández, Roberto (CUB) (1967)																		
FINAL - 1986 IAAF World Junior Championships (Athens, GRE)																		
date	18-Jul-86	time		11.23	21.36		32.59		45.64	45.64	/ 2							
reaction time		interval			10.13		11.23		13.05		# of strides	11.23	10.13	11.23	13.05	21.36	24.28	2.92
		velocity		8.90	9.87		8.90		7.66	8.76		8.90	9.87	8.90	7.66	9.36	8.24	
Watts, Quincy (USA) (1970)																		
FINAL - 1996 USA Olympic Trials (Atlanta, GA)																		
date	19-Jun-96	time		10.92	21.16		32.52	38.68	45.64	45.64	2 / 7							
reaction time		interval			10.24		11.36	6.16	6.96		# of strides	10.92	10.24	11.36	13.12	21.16	24.48	3.32
		velocity		9.16	9.77		8.80	8.12	7.18	8.76		9.16	9.77	8.80	7.62	9.45	8.17	
Collins, Ashton (USA) (1984)																		
FINAL - 2003 USATF National Junior Championships (Palo Alto, CA)																		
date	22-Jun-03	time			22.36		33.72	39.42	45.64	45.64	4 / 1							
reaction time		interval					11.36	5.70	6.22	PB	# of strides			11.36	11.92	22.36	23.28	0.92
		velocity			8.94		8.80	8.77	8.04	8.76				8.80	8.39	8.94	8.59	
Nixon, Greg (USA) (1981)																		
FINAL - 2008 USA Olympic Trials (Eugene, OR)																		
date	03-Jul-08	time	11.16	15.70	21.52	27.01	32.79	38.95	45.64	45.64	2 / 7							
reaction time		interval		4.54	5.82	5.49	5.78	6.16	6.69		# of strides	11.16	10.36	11.27	12.85	21.52	24.12	2.60
		velocity	8.96	11.01	8.59	9.11	8.65	8.12	7.47	8.76		8.96	9.65	8.87	7.78	9.29	8.29	
Larry, Lionel (USA) (1986)																		
Heat 1 - 2009 IAAF World Championships (Berlin, GER)																		
date	18-Aug-09	time		11.07	21.49		32.92		45.64	45.64	3 / 4							
reaction time	0.152	interval			10.42		11.43		12.72		# of strides	11.07	10.42	11.43	12.72	21.49	24.15	2.66
		velocity		9.03	9.60		8.75		7.86	8.76		9.03	9.60	8.75	7.86	9.31	8.28	
Kiprotich, Geoffrey (KEN) (1997)																		
FINAL - 2016 IAAF World Junior Championships (Bydgoszcz, POL)																		
date	22-Jul-16	time	6.42	11.45	16.55	21.76	27.21	33.02	39.07	45.64	4 / 4							
reaction time	0.192	interval		5.03	5.10	5.21	5.45	5.81	6.05	6.57	# of strides	11.45	10.31	11.26	12.62	21.76	23.88	2.12
		velocity	7.79	9.94	9.80	9.60	9.17	8.61	8.26	7.61	8.76	8.73	9.70	8.88	7.92	9.19	8.38	
Gaye, Demish (JAM) (1993)																		
FINAL - 2019 Müller Grand Prix (Birmingham, GBR)																		
date	18-Aug-19	time		11.4	21.8		33.3		45.64	45.64	4 / 6							
reaction time	0.153	interval			10.4		11.5		12.3		# of strides	11.40	10.40	11.50	12.34	21.80	23.84	2.04
		velocity		8.77	9.62		8.70		8.10	8.76		8.77	9.62	8.70	8.10	9.17	8.39	
Coelho, João (POR) (1999)																		
Semi-Final 1 - 2022 European Athletics Championships (Munich, GER)																		
date	16-Aug-22	time		11.13	21.41		32.82		45.64	45.64	8 / 3							
reaction time	0.206	interval			10.28		11.41		12.82		# of strides	11.13	10.28	11.41	12.82	21.41	24.23	2.82
		velocity		8.98	9.73		8.76		7.80	8.76		8.98	9.73	8.76	7.80	9.34	8.25	
Nene, Zakhiti (RSA) (1998)																		
Semi-Final 3 - 2023 World Athletics Championships (Budapest, HUN)																		
date	22-Aug-23	time		11.06	21.45		32.64		45.64	45.64	2 / 6							
reaction time	0.151	interval			10.39		11.19		13.00		# of strides	11.06	10.39	11.19	13.00	21.45	24.19	2.74
		velocity		9.04	9.62		8.94		7.69	8.76		9.04	9.62	8.94	7.69	9.32	8.27	
Joseph, Michael (LCA) (2002)																		
Repechage 2 - 2024 Olympic Games (Paris, FRA)																		
date		time																

date	05-Aug-24	time	6.19	11.24	16.51	21.93	27.54	33.34	39.34	45.64	45.64	6 / 4							
reaction time	0.186	interval		5.05	5.27	5.42	5.61	5.80	6.00	6.30		# of strides	11.24	10.69	11.41	12.30	21.93	23.71	1.78
		velocity	8.08	9.90	9.49	9.23	8.91	8.62	8.33	7.94	8.76	175.2	8.90	9.35	8.76	8.13	9.12	8.44	
Coelho, João (POR) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Repechage 4 - 2024 Olympic Games (Paris, FRA)</i>																		
	<i>Paris 2024 Olympic Games - Results Book (2024)</i>																		
date	05-Aug-24	time	6.38	11.45	16.71	22.11	27.65	33.40	39.30	45.64	45.64	4 / 5							
reaction time	0.175	interval		5.07	5.26	5.40	5.54	5.75	5.90	6.34		# of strides	11.45	10.66	11.29	12.24	22.11	23.53	1.42
		velocity	7.84	9.86	9.51	9.26	9.03	8.70	8.47	7.89	8.76	181.0	8.73	9.38	8.86	8.17	9.05	8.50	
Kemboi, Simon (KEN) (1967)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 1993 IAAF World Championships (Stuttgart, GER)</i>																		
	<i>Butler (2013) - IAAF world championships statistics handbook- moscow 2013</i>																		
date	17-Aug-93	time			22.42				45.65	45.65	1 / 7								
reaction time		interval						23.23									22.42	23.23	0.81
		velocity			8.92			8.61	8.76								8.92	8.61	
Kanemaru, Yuzo (JPN) (1987)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Semi-Final 1 - 2015 IAAF World Championships (Beijing, CHN)</i>																		
	<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>																		
date	23-Aug-15	time	6.15	11.13	16.25	21.60	27.21	33.02	39.20	45.65	45.65	9 / 6							
reaction time	0.156	interval		4.98	5.12	5.35	5.61	5.81	6.18	6.45		# of strides	11.13	10.47	11.42	12.63	21.60	24.05	2.45
		velocity	8.13	10.04	9.77	9.35	8.91	8.61	8.09	7.75	8.76	8.98	9.55	8.76	7.92		9.26	8.32	
Bonevacia, Liemarvin (NED) (1989)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Semi-Final 3 - 2015 IAAF World Championships (Beijing, CHN)</i>																		
	<i>Yamamoto (2015) - race analysis of 15th World Championships 400m- focusing on men's semis and women's prelims</i>																		
date	24-Aug-15	time	6.24	11.30	16.43	21.83	27.40	33.10	39.12	45.65	45.65	2 / 8							
reaction time	0.170	interval		5.06	5.13	5.40	5.57	5.70	6.02	6.53		# of strides	11.30	10.53	11.27	12.55	21.83	23.82	1.99
		velocity	8.01	9.88	9.75	9.26	8.98	8.77	8.31	7.66	8.76	182.7	8.85	9.50	8.87	7.97	9.16	8.40	
Cowan, Dwayne (GBR) (1985)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>National FINAL - 2018 Müller Anniversary Games (London, GBR)</i>																		
	<i>Omega Timing (2018) - diamond league race analysis</i>																		
date	21-Jul-18	time		11.2		21.7		33.1		45.65	45.65	6 / 1							
reaction time	0.131	interval			10.5		11.4		12.6			# of strides	11.20	10.50	11.40	12.55	21.70	23.95	2.25
		velocity		8.93	9.52		8.77		7.97		8.76	8.93	9.52	8.77	7.97	9.22	8.35		
Andant, Teo (FRA) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Heat 1 - 2024 European Athletics Championships (Roma, ITA)</i>																		
	<i>European Athletics (2024) - 2024 european athletics championships - results book</i>																		
date	08-Jun-24	time		11.27		21.91		33.33		45.65	45.65	4 / 3							
reaction time	0.187	interval			10.64		11.42		12.32			# of strides	11.27	10.64	11.42	12.32	21.91	23.74	1.83
		velocity		8.87	9.40		8.76		8.12		8.76	8.87	9.40	8.76	8.12	9.13	8.42		
Elkhatib, Omar (POR) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Semi-Final 3 - 2024 European Athletics Championships (Roma, ITA)</i>																		
	<i>European Athletics (2024) - 2024 european athletics championships - results book</i>																		
date	09-Jun-24	time		11.67		22.44		33.76		45.65	45.65	9 / 3							
reaction time	0.188	interval			10.77		11.32		11.89			# of strides	11.67	10.77	11.32	11.89	22.44	23.21	0.77
		velocity		8.57	9.29		8.83		8.41		8.76	8.57	9.29	8.83	8.41	8.91	8.62		
Šorm, Patrik (CZE) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Heat 1 - 2022 European Athletics Championships (Munich, GER)</i>																		
	<i>European Athletics (2022) - european athletics championships race analysis</i>																		
date	15-Aug-22	time		11.21		21.47		32.74		45.66	45.66	6 / 2							
reaction time	0.197	interval			10.26		11.27		12.92			# of strides	11.21	10.26	11.27	12.92	21.47	24.19	2.72
		velocity		8.92	9.75		8.87		7.74		8.76	8.92	9.75	8.87	7.74	9.32	8.27		
Šorm, Patrik (CZE) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Semi-Final 1 - 2022 European Athletics Championships (Munich, GER)</i>																		
	<i>European Athletics (2022) - european athletics championships race analysis</i>																		
date	16-Aug-22	time		11.21		21.80		33.20		45.66	45.66	2 / 4							
reaction time	0.227	interval			10.59		11.40		12.46			# of strides	11.21	10.59	11.40	12.46	21.80	23.86	2.06
		velocity		8.92	9.44		8.77		8.03		8.76	8.92	9.44	8.77	8.03	9.17	8.38		
Spitz, Lionel (SUI) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 2022 European Athletics Championships (Munich, GER)</i>																		
	<i>European Athletics (2022) - european athletics championships race analysis</i>																		
date	17-Aug-22	time		11.16		21.76		33.04		45.66	45.66	2 / 7							
reaction time	0.175	interval			10.60		11.28		12.62			# of strides	11.16	10.60	11.28	12.62	21.76	23.90	2.14
		velocity		8.96	9.43		8.87		7.92		8.76	8.96	9.43	8.87	7.92	9.19	8.37		
Coelho, João (POR) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 2023 Bauhaus Galan (Stockholm, SWE)</i>																		
	<i>Omega Timing (2023) - diamond league race analysis</i>																		
date	02-Jul-23	time	6.44	11.51	16.74	22.14	27.71	33.49	39.40	45.66	45.66	2 / 4							
reaction time	0.224	interval		5.07	5.23	5.40	5.57	5.78	5.91	6.26		# of strides	11.51	10.63	11.35	12.17	22.14	23.52	1.38
		velocity	7.76	9.86	9.56	9.26	8.98	8.65	8.46	7.99	8.76	8.69	9.41	8.81	8.22	9.03	8.50		
Nielsen, Gustav Lundholm (DEN) (19)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Heat 4 - 2023 World Athletics Championships (Budapest, HUN)</i>																		
	<i>Seiko Timing (2023) - world championship race analysis</i>																		
date	20-Aug-23	time		11.36		21.98		33.40		45.66	45.66	7 / 7							
reaction time	0.176	interval			10.62		11.42		12.26			# of strides	11.36	10.62	11.42	12.26	21.98	23.68	1.70
		velocity		8.80	9.42		8.76		8.16		8.76	8.80	9.42	8.76	8.16	9.10	8.45		
Byrd, Leonard (USA) (1975)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>FINAL - 2005 USATF National Championships (Carson, CA)</i>																		
	<i>USATF Women's Sprint Development (2005)</i>																		
date	25-Jun-05	time			21.72	27.25	33.03	39.27	45.67	45.67	8 / 8								
reaction time		interval				5.53	5.78	6.24	6.40			# of strides			11.31	12.64	21.72	23.95	2.23
		velocity			9.21	9.04	8.65	8.01	7.81	8.76				8.84	7.91	9.21	8.35		
Sato, Kentaro (JPN) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	<i>Heat 2 - 2017 Japanese National Championships (Osaka, JPN)</i>																		
	<i>(2017) - tldata-store.com/2017/07/08/post-965/</i>																		
date	23-Jun-17	time		11.31		21.61		32.78		45.67	45.67	2 / 2							
reaction time	0.145	interval			10.30		11.17		12.89			# of strides	11.31	10.30	11.17	12.89	21.61	24.06	2.45
		velocity		8.84	9.71		8.95		7.76		8.76	8.84	9.71	8.95	7.76	9.25	8.31		

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Walsh, Julian Jrummi (JPN) (1996)																			
Semi-Final 1 - 2019 Asian Athletics Championships (Doha, QAT)																			
date	21-Apr-19	time	6.14	11.23	16.43	21.82	27.44	33.20	39.22	45.67	45.67								
reaction time	0.139	interval		5.09	5.20	5.39	5.62	5.76	6.02	6.45		# of strides	11.23	10.59	11.38	12.47	21.82	23.85	2.03
		velocity	8.14	9.82	9.62	9.28	8.90	8.68	8.31	7.75	8.76		8.90	9.44	8.79	8.02	9.17	8.39	
Borlée, Dylan (BEL) (1992)																			
Semi-Final 3 - 2022 European Athletics Championships (Munich, GER)																			
date	16-Aug-22	time									45.67								
reaction time	0.157	interval									45.67								
		velocity		8.62	9.63	8.90	8.03	8.76		173.0	8.62	8.62	9.63	8.90	8.03	9.10	8.44		
Jordier, Thomas (FRA) (1994)																			
FINAL - 2022 European Athletics Championships (Munich, GER)																			
date	17-Aug-22	time									45.67								
reaction time	0.171	interval									45.67								
		velocity		8.99	9.48	8.71	7.99	8.76		188.0	8.99	8.99	9.48	8.71	7.99	9.23	8.33		
Borlée, Dylan (BEL) (1992)																			
FINAL - 2023 Weltklasse (Zürich, SUI)																			
date	31-Aug-23	time	6.21	11.25	16.40	21.70	27.22	33.07	39.18	45.67	45.67								
reaction time	0.184	interval		5.04	5.15	5.30	5.52	5.85	6.11	6.49		# of strides	11.25	10.45	11.37	12.60	21.70	23.97	2.27
		velocity	8.05	9.92	9.71	9.43	9.06	8.55	8.18	7.70	8.76		8.89	9.57	8.80	7.94	9.22	8.34	
Honz, Karl (FRG) (1951)																			
FINAL - 1972 Olympic Games (Munich, FRG)																			
date	07-Sep-72	time				21.8		33.2		45.7	45.68								
reaction time		interval						11.40		12.50		# of strides		21.80	11.40	12.50	21.80	23.90	2.10
		velocity				9.17		8.77		8.00	8.76		174.5	9.17	8.77	8.00	9.17	8.37	
Morris, Devon (JAM) (1961)																			
Semi-Final 2 - 1988 Olympic Games (Seoul, KOR)																			
date	26-Sep-88	time									45.68								
reaction time	0.239	interval									45.68								
		velocity		8.69	9.50	8.90	8.06	8.76			8.76	# of strides	11.51	10.53	11.23	12.41	22.04	23.64	1.60
Ochieng, Kennedy (KEN) (1971)																			
FINAL - 1993 IAAF World Championships (Stuttgart, GER)																			
date	17-Aug-93	time									45.68								
reaction time		interval									45.68								
		velocity		8.97							8.76	# of strides					22.30	23.38	1.08
Kikaya, Gary (COD) (1980)																			
FINAL - 2009 ISTAF (Berlin, GER)																			
date	14-Jun-09	time									45.68								
reaction time	0.161	interval									45.68								
		velocity		9.07	9.59	8.70	7.85	8.76			8.76	# of strides	11.02	10.43	11.49	12.74	21.45	24.23	2.78
Kanemaru, Yuzo (JPN) (1987)																			
FINAL - 2011 Japanese National Championships (Kumagaya, JPN)																			
date	12-Jun-11	time	6.07	11.01	16.02	21.33	26.98	32.91	39.10	45.68	45.68								
reaction time		interval		4.94	5.01	5.31	5.65	5.93	6.19	6.58		# of strides	11.01	10.32	11.58	12.77	21.33	24.35	3.02
		velocity	8.24	10.12	9.98	9.42	8.85	8.43	8.08	7.60	8.76		9.08	9.69	8.64	7.83	9.38	8.21	
Walsh, Julian Jrummi (JPN) (1996)																			
FINAL - 2016 Seiko Golden Grand Prix (Kawasaki, JPN)																			
date	08-May-16	time	6.05	11.07	16.24	21.58	27.10	32.90	39.09	45.68	45.68								
reaction time	0.155	interval		5.02	5.17	5.34	5.52	5.80	6.19	6.59	PB	# of strides	11.07	10.51	11.32	12.78	21.58	24.10	2.52
		velocity	8.26	9.96	9.67	9.36	9.06	8.62	8.08	7.59	8.76		9.03	9.51	8.83	7.82	9.27	8.30	
Taylor, Christopher (JAM) (1999)																			
Heat 2 - 2022 World Athletics Championships (Eugene, OR)																			
date	17-Jul-22	time									45.68								
reaction time	0.167	interval									45.68								
		velocity		8.83	9.23	8.81	8.22	8.76			8.76	# of strides	11.32	10.84	11.35	12.17	22.16	23.52	1.36
Young, Jerome (USA) (1976)																			
FINAL - 2000 ISTAF (Berlin, GER)																			
date	01-Sep-00	time									45.69								
reaction time		interval									45.69								
		velocity		8.80	9.36	9.07	7.92	8.75			8.75	# of strides	11.36	10.68	11.02	12.63	22.04	23.65	1.61
Kanemaru, Yuzo (JPN) (1987)																			
FINAL - 2014 Japanese National Championships (Fukushima, JPN)																			
date	08-Jun-14	time	6.18	11.21	16.28	21.70	27.32	33.18	39.25	45.69	45.69								
reaction time		interval		5.03	5.07	5.42	5.62	5.86	6.07	6.44		# of strides	11.21	10.49	11.48	12.51	21.70	23.99	2.29
		velocity	8.09	9.94	9.86	9.23	8.90	8.53	8.24	7.76	8.75		8.92	9.53	8.71	7.99	9.22	8.34	
Anas, Y. Muhammed (IND) (1994)																			
FINAL - 2018 Asian Games (Jakarta, INA)																			
date	26-Aug-18	time	6.06	11.07	16.27	21.67	27.21	32.97	39.12	45.69	45.69								
reaction time	0.151	interval		5.01	5.20	5.40	5.54	5.76	6.15	6.57		# of strides	11.07	10.60	11.30	12.72	21.67	24.02	2.35
		velocity	8.25	9.98	9.62	9.26	9.03	8.68	8.13	7.61	8.75		9.03	9.43	8.85	7.86	9.23	8.33	
Yamaki, Kakeru (JPN) (1996)																			
B Final - 2021 Denka Athletics Challenge Cup (Niigata, JPN)																			

Sato, Fuga (JPN) (1996)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Semi-Final 2 - 2022 World Athletics Championships (Eugene, OR)		Timing by Seiko (2022) - world athletics championships race analysis																
date	20-Jul-22	time	11.45	22.21	33.42	45.71	45.71		1 / 5									
reaction time	0.175	interval		10.76	11.21	12.29			# of strides	11.45	10.76	11.21	12.29	22.21	23.50	1.29		
		velocity	8.73	9.29	8.92	8.14	8.75		175.0	8.73	9.29	8.92	8.14	9.00	8.51			
Klein Ikkink, Isaya (NED) (2003)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
B Race - 2023 Memorial van Damme (Brussels, BEL)		Omega Timing (2023) - diamond league race analysis																
date	08-Sep-23	time	6.20	11.22	16.44	21.81	27.40	33.19	39.28	45.71	45.71							
reaction time	0.159	interval		5.02	5.22	5.37	5.59	5.79	6.09	6.43	PB							
		velocity	8.06	9.96	9.58	9.31	8.94	8.64	8.21	7.78	8.75							
Pohorilko, Oleksandr (UKR) (2000)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Heat 1 - 2024 Olympic Games (Paris, FRA)		Paris 2024 Olympc Games - Results Book (2024)																
date	04-Aug-24	time	6.37	11.53	16.68	22.08	27.67	33.34	39.28	45.71	45.71							
reaction time	0.175	interval		5.16	5.15	5.40	5.59	5.67	5.94	6.43								
		velocity	7.85	9.69	9.71	9.26	8.94	8.82	8.42	7.78	8.75							
Krsek, Matěj (CZE) (2000)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Heat 3 - 2024 Olympic Games (Paris, FRA)		Paris 2024 Olympc Games - Results Book (2024)																
date	04-Aug-24	time	6.21	11.30	16.58	21.94	27.48	33.22	39.21	45.71	45.71							
reaction time	0.130	interval		5.09	5.28	5.36	5.54	5.74	5.99	6.50								
		velocity	8.05	9.82	9.47	9.33	9.03	8.71	8.35	7.69	8.75							
Itt, Edgar (FRG) (1967)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
FINAL - 1986 IAAF World Junior Championships (Athens, GRE)		Moravec (1986) - IAAF biomechanical research - Athens 1986 - sprints																
date	18-Jul-86	time	11.34		21.85		33.08		45.72	45.72								
reaction time		interval			10.51		11.23		12.64									
		velocity			8.82		9.51		8.90	7.91	8.75							
Sacoor, Jonathan (BEL) (1999)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
FINAL - 2019 Memorial van Damme (Brussels, BEL)		Omega Timing (2019) - diamond league race analysis																
date	06-Sep-19	time	6.2	11.1	16.2	21.5	27.1	32.9	39.0	45.72	45.72							
reaction time	0.147	interval		4.9	5.1	5.3	5.6	5.8	6.1	12.8								
		velocity	8.06	10.20	9.80	9.43	8.93	8.62	8.20	7.80	8.75							
Borlée, Kevin (BEL) (1988)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Heat 2 - 2022 World Athletics Championships (Eugene, OR)		Timing by Seiko (2022) - world athletics championships race analysis																
date	17-Jul-22	time	11.72		22.56		33.77		45.72	45.72								
reaction time	0.132	interval			10.84		11.21		11.95									
		velocity	8.53		9.23		8.92		8.37	8.75								
Borlée, Kevin (BEL) (1988)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
FINAL - 2022 Memorial van Damme (Brussels, BEL)		Omega Timing (2022) - diamond league race analysis																
date	02-Sep-22	time	6.35	11.52	16.78	22.17	27.70	33.46	39.44	45.72	45.72							
reaction time	0.171	interval		5.17	5.26	5.39	5.53	5.76	5.98	6.28								
		velocity	7.87	9.67	9.51	9.28	9.04	8.68	8.36	7.96	8.75							
Bengtström, Carl (SWE) (2000)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Heat 4 - 2023 World Athletics Championships (Budapest, HUN)		Seiko Timing (2023) - world championship race analysis																
date	20-Aug-23	time	11.26		21.80		33.42		45.72	45.72								
reaction time	0.191	interval			10.54		11.62		12.30	DQ								
		velocity	8.88		9.49		8.61		8.13	8.75								
Andant, Teo (FRA) (1999)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Semi-Final 1 - 2024 European Athletics Championships (Roma, ITA)		European Athletics (2024) - 2024 european athletics championships - results book																
date	09-Jun-24	time	11.17		21.84		33.26		45.72	45.72								
reaction time	0.184	interval			10.67		11.42		12.46									
		velocity	8.95		9.37		8.76		8.03	8.75								
O'Donnell, Christopher (IRL) (1998)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Semi-Final 3 - 2024 European Athletics Championships (Roma, ITA)		European Athletics (2024) - 2024 european athletics championships - results book																
date	09-Jun-24	time	11.27		21.97		33.26		45.72	45.72								
reaction time	0.160	interval			10.70		11.29		12.46	DQ								
		velocity	8.87		9.35		8.86		8.03	8.75								
Strader, Solomon (USA) (2001)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Semi-Final 1 - 2024 USA Olympic Trials (Eugene, OR)		USATF and Karmarush (2024) - USA Olympic trials results and race analysis																
date	23-Jun-24	time	11.03		21.44		32.72		45.72	45.72								
reaction time		interval			10.41		11.28		13.00									
		velocity	9.07		9.61		8.87		7.69	8.75								
Hofmeister, Franz-Peter (FRG) (1951)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
FINAL - 1978 European Championships (Prague, TCH)		Lamare (1978) - championnats d'Europa 1978																
date	01-Sep-78	time	11.10		21.58		32.78		45.73	45.73								
reaction time		interval			10.48		11.20		12.95									
		velocity	9.01		9.54		8.93		7.72	8.75								
Allen, Nathon (JAM) (1995)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
FINAL - 2019 Shanghai (Shanghai, CHN)		Omega Timing (2019) - diamond league race analysis																
date	18-May-19	time	10.9		21.5		33.2		45.73	45.73								
reaction time	0.163	interval			10.6		11.7		12.5									
		velocity	9.17		9.43		8.55		7.98	8.75								
Nene, Zakhiti (RSA) (1998)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
FINAL - 2022 Bislett Games (Oslo, NOR)		Omega Timing (2022) - diamond league race analysis																

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Sato, Kentaro (JPN) (1994)																			
FINAL - 2023 Seiko Golden Grand Prix (Yokohama, JPN)																			
date	21-May-23	time	6.01	11.00	16.15	21.49	27.02	32.89	39.17	45.75	45.75	5 / 5							
reaction time	0.163	interval		4.99	5.15	5.34	5.53	5.87	6.28	6.58		# of strides	11.00	10.49	11.40	12.86	21.49	24.26	2.77
		velocity	8.32	10.02	9.71	9.36	9.04	8.52	7.96	7.60	8.74		175.5	9.09	9.53	8.77	7.78	9.31	8.24
Dedewo, Paul (USA) (1991)																			
Heat 4 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time		11.42		21.94		33.47		45.75	45.75	7 / 4							
reaction time		interval				10.52		11.53		12.28		# of strides	11.42	10.52	11.53	12.28	21.94	23.81	1.87
		velocity		8.76		9.51		8.67		8.14	8.74	164.0	8.76	9.51	8.67	8.14	9.12	8.40	
Torrance, Jamaal (USA) (1983)																			
Semi-Final 1 - 2008 USA Olympic Trials (Eugene, OR)																			
date	30-Jun-08	time		11.21		21.87	27.41	33.13	39.25	45.76	45.76	2 / 5							
reaction time		interval				10.66	5.54	5.72	6.12	6.51		# of strides	11.21	10.66	11.26	12.63	21.87	23.89	2.02
		velocity		8.92		9.38	9.03	8.74	8.17	7.68	8.74		8.92	9.38	8.88	7.92	9.14	8.37	
Kanemaru, Yuzo (JPN) (1987)																			
Heat 1 - 2017 Japanese National Championships (Osaka, JPN)																			
date	23-Jun-17	time		11.21		21.50		33.20		45.76	45.76	4 / 2							
reaction time	0.144	interval				10.29		11.70		12.56		# of strides	11.21	10.29	11.70	12.56	21.50	24.26	2.76
		velocity		8.92		9.72		8.55		7.96	8.74	174.7	8.92	9.72	8.55	7.96	9.30	8.24	
Kitagawa, Takamasa (JPN) (1996)																			
FINAL - 2017 Japanese National Championships (Osaka, JPN)																			
date	24-Jun-17	time	6.14	11.23	16.39	21.76	27.31	33.09	39.17	45.76	45.76	4 / 1							
reaction time	0.147	interval		5.09	5.16	5.37	5.55	5.78	6.08	6.59		# of strides	11.23	10.53	11.33	12.67	21.76	24.00	2.24
		velocity	8.14	9.82	9.69	9.31	9.01	8.65	8.22	7.59	8.74	180.0	8.90	9.50	8.83	7.89	9.19	8.33	
Janežič, Luka (SLO) (1995)																			
FINAL - 2019 Herculis Meeting International d'Athlétisme (Monaco, MON)																			
date	12-Jul-19	time		11.4		21.9		33.4		45.76	45.76	1 / 4							
reaction time	0.180	interval				10.5		11.5		12.4		# of strides	11.40	10.50	11.50	12.36	21.90	23.86	1.96
		velocity		8.77		9.52		8.70		8.09	8.74		8.77	9.52	8.70	8.09	9.13	8.38	
Jinushi, Naohiro (JPN) (2001)																			
FINAL - 2023 Seiko Golden Grand Prix (Yokohama, JPN)																			
date	21-May-23	time	6.32	11.51	16.82	22.25	27.76	33.43	39.36	45.76	45.76	2 / 6							
reaction time	0.159	interval		5.19	5.31	5.43	5.51	5.67	5.93	6.40	PB	# of strides	11.51	10.74	11.18	12.33	22.25	23.51	1.26
		velocity	7.91	9.63	9.42	9.21	9.07	8.82	8.43	7.81	8.74		8.69	9.31	8.94	8.11	8.99	8.51	
Imaizumi, Kenki (JPN) (2001)																			
FINAL - 2023 Seiko Golden Grand Prix (Yokohama, JPN)																			
date	21-May-23	time	6.11	11.23	16.48	21.94	27.56	33.43	39.43	45.76	45.76	8 / 6							
reaction time	0.148	interval		5.12	5.25	5.46	5.62	5.87	6.00	6.33		# of strides	11.23	10.71	11.49	12.33	21.94	23.82	1.88
		velocity	8.18	9.77	9.52	9.16	8.90	8.52	8.33	7.90	8.74		8.90	9.34	8.70	8.11	9.12	8.40	
Tomlyanovich, TJ (USA) (2003)																			
Heat 5 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time		11.13		21.70		33.15		45.76	45.76	3 / 3							
reaction time		interval				10.57		11.45		12.61		# of strides	11.13	10.57	11.45	12.61	21.70	24.06	2.36
		velocity		8.98		9.46		8.73		7.93	8.74	170.0	8.98	9.46	8.73	7.93	9.22	8.31	
Strader, Solomon (USA) (2001)																			
Heat 4 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time				22.01		32.78		45.76	45.76	9 / 5							
reaction time		interval				10.77		12.98		12.98		# of strides			10.77	12.98	22.01	23.75	1.74
		velocity				9.09		9.29		7.70	8.74	180.0			9.29	7.70	9.09	8.42	
Horigome, Yoshihiro (JPN) (1981)																			
FINAL - 2006 Seiko Super Grand Prix (Yokohama, JPN)																			
date	24-Sep-06	time	6.1	11.3	16.6	22.1	27.6	33.3	39.3	45.77	45.77	7 / 1							
reaction time		interval		5.20	5.30	5.50	5.50	5.70	6.00	6.47	PB	# of strides	11.30	10.80	11.20	12.47	22.10	23.67	1.57
		velocity	8.20	9.62	9.43	9.09	9.09	8.77	8.33	7.73	8.74		8.85	9.26	8.93	8.02	9.05	8.45	
Marciniszyn, Marcin (POL) (1982)																			
Heat 2 - 2009 IAAF World Championships (Berlin, GER)																			
date	18-Aug-09	time		11.44		21.98		33.46		45.77	45.77	3 / 4							
reaction time	0.167	interval				10.54		11.48		12.31		# of strides	11.44	10.54	11.48	12.31	21.98	23.79	1.81
		velocity		8.74		9.49		8.71		8.12	8.74		8.74	9.49	8.71	8.12	9.10	8.41	
Solomon, Jarrin (TTO) (1986)																			
FINAL - 2016 Seiko Golden Grand Prix (Kawasaki, JPN)																			
date	08-May-16	time	6.29	11.34	16.52	21.91	27.48	33.21	39.30	45.77	45.77	7 / 2							
reaction time	0.192	interval		5.05	5.18	5.39	5.57	5.73	6.09	6.47		# of strides	11.34	10.57	11.30	12.56	21.91	23.86	1.95
		velocity	7.95	9.90	9.65	9.28	8.98	8.73	8.21	7.73	8.74	181.2	8.82	9.46	8.85	7.96	9.13	8.38	
Bonevacia, Liemarvin (NED) (1989)																			
FINAL - 2022 Bislett Games (Oslo, NOR)																			
date	16-Jun-22	time	6.30	11.31	16.42	21.73	27.28	33.15	39.23	45.77	45.77	5 / 5							
reaction time	0.146	interval		5.01	5.11	5.31	5.55	5.87	6.08	6.54		# of strides	11.31	10.42	11.42	12.62	21.73	24.04	2.31
		velocity	7.94	9.98	9.78	9.42	9.01	8.52	8.22	7.65	8.74	184.0	8.84	9.60	8.76	7.92	9.20	8.32	
Hudson-Smith, Matthew (GBR) (1994)																			
Semi-Final 3 - 2022 Commonwealth Games (Birmingham, GBR)																			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Gregory, Eric (USA) (2000)																			
Heat 2 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time	11.19		21.66		32.96		45.79	45.79	3 / 7								
reaction time		interval			10.47		11.30		12.83		# of strides	11.19	10.47	11.30	12.83	21.66	24.13	2.47	
		velocity	8.94		9.55		8.85		7.79	8.74	171.0	8.94	9.55	8.85	7.79	9.23	8.29		
Paul, Michael (TTO) (1957)																			
FINAL - 1983 IAAF World Championships (Helsinki, FIN)																			
date	10-Aug-83	time			21.5				45.80	45.80	8 / 7								
reaction time		interval							24.30		# of strides					21.50	24.30	2.80	
		velocity			9.30				8.23	8.73						9.30	8.23		
Walsh, Julian Jrummi (JPN) (1996)																			
FINAL - 2019 Japanese National Championships (Fukuoka, JPN)																			
date	28-Jun-19	time	6.20	11.24	16.38	21.66	27.20	33.02	39.18	45.80	45.80	4 / 1							
reaction time	0.160	interval		5.04	5.14	5.28	5.54	5.82	6.16	6.62		# of strides	11.24	10.42	11.36	12.78	21.66	24.14	2.48
		velocity	8.06	9.92	9.73	9.47	9.03	8.59	8.12	7.55	8.73	174.7	8.90	9.60	8.80	7.82	9.23	8.29	
Walsh, Julian Jrummi (JPN) (1996)																			
Final - 2021 Denka Athletics Challenge Cup (Niigata, JPN)																			
date	06-Jun-21	time	6.39	11.57	16.77	21.97	27.29	32.98	39.13	45.80	45.80	4 / 1							
reaction time		interval		5.18	5.20	5.20	5.32	5.69	6.15	6.67		# of strides	11.57	10.40	11.01	12.82	21.97	23.83	1.86
		velocity	7.82	9.65	9.62	9.62	9.40	8.79	8.13	7.50	8.73	8.64	9.62	9.08	7.80	9.10	8.39		
Re, Davide (ITA) (1993)																			
FINAL - 2021 Golden Gala Pietro Mennea (Florence, ITA)																			
date	10-Jun-21	time	6.4	11.6	16.8	22.2	27.8	33.6	39.6	45.80	45.80	6 / 2							
reaction time	0.139	interval		5.20	5.20	5.40	5.60	5.80	6.00	6.20		# of strides	11.60	10.60	11.40	12.20	22.20	23.60	1.40
		velocity	7.81	9.62	9.62	9.26	8.93	8.62	8.33	8.06	8.73	8.62	9.43	8.77	8.20	9.01	8.47		
Adoli, Aaron (UGA) (1994)																			
Semi-Final 1 - 2022 Commonwealth Games (Birmingham, GBR)																			
date	05-Aug-22	time	6.3	11.4	16.7	22.2	27.9	33.7	39.5	45.80	45.80	7 / 1							
reaction time	0.240	interval		5.10	5.30	5.50	5.70	5.80	5.80	6.30	PB	# of strides	11.40	10.80	11.50	12.10	22.20	23.60	1.40
		velocity	7.94	9.80	9.43	9.09	8.77	8.62	8.62	7.94	8.73	167.0	8.77	9.26	8.70	8.26	9.01	8.47	
Doom, Alexander (BEL) (1997)																			
Semi-Final 2 - 2022 World Athletics Championships (Eugene, OR)																			
date	20-Jul-22	time			11.50		21.78		33.25	45.80	45.80	7 / 6							
reaction time	0.170	interval					10.28		11.47	12.55		# of strides	11.50	10.28	11.47	12.55	21.78	24.02	2.24
		velocity			8.70		9.73		8.72	7.97	8.73	182.0	8.70	9.73	8.72	7.97	9.18	8.33	
Borlée, Dylan (BEL) (1992)																			
FINAL - 2023 FBK Games (Hengelo, NED)																			
date	04-Jun-23	time	6.29	11.38	16.61	21.96	27.51	33.25	39.28	45.80	45.80	2 / 4							
reaction time	0.172	interval		5.09	5.23	5.35	5.55	5.74	6.03	6.52		# of strides	11.38	10.58	11.29	12.55	21.96	23.84	1.88
		velocity	7.95	9.82	9.56	9.35	9.01	8.71	8.29	7.67	8.73	8.79	9.45	8.86	7.97	9.11	8.39		
Šorm, Patrik (CZE) (1993)																			
B Race - 2023 Memorial van Damme (Brussels, BEL)																			
date	08-Sep-23	time	6.33	11.38	16.62	22.13	27.74	33.45	39.39	45.80	45.80	8 / 5							
reaction time	0.168	interval		5.05	5.24	5.51	5.61	5.71	5.94	6.41		# of strides	11.38	10.75	11.32	12.35	22.13	23.67	1.54
		velocity	7.90	9.90	9.54	9.07	8.91	8.76	8.42	7.80	8.73	8.79	9.30	8.83	8.10	9.04	8.45		
Zalewski, Karol (POL) (1993)																			
Heat 1 - 2024 European Athletics Championships (Roma, ITA)																			
date	08-Jun-24	time			11.19		21.71		33.13	45.80	45.80	3 / 5							
reaction time	0.165	interval					10.52		11.42	12.67		# of strides	11.19	10.52	11.42	12.67	21.71	24.09	2.38
		velocity			8.94		9.51		8.76	7.89	8.73	8.94	9.51	8.76	7.89	9.21	8.30		
Elkhatib, Omar (POR) (2001)																			
Heat 2 - 2024 European Athletics Championships (Roma, ITA)																			
date	08-Jun-24	time			11.57		22.12		33.60	45.80	45.80	4 / 2							
reaction time	0.155	interval					10.55		11.48	12.20		# of strides	11.57	10.55	11.48	12.20	22.12	23.68	1.56
		velocity			8.64		9.48		8.71	8.20	8.73	8.64	9.48	8.71	8.20	9.04	8.45		
Stewart, Trevor (USA) (1997)																			
Semi-Final 1 - 2024 USA Olympic Trials (Eugene, OR)																			
date	23-Jun-24	time			11.38		21.96		33.37	45.80	45.80	1 / 9							
reaction time		interval					10.58		11.41	12.43		# of strides	11.38	10.58	11.41	12.43	21.96	23.84	1.88
		velocity			8.79		9.45		8.76	8.05	8.73	8.79	9.45	8.76	8.05	9.11	8.39		
Davey, Lewis (GBR) (2000)																			
National FINAL - 2024 London Athletics Meet (London, GBR)																			
date	20-Jul-24	time	6.33	11.29	16.36	21.65	27.26	33.08	39.20	45.80	45.80	5 / 4							
reaction time	0.160	interval		4.96	5.07	5.29	5.61	5.82	6.12	6.60		# of strides	11.29	10.36	11.43	12.72	21.65	24.15	2.50
		velocity	7.90	10.08	9.86	9.45	8.91	8.59	8.17	7.58	8.73	8.86	9.65	8.75	7.86	9.24	8.28		
Mabille, Florent (BEL) (1996)																			
Invitational - 2024 Memorial van damme (Brussels, BEL)																			
date	13-Sep-24	time	6.26	11.22	16.32	21.69	27.25	33.06	39.14	45.80	45.80	7 / 3							
reaction time	0.142	interval		4.96	5.10	5.37	5.56	5.81	6.08	6.66		# of strides	11.22	10.47	11.37	12.74	21.69	24.11	2.42
		velocity	7.99	10.08	9.80	9.31	8.99	8.61	8.22	7.51	8.73	8.91	9.55	8.80	7.85	9.22	8.30		
Santos, Luguélin (DOM) (1993)																			
FINAL - 2018 Müller Grand Prix (Birmingham, GBR)																			

date	18-Aug-18	time	11.8	22.6	33.8	45.81	45.81	3 / 5											
reaction time	0.207	interval		10.8	11.2	12.0		# of strides	11.80	10.80	11.20	12.01	22.60	23.21	0.61				
		velocity	8.47	9.26	8.93	8.33	8.73	184.2	8.47	9.26	8.93	8.33	8.85	8.62					
Cherry, Michael (USA) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 3 - 2022 World Athletics Championships (Eugene, OR)																			
date	17-Jul-22	time	11.16	21.84	33.16	45.81	45.81	3 / 1											
reaction time	0.137	interval		10.68	11.32	12.65		# of strides	11.16	10.68	11.32	12.65	21.84	23.97	2.13				
		velocity	8.96	9.36	8.83	7.91	8.73	162.0	8.96	9.36	8.83	7.91	9.16	8.34					
Benson, James (USA) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 5 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time	11.12	21.60	33.08	45.81	45.81	4 / 4											
reaction time		interval		10.48	11.48	12.73		# of strides	11.12	10.48	11.48	12.73	21.60	24.21	2.61				
		velocity	8.99	9.54	8.71	7.86	8.73	178.0	8.99	9.54	8.71	7.86	9.26	8.26					
Spitz, Lionel (SUI) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 5 - 2024 Olympic Games (Paris, FRA)																			
date	04-Aug-24	time	6.18	11.13	16.20	21.48	26.97	32.78	38.94	45.81	45.81	3 / 6							
reaction time	0.145	interval		4.95	5.07	5.28	5.49	5.81	6.16	6.87		# of strides	11.13	10.35	11.30	13.03	21.48	24.33	2.85
		velocity	8.09	10.10	9.86	9.47	9.11	8.61	8.12	7.28	8.73	186.5	8.98	9.66	8.85	7.67	9.31	8.22	
Larry, Lionel (USA) (1986)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2008 USA Olympic Trials (Eugene, OR)																			
date	03-Jul-08	time	11.13	15.66	21.42	26.94	32.73	39.03	45.82	45.82	1 / 8								
reaction time		interval		4.53	5.76	5.52	5.79	6.30	6.79		# of strides	11.13	10.29	11.31	13.09	21.42	24.40	2.98	
		velocity	8.98	11.04	8.68	9.06	8.64	7.94	7.36	8.73	8.98	9.72	8.84	7.64	9.34	8.20			
Rooney, Martyn (GBR) (1987)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2008 IAAF World Athletic Final (Stuttgart, GER)																			
date	13-Sep-08	time	11.57	22.42	33.78	45.82	45.82	8 / 5											
reaction time	0.179	interval		10.85	11.36	12.04		# of strides	11.57	10.85	11.36	12.04	22.42	23.40	0.98				
		velocity	8.64	9.22	8.80	8.31	8.73	181.0	8.64	9.22	8.80	8.31	8.92	8.55					
Nakano, Hiroyuki (JPN) (1988)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2012 Kokutai National Sport Festival (Gifu, JPN)																			
date	08-Oct-12	time	6.31	11.42	16.72	22.15	27.64	33.29	39.30	45.82	45.82	1 / 1							
reaction time		interval		5.11	5.30	5.43	5.49	5.65	6.01	6.52		# of strides	11.42	10.73	11.14	12.53	22.15	23.67	1.52
		velocity	7.92	9.78	9.43	9.21	9.11	8.85	8.32	7.67	8.73	8.76	9.32	8.98	7.98	9.03	8.45		
Imoto, Yoshinobu (JPN) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
B FINAL - 2018 Shizuoka International Meeting (Fukurui, JPN)																			
date	03-May-18	time	6.03	11.09	16.23	21.53	27.09	32.97	39.17	45.82	45.82	3 / 1							
reaction time	0.155	interval		5.06	5.14	5.30	5.56	5.88	6.20	6.65		# of strides	11.09	10.44	11.44	12.85	21.53	24.29	2.76
		velocity	8.29	9.88	9.73	9.43	8.99	8.50	8.06	7.52	8.73	196.0	9.02	9.58	8.74	7.78	9.29	8.23	
Samukonga, Muzala (ZAM) (2002)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 3 - 2022 World Athletics Championships (Eugene, OR)																			
date	17-Jul-22	time	11.27	21.83	33.33	45.82	45.82	7 / 2											
reaction time	0.180	interval		10.56	11.50	12.49		# of strides	11.27	10.56	11.50	12.49	21.83	23.99	2.16				
		velocity	8.87	9.47	8.70	8.01	8.73	180.0	8.87	9.47	8.70	8.01	9.16	8.34					
Bonevacia, Liemarvin (NED) (1989)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 6 - 2022 World Athletics Championships (Eugene, OR)																			
date	17-Jul-22	time	11.65	22.33	33.76	45.82	45.82	6 / 2											
reaction time	0.158	interval		10.68	11.43	12.06		# of strides	11.65	10.68	11.43	12.06	22.33	23.49	1.16				
		velocity	8.58	9.36	8.75	8.29	8.73	180.5	8.58	9.36	8.75	8.29	8.96	8.51					
Jones, Jonathan (BAR) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 2 - 2022 Commonwealth Games (Birmingham, GBR)																			
date	05-Aug-22	time	6.2	11.3	16.7	22.1	27.7	33.6	39.5	45.82	45.82	7 / 1							
reaction time	0.157	interval		5.10	5.40	5.40	5.90	5.90	6.32		# of strides	11.30	10.80	11.50	12.22	22.10	23.72	1.62	
		velocity	8.06	9.80	9.26	8.93	8.47	8.47	7.91	8.73	175.0	8.85	9.26	8.70	8.18	9.05	8.43		
Biron, Gilles (FRA) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 3 - 2022 European Athletics Championships (Munich, GER)																			
date	15-Aug-22	time	11.10	21.53	33.01	45.82	45.82	8 / 2											
reaction time	0.157	interval		10.43	11.48	12.81		# of strides	11.10	10.43	11.48	12.81	21.53	24.29	2.76				
		velocity	9.01	9.59	8.71	7.81	8.73	181.0	9.01	9.59	8.71	7.81	9.29	8.23					
Doom, Alexander (BEL) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2022 Memorial van Damme (Brussels, BEL)																			
date	02-Sep-22	time	6.45	11.58	16.81	22.26	27.89	33.70	39.68	45.82	45.82	6 / 3							
reaction time	0.164	interval		5.13	5.23	5.45	5.63	5.81	5.98	6.14		# of strides	11.58	10.68	11.44	12.12	22.26	23.56	1.30
		velocity	7.75	9.75	9.56	9.17	8.88	8.61	8.36	8.14	8.73	8.64	9.36	8.74	8.25	8.98	8.49		
Davey, Lewis (GBR) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
B Race - 2023 Memorial van Damme (Brussels, BEL)																			
date	08-Sep-23	time	6.28	11.19	16.35	21.83	27.51	33.33	39.34	45.82	45.82	7 / 6							
reaction time	0.173	interval		4.91	5.16	5.48	5.68	5.82	6.01	6.48	PB	# of strides	11.19	10.64	11.50	12.49	21.83	23.99	2.16
		velocity	7.96	10.18	9.69	9.12	8.80	8.59	8.32	7.72	8.73	8.94	9.40	8.70	8.01	9.16	8.34		
Spitz, Lionel (SUI) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2024 Athletissima (Lausanne, SUI)																			
date	22-Aug-24	time	6.15	11.07	16.11	21.40	27.00	32.88	39.05	45.82	45.82	2 / 7							
reaction time	0.119	interval		4.92	5.04	5.29	5.60	5.88	6.17	6.77		# of strides	11.07	10.33	11.48	12.94	21.40	24.42	3.02
		velocity	8.13	10.16	9.92	9.45	8.93	8.50	8.10	7.39									

Plawgo, Marek (POL) (1987)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 1 - 2002 European Championships (Munich, GER)		Graubner (2009) - http://www.fgs.uni-halle.de																	
date	07-Aug-02	time	11.43		22.14		33.49		45.83	45.83	/ 3								
reaction time	0.172	interval			10.71		11.35		12.34		# of strides	11.43	10.71	11.35	12.34	22.14	23.69	1.55	
		velocity	8.75		9.34		8.81		8.10	8.73		8.75	9.34	8.81	8.10	9.03	8.44		
Wissman, Johan (SWE) (1982)		Graubner (2009) - <i>biomechanical analyses at the 12th IAAF world championships</i>																	
Heat 5 - 2009 IAAF World Championships (Berlin, GER)																			
date	18-Aug-09	time	11.19		21.50		32.82		45.83	45.83	2 / 3								
reaction time	0.176	interval			10.31		11.32		13.01		# of strides	11.19	10.31	11.32	13.01	21.50	24.33	2.83	
		velocity	8.94		9.70		8.83		7.69	8.73		8.94	9.70	8.83	7.69	9.30	8.22		
Juantorena, Alberto (CUB) (1950)		Butler (2010) - <i>1st/IAAF VTB bank continental cup, IAAF statistics handbook - split 2010</i>																	
FINAL (original) - 1977 IAAF World Cup (Düsseldorf, FRG)																			
date	03-Sep-77	time	12.8						45.83	45.83	8 / 3								
reaction time		interval							33.1		# of strides	12.80							
		velocity	7.81						9.06	8.73		7.81							
Haroun, Abdalelah (QAT) (1997)		Yamanaka (2018) - <i>Race analysis of men and women 400m at 2018 competition</i>																	
Semi-Final 3 - 2018 Asian Games (Jakarta, INA)																			
date	25-Aug-18	time	6.13	11.11	16.29	21.75	27.43	33.21	39.23	45.83	45.83	4 / 1							
reaction time	0.195	interval	4.98	5.18	5.46	5.68	5.78	6.02	6.60		# of strides	11.11	10.64	11.46	12.62	21.75	24.08	2.33	
		velocity	8.16	10.04	9.65	9.16	8.80	8.65	8.31	7.58	8.73		9.00	9.40	8.73	7.92	9.20	8.31	
Ito, Rikiya (JPN) (1998)		Yamanaka (2020) - <i>400m race analysis of men and women during 2020 season</i>																	
FINAL - 2020 Seiko Golden Grand Prix (Tokyo, JPN)																			
date	23-Aug-20	time	6.04	10.95	16.00	21.27	26.83	32.77	39.04	45.83	45.83	4 / 1							
reaction time	0.132	interval	4.91	5.05	5.27	5.56	5.94	6.27	6.79		# of strides	10.95	10.32	11.50	13.06	21.27	24.56	3.29	
		velocity	8.28	10.18	9.90	9.49	8.99	8.42	7.97	7.36	8.73		9.13	9.69	8.70	7.66	9.40	8.14	
Cañal, Iñaki (ESP) (1997)		Timing by Seiko (2022) - <i>world athletics championships race analysis</i>																	
Heat 1 - 2022 World Athletics Championships (Eugene, OR)																			
date	17-Jul-22	time	11.11		21.35		32.75		45.83	45.83	7 / 3								
reaction time	0.151	interval			10.24		11.40		13.08	PB	# of strides	11.11	10.24	11.40	13.08	21.35	24.48	3.13	
		velocity	9.00		9.77		8.77		7.65	8.73		9.00	9.77	8.77	7.65	9.37	8.17		
Spitz, Lionel (SUI) (2001)		Omega Timing (2023) - <i>diamond league race analysis</i>																	
FINAL - 2023 Weltklasse (Zürich, SUI)																			
date	31-Aug-23	time	6.31	11.43	16.82	22.35	27.92	33.61	39.50	45.83	45.83	4 / 4							
reaction time	0.147	interval	5.12	5.39	5.53	5.57	5.69	5.89	6.33		# of strides	11.43	10.92	11.26	12.22	22.35	23.48	1.13	
		velocity	7.92	9.77	9.28	9.04	8.98	8.79	8.49	7.90	8.73		8.75	9.16	8.88	8.18	8.95	8.52	
Stewart, Trevor (USA) (1997)		USATF and Karmarush (2024) - <i>USA Olympic trials results and race analysis</i>																	
Heat 5 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time	11.63		22.33		33.62		45.83	45.83	9 / 5								
reaction time		interval			10.70		11.29		12.21		# of strides	11.63	10.70	11.29	12.21	22.33	23.50	1.17	
		velocity	8.60		9.35		8.86		8.19	8.73		8.60	9.35	8.86	8.19	8.96	8.51		
Brier, Joseph (GBR) (1999)		Omega Timing (2024) - <i>diamond league race analysis</i>																	
National FINAL - 2024 London Athletics Meet (London, GBR)																			
date	20-Jul-24	time	6.16	11.13	16.18	21.39	26.90	32.70	38.88	45.83	45.83	2 / 5							
reaction time	0.151	interval	4.97	5.05	5.21	5.51	5.80	6.18	6.95		# of strides	11.13	10.26	11.31	13.13	21.39	24.44	3.05	
		velocity	8.12	10.06	9.90	9.60	9.07	8.62	8.09	7.19	8.73		8.98	9.75	8.84	7.62	9.35	8.18	
Petrucciani, Ricky (SUI) (2000)		Omega Timing (2024) - <i>diamond league race analysis</i>																	
B Race - 2024 Athletissima (Lausanne, SUI)																			
date	22-Aug-24	time	6.21	11.46	16.79	22.30	27.83	33.55	39.49	45.83	45.83	5 / 1							
reaction time	0.167	interval	5.25	5.33	5.51	5.53	5.72	5.94	6.34		# of strides	11.46	10.84	11.25	12.28	22.30	23.53	1.23	
		velocity	8.05	9.52	9.38	9.07	9.04	8.74	8.42	7.89	8.73		8.73	9.23	8.89	8.14	8.97	8.50	
McKenley, Herb (JAM) (1922)		Track & Field News (1963)																	
FINAL - 1948 Pacific Association Championships (Berkeley, CA) (yards)																			
date	06-Jun-48	time			21.4				45.7	45.7	/ 1								
reaction time		interval							24.3	WR yards	# of strides					21.40	24.30	2.90	
		velocity			9.35				8.23	8.75	(46.0/440y)					9.35	8.23		
Lea, Jim (USA) (1932)		Hymans (2008) - <i>history of the US olympic trials - track and field</i>																	
FINAL - 1956 USA Olympic Trials (Los Angeles, CA)																			
date	30-Jun-56	time			21.6				45.7	45.7	7 / 2								
reaction time		interval							24.1		# of strides					21.60	24.10	2.50	
		velocity			9.26				8.30	8.75						9.26	8.30		
Brightwell, Robbie (GBR) (1939)		Butler (2016) - <i>IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																	
FINAL - 1964 Olympic Games (Tokyo, JPN)																			
date	19-Sep-64	time			21.8		34.1		45.7	45.7	6 / 4								
reaction time		interval					12.30		11.60	(45.75)	# of strides		21.80	12.30	11.60	21.80	23.90	2.10	
		velocity			9.17		8.13		8.62	8.75			9.17	8.13	8.62	9.17	8.37		
Egbunike, Innocent (NGR) (1961)		Moravec (1990) - <i>time analysis of the sprints - Rome 1987 Scientific Report (2nd ed)</i>																	
Heat 2 - 1987 IAAF World Championship (Rome, ITA)																			
date	30-Aug-87	time			21.94		33.50		45.84	45.84	6 / 2								
reaction time		interval			10.62		11.56		12.34		# of strides	11.32	10.62	11.56	12.34	21.94	23.90	1.96	
		velocity			8.83		9.42		8.65	8.10	161.0		8.83	9.42	8.65	8.10	9.12	8.37	
Valmon, Andrew (USA) (1965)		USATF Women's Sprint Development (1996)																	
Semi-Final 1 - 1996 USA Olympic Trials (Atlanta, GA)																			

date	17-Jun-96	time	11.63	22.11	33.34	39.90	45.84	45.84	8 / 6										
reaction time		interval		10.48	11.23	6.56	5.94		# of strides	11.63	10.48	11.23	12.50	22.11	23.73	1.62			
		velocity	8.60	9.54	8.90	7.62	8.42	8.73		8.60	9.54	8.90	8.00	9.05	8.43				
Szegtlet, Zsolt (HUN) (1977)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 1 - 2002 European Championships (Munich, GER)																			
date	07-Aug-02	time	11.52	22.46		33.41		45.84	45.84	/ 4									
reaction time	0.155	interval		10.94		10.95		12.43		# of strides	11.52	10.94	10.95	12.43	22.46	23.38	0.92		
		velocity	8.68	9.14		9.13		8.05	8.73		8.68	9.14	9.13	8.05	8.90	8.55			
Iglhart-Summers, Quentin (USA) (19)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 1 - 2008 USA Olympic Trials (Eugene, OR)																			
date	30-Jun-08	time	11.27	16.62	21.36	27.72	33.60	39.50	45.84	45.84	5 / 6								
reaction time		interval		5.35	4.74	6.36	5.88	5.90	6.34		# of strides	11.27	10.09	12.24	12.24	21.36	24.48	3.12	
		velocity	8.87	9.35	10.55	7.86	8.50	8.47	7.89	8.73		8.87	9.91	8.17	8.17	9.36	8.17		
Hirose, Hideyuki (JPN) (1989)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2011 Japanese National Championships (Kumagaya, JPN)																			
date	12-Jun-11	time	6.31	11.37	16.58	21.91	27.44	33.11	39.21	45.84	45.84	/ 2							
reaction time		interval		5.06	5.21	5.33	5.53	5.67	6.10	6.63		# of strides	11.37	10.54	11.20	12.73	21.91	23.93	2.02
		velocity	7.92	9.88	9.60	9.38	9.04	8.82	8.20	7.54	8.73		8.80	9.49	8.93	7.86	9.13	8.36	
Tamura, Tomoya (JPN) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 3 - 2017 Japanese National Championships (Osaka, JPN)																			
date	23-Jun-17	time	11.39	21.69		32.84		45.84	45.84	8 / 1									
reaction time	0.161	interval		10.30		11.15		13.00		# of strides	11.39	10.30	11.15	13.00	21.69	24.15	2.46		
		velocity	8.78	9.71		8.97		7.69	8.73	187.0	8.78	9.71	8.97	7.69	9.22	8.28			
Rajiv, Arokia (IND) (1991)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2018 Asian Games (Jakarta, INA)																			
date	26-Aug-18	time	6.24	11.39	16.63	22.08	27.55	33.15	39.18	45.84	45.84	8 / 4							
reaction time	0.187	interval		5.15	5.24	5.45	5.47	5.60	6.03	6.66		# of strides	11.39	10.69	11.07	12.69	22.08	23.76	1.68
		velocity	8.01	9.71	9.54	9.17	9.14	8.93	8.29	7.51	8.73		8.78	9.35	9.03	7.88	9.06	8.42	
Doom, Alexander (BEL) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2021 Memorial van Damme (Brussels, BEL)																			
date	03-Sep-21	time	6.4	11.3	16.4	21.8	27.4	33.3	39.5	45.84	45.84	7 / 6							
reaction time	0.154	interval		4.90	5.10	5.40	5.60	5.90	6.20	6.34		# of strides	11.30	10.50	11.50	12.54	21.80	24.04	2.24
		velocity	7.81	10.20	9.80	9.26	8.93	8.47	8.06	7.89	8.73		8.85	9.52	8.70	7.97	9.17	8.32	
Sato, Fuga (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2021 All Japan Corporate Championships (Osaka, JPN)																			
date	25-Sep-21	time	11.09	21.80		33.42		45.73	45.84	7 / 1									
reaction time	0.192	interval		10.71		11.62		12.31		# of strides	11.09	10.71	11.62	12.31	21.80	23.93	2.13		
		velocity	9.02	9.34		8.61		8.12	8.73		9.02	9.34	8.61	8.12	9.17	8.36			
Bonevacia, Liamarvin (NED) (1989)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2022 Weltklasse (Zürich, SUI)																			
date	08-Sep-22	time	6.27	11.37	16.61	21.92	27.40	33.13	39.23	45.84	45.84	1 / 7							
reaction time	0.143	interval		5.10	5.24	5.31	5.48	5.73	6.10	6.61		# of strides	11.37	10.55	11.21	12.71	21.92	23.92	2.00
		velocity	7.97	9.80	9.54	9.42	9.12	8.73	8.20	7.56	8.73		8.80	9.48	8.92	7.87	9.12	8.36	
Nielsen, Gustav Lundholm (DEN) (19)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 3 - 2024 European Athletics Championships (Roma, ITA)																			
date	08-Jun-24	time	11.37	21.97		33.38		45.84	45.84	7 / 5									
reaction time	0.146	interval		10.60		11.41		12.46		# of strides	11.37	10.60	11.41	12.46	21.97	23.87	1.90		
		velocity	8.80	9.43		8.76		8.03	8.73		8.80	9.43	8.76	8.03	9.10	8.38			
Schönlebe, Thomas (GDR) (1965)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 4 - 1987 IAAF World Championship (Rome, ITA)																			
date	30-Aug-87	time	11.48	22.00		33.35		45.85	45.85	6 / 2									
reaction time		interval		10.52		11.35		12.50		# of strides	11.48	10.52	11.35	12.50	22.00	23.85	1.85		
		velocity	8.71	9.51		8.81		8.00	8.72	172.5	8.71	9.51	8.81	8.00	9.09	8.39			
Horii, Kosuke (JPN) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 1 - 2015 Japanese National Championships (Niigata, JPN)																			
date	27-Jun-15	time	6.29	11.48	16.75	22.29	28.11	33.81	39.67	45.85	45.85	7 / 4							
reaction time	0.172	interval		5.19	5.27	5.54	5.82	5.70	5.86	6.18	PB	# of strides	11.48	10.81	11.52	12.04	22.29	23.56	1.27
		velocity	7.95	9.63	9.49	9.03	8.59	8.77	8.53	8.09	8.72	183.2	8.71	9.25	8.68	8.31	8.97	8.49	
Janežič, Luka (SLO) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2020 Bauhaus Galan (Stockholm, SWE)																			
date	23-Aug-20	time	6.4	11.5	16.8	22.2	27.9	33.7	39.6	45.85	45.85	6 / 2							
reaction time	0.177	interval		5.10	5.30	5.40	5.70	5.80	5.90	6.25		# of strides	11.50	10.70	11.50	12.15	22.20	23.65	1.45
		velocity	7.81	9.80	9.43	9.26	8.77	8.62	8.47	8.00	8.72		8.70	9.35	8.70	8.23	9.01	8.46	
Mweresa, Boniface (KEN) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 1 - 2022 Commonwealth Games (Birmingham, GBR)																			
date	05-Aug-22	time	6.0	11.0	16.3	21.8	27.5	33.4	39.4	45.85	45.85	4 / 2							
reaction time	0.181	interval		5.00	5.30	5.50	5.70	5.90	6.00	6.45		# of strides	11.00	10.80	11.60	12.45	21.80	24.05	2.25
		velocity	8.33	10.00	9.43	9.09	8.77	8.47	8.33	7.75	8.72		181.0	9.09	9.26	8.62	8.03	9.17	8.32
Carvalho, Lucas (BRA) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 5 - 2024 Olympic Games (Paris, FRA)																			
date	04-Aug-24	time	6.17	11.11	16.21	21.55	27.09	32.90	38.98	45.85	45.85	5 / 7							
reaction time	0.133	interval		4.94	5.10	5.34	5.54	5.81	6.08	6.87		# of strides	11.11	10.44	11.35	12.95	21.55	24.30	2.75
		velocity	8.10	10.12	9.80	9.36	9.03	8.61	8.22	7.28	8.72		180.7	9.00	9.58	8.81	7.72	9.28	8.23

Name (Year)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Canal, David (ESP) (1978)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Semi-Final 2 - 2002 European Championships (Munich, GER)		Graubner (2009) - http://www.fgs.uni-halle.de																	
date	07-Aug-02	time	11.44		21.85		33.22		45.86	45.86	/ 1								
reaction time	0.152	interval			10.41		11.37		12.64		# of strides	11.44	10.41	11.37	12.64	21.85	24.01	2.16	
		velocity	8.74		9.61		8.80		7.91	8.72		8.74	9.61	8.80	7.91	9.15	8.33		
Byrd, Leonard (USA) (1975)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2005 Seiko Super Grand Prix (Yokohama, JPN)		Masaaki (2006) - time analysis in the 400m at the Seiko Super Grand Prix																	
date	19-Sep-05	time	11.34		22.10		33.25	39.28	45.86	45.86	5 / 3								
reaction time		interval			10.76		11.15	6.03	6.58		# of strides	11.34	10.76	11.15	12.61	22.10	23.76	1.66	
		velocity	8.82		9.29		8.97	8.29	7.60	8.72		8.82	9.29	8.97	7.93	9.05	8.42		
Galvan, Matteo (ITA) (1988)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Heat 4 - 2009 IAAF World Championships (Berlin, GER)		Graubner (2009) - biomechanical analyses at the 12th IAAF world championships																	
date	18-Aug-09	time	11.53		22.31		33.50		45.86	45.86	6 / 3								
reaction time	0.150	interval			10.78		11.19		12.36	PB	# of strides	11.53	10.78	11.19	12.36	22.31	23.55	1.24	
		velocity	8.67		9.28		8.94		8.09	8.72		8.67	9.28	8.94	8.09	8.96	8.49		
Borlée, Dylan (BEL) (1992)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2023 Athletissima (Lausanne, SUJ)		Omega Timing (2023) - diamond league race analysis																	
date	30-Jun-23	time	6.19	11.25	16.30	21.52	27.02	32.87	39.04	45.86	45.86	8 / 2							
reaction time	0.131	interval		5.06	5.05	5.22	5.50	5.85	6.17	6.82		# of strides	11.25	10.27	11.35	12.99	21.52	24.34	2.82
		velocity	8.08	9.88	9.90	9.58	9.09	8.55	8.10	7.33	8.72		8.89	9.74	8.81	7.70	9.29	8.22	
Boers, Isayah (NED) (1999)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
National FINAL - 2024 FBK Games (Hengelo, NED)		Omega Timing (2024) - continental tour gold race analysis																	
date	07-Jul-24	time	6.16	11.04	16.00	21.22	26.77	32.63	38.91	45.86	45.86	6 / 1							
reaction time	0.174	interval		4.88	4.96	5.22	5.55	5.86	6.28	6.95		# of strides	11.04	10.18	11.41	13.23	21.22	24.64	3.42
		velocity	8.12	10.25	10.08	9.58	9.01	8.53	7.96	7.19	8.72		9.06	9.82	8.76	7.56	9.43	8.12	
Williamson, Darold (USA) (1983)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2003 USATF National Championships (Palo Alto, CA)		USATF Women's Sprint Development (2003)																	
date	21-Jun-03	time			22.09		33.35	39.27	45.87	45.87	7 / 6								
reaction time		interval					11.26	5.92	6.60		# of strides			11.26	12.52	22.09	23.78	1.69	
		velocity			9.05		8.88	8.45	7.58	8.72				8.88	7.99	9.05	8.41		
Benjamin, Tim (GBR) (1982)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2007 European Cup (Munich, GER)		Graubner (2007) - http://www.fgs.uni-halle.de																	
date	23-Jun-07	time	11.62		22.42		33.63		45.87	45.87	/ 2								
reaction time	0.178	interval			10.80		11.21		12.24		# of strides	11.62	10.80	11.21	12.24	22.42	23.45	1.03	
		velocity	8.61		9.26		8.92		8.17	8.72		8.61	9.26	8.92	8.17	8.92	8.53		
Feliz, Lidio Andres (DOM) (1997)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Heat 6 - 2022 World Athletics Championships (Eugene, OR)		Timing by Seiko (2022) - world athletics championships race analysis																	
date	17-Jul-22	time	11.58		22.24		33.78		45.87	45.87	5 / 3								
reaction time	0.257	interval			10.66		11.54		12.09		# of strides	11.58	10.66	11.54	12.09	22.24	23.63	1.39	
		velocity	8.64		9.38		8.67		8.27	8.72	174.7	8.64	9.38	8.67	8.27	8.99	8.46		
Scotti, Edoardo (ITA) (2000)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Heat 4 - 2022 European Athletics Championships (Munich, GER)		European Athletics (2022) - european athletics championships race analysis																	
date	15-Aug-22	time	11.41		22.08		33.45		45.87	45.87	8 / 3								
reaction time	0.251	interval			10.67		11.37		12.42		# of strides	11.41	10.67	11.37	12.42	22.08	23.79	1.71	
		velocity	8.76		9.37		8.80		8.05	8.72		8.76	9.37	8.80	8.05	9.06	8.41		
Bonevacia, Liemarvin (NED) (1989)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2023 FBK Games (Hengelo, NED)		Omega Timing (2023) - continental tour race analysis																	
date	04-Jun-23	time	6.28	11.28	16.38	21.74	27.26	33.01	39.08	45.87	45.87	5 / 5							
reaction time	0.147	interval		5.00	5.10	5.36	5.52	5.75	6.07	6.79		# of strides	11.28	10.46	11.27	12.86	21.74	24.13	2.39
		velocity	7.96	10.00	9.80	9.33	9.06	8.70	8.24	7.36	182.5	8.87	9.56	8.87	7.78	9.20	8.29		
Zalewski, Karol (POL) (1993)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2023 Kamila Skolimowska Memorial (Silesia, POL)		Omega Timing (2023) - diamond league race analysis																	
date	16-Jul-23	time	6.15	11.15	16.32	21.60	27.19	33.11	39.24	45.87	45.87	1 / 8							
reaction time	0.138	interval		5.00	5.17	5.28	5.59	5.92	6.13	6.63		# of strides	11.15	10.45	11.51	12.76	21.60	24.27	2.67
		velocity	8.13	10.00	9.67	9.47	8.94	8.45	8.16	7.54	8.72		8.97	9.57	8.69	7.84	9.26	8.24	
Mitcham, Rio (GBR) (1999)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
National FINAL - 2024 London Athletics Meet (London, GBR)		Omega Timing (2024) - diamond league race analysis																	
date	20-Jul-24	time	6.23	11.31	16.37	21.61	27.17	33.04	39.17	45.87	45.87	3 / 6							
reaction time	0.156	interval		5.08	5.06	5.24	5.56	5.87	6.13	6.70		# of strides	11.31	10.30	11.43	12.83	21.61	24.26	2.65
		velocity	8.03	9.84	9.88	9.54	8.99	8.52	8.16	7.46	8.72		8.84	9.71	8.75	7.79	9.25	8.24	
Biron, Gilles (FRA) (1995)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Repechage 1 - 2024 Olympic Games (Paris, FRA)		Paris 2024 Olympic Games - Results Book (2024)																	
date	05-Aug-24	time	6.24	11.25	16.28	21.56	27.20	33.05	39.22	45.87	45.87	8 / 2							
reaction time	0.187	interval		5.01	5.03	5.28	5.64	5.85	6.17	6.65		# of strides	11.25	10.31	11.49	12.82	21.56	24.31	2.75
		velocity	8.01	9.98	9.94	9.47	8.87	8.55	8.10	7.52	8.72	178.7	8.89	9.70	8.70	7.80	9.28	8.23	
Kocheryagin, Vyacheslav (URS)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 1991 European Cup (Frankfurt, GER)		Federle (2003) - http://www.fgs.uni-halle.de																	
date	29-Jun-91	time	11.59		22.39		33.59		45.88	45.88	/ 4								
reaction time		interval			10.80		11.20		12.29		# of strides	11.59	10.80	11.20	12.29	22.39	23.49	1.10	
		velocity	8.63		9.26		8.93		8.14	8.72		8.63	9.26	8.93	8.14	8.93	8.51		
Horii, Kosuke (JPN) (1994)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Heat 1 - 2017 Japanese National Championships (Osaka, JPN)		(2017) - tdata-store.com/2017/07/08/post-965/																	

date	23-Jun-17	time	11.49	22.06	33.54	45.88	45.88	3 / 3												
reaction time	0.174	interval		10.57	11.48	12.34	12.34	# of strides	11.49	10.57	11.48	12.34	22.06	23.82	1.76					
		velocity	8.70	9.46	8.71	8.10	8.10	8.72	185.2	8.70	9.46	8.71	8.10	9.07	8.40					
Mihara, Taiki (JPN) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 3 - 2017 Japanese National Championships (Osaka, JPN)																				
date	23-Jun-17	time	11.59	21.83	33.04	45.88	45.88	5 / 2												
reaction time	0.212	interval		10.24	11.21	12.84	12.84	PB	# of strides	11.59	10.24	11.21	12.84	21.83	24.05	2.22				
		velocity	8.63	9.77	8.92	7.79	7.79	8.72	183.0	8.63	9.77	8.92	7.79	9.16	8.32					
Humaida, Bassem (QAT) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
National FINAL - 2019 Doha (Doha, QAT)																				
date	03-May-19	time	11.5	22.3	33.9	45.88	45.88	6 / 1												
reaction time	0.168	interval		10.8	11.6	12.0	12.0	PB	# of strides	11.50	10.80	11.60	11.98	22.30	23.58	1.28				
		velocity	8.70	9.26	8.62	8.35	8.35	8.72	183.0	8.70	9.26	8.62	8.35	8.97	8.48					
Taylor, Christopher (JAM) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2021 Memorial van Damme (Brussels, BEL)																				
date	03-Sep-21	time	6.3	11.3	16.5	22.0	27.5	33.2	39.3	45.88	45.88	2 / 7								
reaction time	0.170	interval		5.00	5.20	5.50	5.50	5.70	6.10	6.58	6.58	# of strides	11.30	10.70	11.20	12.68	22.00	23.88	1.88	
		velocity	7.94	10.00	9.62	9.09	9.09	8.77	8.20	7.60	7.60	8.72	8.85	9.35	8.93	7.89	9.09	8.38		
Sato, Fuga (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 5 - 2022 World Athletics Championships (Eugene, OR)																				
date	17-Jul-22	time	11.25	21.72	33.19	45.88	45.88	5 / 4												
reaction time	0.170	interval		10.47	11.47	12.69	12.69	# of strides	11.25	10.47	11.47	12.69	21.72	24.16	2.44					
		velocity	8.89	9.55	8.72	7.88	7.88	8.72	177.0	8.89	9.55	8.72	7.88	9.21	8.28					
Kijanović, Boško (SRB) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Semi-Final 1 - 2022 European Athletics Championships (Munich, GER)																				
date	16-Aug-22	time	10.86	21.42	32.86	45.88	45.88	7 / 7												
reaction time	0.162	interval		10.56	11.44	13.02	13.02	# of strides	10.86	10.56	11.44	13.02	21.42	24.46	3.04					
		velocity	9.21	9.47	8.74	7.68	7.68	8.72	170.0	9.21	9.47	8.74	7.68	9.34	8.18					
Horigome, Yoshihiro (JPN) (1981)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2005 Seiko Super Grand Prix (Yokohama, JPN)																				
date	19-Sep-05	time	11.47	22.46	33.52	39.36	45.89	45.89	2 / 4											
reaction time		interval		10.99	11.06	5.84	6.53	PB	# of strides	11.47	10.99	11.06	12.37	22.46	23.43	0.97				
		velocity	8.72	9.10	9.04	8.56	7.66	8.72	177.0	8.72	9.10	9.04	8.08	8.90	8.54					
Benjamin, Tim (GBR) (1982)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2006 European Championships (Göteborg, SWE)																				
date	09-Aug-06	time		22.6	33.2	45.89	45.89	1 / 6												
reaction time		interval		10.60	12.69	12.69	12.69	# of strides			22.60	10.60	12.69	22.60	23.29	0.69				
		velocity		8.85	18.87	7.88	7.88	8.72			4.42	9.43	7.88	8.85	8.59					
Sawyers, Chantz (JAM) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2018 IAAF World Junior Championships (Tampere, FIN)																				
date	13-Jul-18	time	6.27	11.25	16.35	21.72	27.23	32.97	39.12	45.89	45.89	4 / 3								
reaction time	0.157	interval		4.98	5.10	5.37	5.51	5.74	6.15	6.77	6.77	# of strides	11.25	10.47	11.25	12.92	21.72	24.17	2.45	
		velocity	7.97	10.04	9.80	9.31	9.07	8.71	8.13	7.39	7.39	8.72	8.89	9.55	8.89	7.74	9.21	8.27		
Walsh, Julian Jrummi (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2018 Asian Games (Jakarta, INA)																				
date	26-Aug-18	time	6.08	11.07	16.17	21.53	27.13	33.04	39.27	45.89	45.89	4 / 5								
reaction time	0.120	interval		4.99	5.10	5.36	5.60	5.91	6.23	6.62	6.62	# of strides	11.07	10.46	11.51	12.85	21.53	24.36	2.83	
		velocity	8.22	10.02	9.80	9.33	8.93	8.46	8.03	7.55	7.55	8.72	9.03	9.56	8.69	7.78	9.29	8.21		
Borlée, Kevin (BEL) (1988)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
National FINAL - 2019 Memorial van Damme (Brussels, BEL)																				
date	06-Sep-19	time	6.4	11.4	16.6	21.9	27.4	33.3	39.3	45.89	45.89	5 / 3								
reaction time		interval		5.0	5.2	5.3	5.5	5.9	6.0	12.6	12.6	# of strides	11.40	10.50	11.40	12.59	21.90	23.99	2.09	
		velocity	7.81	10.00	9.62	9.43	9.09	8.47	8.33	7.94	7.94	8.72	8.77	9.52	8.77	7.94	9.13	8.34		
Scotti, Edoardo (ITA) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2022 Golden Gala Pietro Mennea (Rome, ITA)																				
date	09-Jun-22	time	6.27	11.35	16.49	21.83	27.45	33.27	39.30	45.89	45.89	9 / 7								
reaction time	0.185	interval		5.08	5.14	5.34	5.62	5.82	6.03	6.59	6.59	# of strides	11.35	10.48	11.44	12.62	21.83	24.06	2.23	
		velocity	7.97	9.84	9.73	9.36	8.90	8.59	8.29	7.59	7.59	8.72	8.81	9.54	8.74	7.92	9.16	8.31		
Scotch, Leungo (BOT) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2023 Bauhaus Galan (Stockholm, SWE)																				
date	02-Jul-23	time	6.23	11.31	16.53	21.94	27.57	33.39	39.39	45.89	45.89	3 / 6								
reaction time	0.188	interval		5.08	5.22	5.41	5.63	5.82	6.00	6.50	6.50	# of strides	11.31	10.63	11.45	12.50	21.94	23.95	2.01	
		velocity	8.03	9.84	9.58	9.24	8.88	8.59	8.33	7.69	7.69	8.72	8.84	9.41	8.73	8.00	9.12	8.35		
Patterson, Jacory (USA) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Semi-Final 2 - 2024 USA Olympic Trials (Eugene, OR)																				
date	23-Jun-24	time		10.79	21.27	32.67	45.89	45.89	1 / 8											
reaction time		interval		10.48	11.40	13.22	13.22	# of strides	10.79	10.48	11.40	13.22	21.27	24.62	3.35					
		velocity		9.27	9.54	8.77	7.56	8.72			9.27	9.54	8.77	7.56	9.40	8.12				
Andant, Teo (FRA) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2024 Herculis Meeting International d'Athlétisme (Monaco, MON)																				
date	12-Jul-24	time	6.14	11.08	16.17	21.44	27.09	33.04	39.25	45.89	45.89	1 / 8								
reaction time	0.157	interval		4.94	5.09	5.27	5.65	5.95	6.21	6.64	6.64	# of strides	11.08	10.36	11.60	12.85	21.44	24.45	3.01	
		velocity	8.14	10.12	9.82	9.49	8.85	8.40	8.05	7.53	7.53	8.72	181.0	9.03	9.65	8.62	7.78	9.33	8.18	

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Djhone, Leslie (FRA) (1981)																			
FINAL - 2009 IAAF World Championships (Berlin, GER)																			
date	21-Aug-09	time	11.34		22.04		33.46		45.90	45.90	1 / 8								
reaction time	0.151	interval			10.70		11.42		12.44		# of strides	11.34	10.70	11.42	12.44	22.04	23.86	1.82	
		velocity	8.82		9.35		8.76		8.04	8.71		8.82	9.35	8.76	8.04	9.07	8.38		
Berry, Mike (USA) (1991)																			
FINAL - 2016 USA Olympic Trials (Eugene, OR)																			
date	03-Jul-16	time			22.1		33.4		45.90	45.90	1 / 8								
reaction time	0.249	interval					11.30		12.50		# of strides		22.10	11.30	12.50	22.10	23.80	1.70	
		velocity			9.05		8.85		8.00	8.71		4.52	8.85	8.00	9.05	8.40			
Makwala, Isaac (BOT) (1986)																			
FINAL - 2022 Golden Gala Pietro Mennea (Rome, ITA)																			
date	09-Jun-22	time	6.21	11.18	16.28	21.55	27.06	32.81	38.98	45.90	45.90	7 / 8							
reaction time	0.185	interval		4.97	5.10	5.27	5.51	5.75	6.17	6.92	# of strides	11.18	10.37	11.26	13.09	21.55	24.35	2.80	
		velocity	8.05	10.06	9.80	9.49	9.07	8.70	8.10	7.23	8.71	184.0	8.94	9.64	8.88	7.64	9.28	8.21	
Walsh, Julian Jrummi (JPN) (1996)																			
Heat 1 - 2022 World Athletics Championships (Eugene, OR)																			
date	17-Jul-22	time			11.07		21.63		32.96	45.90	45.90	2 / 4							
reaction time	0.126	interval			10.56		11.33		12.94		# of strides	11.07	10.56	11.33	12.94	21.63	24.27	2.64	
		velocity			9.03		9.47		8.83	7.73	8.71	176.7	9.03	9.47	8.83	7.73	9.25	8.24	
Borlée, Jonathan (BEL) (1988)																			
FINAL - 2022 Memorial van Damme (Brussels, BEL)																			
date	02-Sep-22	time	6.31	11.43	16.67	22.02	27.52	33.28	39.42	45.90	45.90	3 / 4							
reaction time	0.194	interval		5.12	5.24	5.35	5.50	5.76	6.14	6.48	# of strides	11.43	10.59	11.26	12.62	22.02	23.88	1.86	
		velocity	7.92	9.77	9.54	9.35	9.09	8.68	8.14	7.72	8.71	8.75	9.44	8.88	7.92	9.08	8.38		
Pohoriiko, Oleksandr (UKR) (2000)																			
Heat 1 - 2024 European Athletics Championships (Roma, ITA)																			
date	08-Jun-24	time			11.37		21.94		33.28	45.90	45.90	2 / 6							
reaction time	0.169	interval			10.57		11.34		12.62		# of strides	11.37	10.57	11.34	12.62	21.94	23.96	2.02	
		velocity			8.80		9.46		8.82	7.92	8.71	8.80	9.46	8.82	7.92	9.12	8.35		
Grimerud, Andreas (NOR) (2003)																			
Heat 3 - 2024 European Athletics Championships (Roma, ITA)																			
date	08-Jun-24	time			11.62		22.26		33.66	45.90	45.90	9 / 6							
reaction time	0.222	interval			10.64		11.40		12.24	=PB	# of strides	11.62	10.64	11.40	12.24	22.26	23.64	1.38	
		velocity			8.61		9.40		8.77	8.17	8.71	8.61	9.40	8.77	8.17	8.98	8.46		
de Souza, Gerson (BRA) (1959)																			
FINAL - 1983 IAAF World Championships (Helsinki, FIN)																			
date	10-Aug-83	time			21.8				45.91	45.91	2 / 8								
reaction time		interval							24.11		# of strides					21.80	24.11	2.31	
		velocity			9.17				8.30	8.71						9.17	8.30		
Dyldin, Maksim (RUS) (1987)																			
Heat 5 - 2009 IAAF World Championships (Berlin, GER)																			
date	18-Aug-09	time			11.75		22.33		33.42	45.91	45.91	6 / 4							
reaction time	0.172	interval			10.58		11.09		12.49		# of strides	11.75	10.58	11.09	12.49	22.33	23.58	1.25	
		velocity			8.51		9.45		9.02	8.01	8.71	8.51	9.45	9.02	8.01	8.96	8.48		
Kanemaru, Yuzo (JPN) (1987)																			
Heat 2 - 2015 Japanese National Championships (Niigata, JPN)																			
date	27-Jun-15	time	6.32	11.42	16.58	21.92	27.53	33.13	39.18	45.91	45.91	9 / 1							
reaction time	0.187	interval		5.10	5.16	5.34	5.61	5.60	6.05	6.73	# of strides	11.42	10.50	11.21	12.78	21.92	23.99	2.07	
		velocity	7.91	9.80	9.69	9.36	8.91	8.93	8.26	7.43	8.71	182.0	8.76	9.52	8.92	7.82	9.12	8.34	
Cedenio, Machel (TTO) (1995)																			
Semi-Final 3 - 2017 IAAF World Championships (London, GBR)																			
date	06-Aug-17	time			10.83		21.01		32.37	38.56	45.69	45.91							
reaction time	0.221	interval			10.18		11.36		6.19	7.13	# of strides	10.83	10.18	11.36	13.32	21.01	24.68	3.67	
		velocity			9.23		9.82		8.80	8.08	8.71	168.4	9.23	9.82	8.80	7.51	9.52	8.10	
Mwera, Bonface (KEN) (1993)																			
Heat 1 - 2023 World Athletics Championships (Budapest, HUN)																			
date	20-Aug-23	time			11.66		22.48		33.85	45.91	45.91	3 / 7							
reaction time	0.190	interval			10.82		11.37		12.06		# of strides	11.66	10.82	11.37	12.06	22.48	23.43	0.95	
		velocity			8.58		9.24		8.80	8.29	8.71	8.58	9.24	8.80	8.29	8.90	8.54		
Biron, Gilles (FRA) (1995)																			
Semi-Final 3 - 2024 European Athletics Championships (Roma, ITA)																			
date	09-Jun-24	time			11.35		21.87		33.13	45.91	45.91	8 / 4							
reaction time	0.160	interval			10.52		11.26		12.78		# of strides	11.35	10.52	11.26	12.78	21.87	24.04	2.17	
		velocity			8.81		9.51		8.88	7.82	8.71	181.0	8.81	9.51	8.88	7.82	9.14	8.32	
Juantorena, Alberto (CUB) (1950)																			
Quarter-Final 2 - 1976 Olympic Games (Montreal, CAN)																			
date	26-Jul-76	time			22.6		34.1		45.92	45.92	7 / 2								
reaction time		interval					11.5		11.82		# of strides			11.50	11.82	22.60	23.32	0.72	
		velocity			8.85		8.70		8.46	8.71				8.70	8.46	8.85	8.58		
Attene, Alessandro (ITA) (1977)																			
FINAL - 2001 European Cup (Bremen, GER)																			

date	23-Jun-01	time	11.47	22.11	33.59	45.92	45.92	/ 5											
reaction time		interval		10.64	11.48	12.33	12.33	# of strides	11.47	10.64	11.48	12.33	22.11	23.81	1.70				
		velocity	8.72	9.40	8.71	8.11	8.71		8.72	9.40	8.71	8.11	9.05	8.40					
McKee, Paul (IRL) (1977)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 1 - 2002 European Championships (Munich, GER)																			
date	07-Aug-02	time	11.38	22.02	33.25	45.92	45.92	/ 5											
reaction time	0.154	interval		10.64	11.23	12.67	12.67	# of strides	11.38	10.64	11.23	12.67	22.02	23.90	1.88				
		velocity	8.79	9.40	8.90	7.89	8.71		8.79	9.40	8.90	7.89	9.08	8.37					
Kikaya, Gary (COD) (1980)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2008 IAAF World Athletic Final (Stuttgart, GER)																			
date	13-Sep-08	time	11.15	21.65	33.09	45.92	45.92	2 / 6											
reaction time	0.167	interval		10.50	11.44	12.83	12.83	# of strides	11.15	10.50	11.44	12.83	21.65	24.27	2.62				
		velocity	8.97	9.52	8.74	7.79	8.71		8.97	9.52	8.74	7.79	9.24	8.24					
Mathieu, Michael (BAH) (1984)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2009 ISTAF (Berlin, GER)																			
date	14-Jun-09	time	11.06	21.72	33.05	45.92	45.92	7 / 3											
reaction time	0.316	interval		10.66	11.33	12.87	12.87	# of strides	11.06	10.66	11.33	12.87	21.72	24.20	2.48				
		velocity	9.04	9.38	8.83	7.77	8.71		9.04	9.38	8.83	7.77	9.21	8.26					
Nyongani, Young Talkmore (ZIM) (1981)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 1 - 2009 IAAF World Championships (Berlin, GER)																			
date	18-Aug-09	time	11.29	21.89	32.37	45.92	45.92	8 / 5											
reaction time	0.178	interval		10.60	10.48	13.55	13.55	# of strides	11.29	10.60	10.48	13.55	21.89	24.03	2.14				
		velocity	8.86	9.43	9.54	7.38	8.71		8.86	9.43	9.54	7.38	9.14	8.32					
Santos, Luguelin (DOM) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2022 Bislett Games (Oslo, NOR)																			
date	16-Jun-22	time	6.39	11.43	16.53	21.73	27.23	33.14	39.32	45.92	45.92	1 / 7							
reaction time	0.174	interval		5.04	5.10	5.20	5.50	5.91	6.18	6.60	6.60	# of strides	11.43	10.30	11.41	12.78	21.73	24.19	2.46
		velocity	7.82	9.92	9.80	9.62	9.09	8.46	8.09	7.58	8.71		8.75	9.71	8.76	7.82	9.20	8.27	
Maslák, Pavel (CZE) (1991)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 4 - 2022 European Athletics Championships (Munich, GER)																			
date	15-Aug-22	time	11.11	21.47	32.88	45.92	45.92	4 / 4											
reaction time	0.230	interval		10.36	11.41	13.04	13.04	# of strides	11.11	10.36	11.41	13.04	21.47	24.45	2.98				
		velocity	9.00	9.65	8.76	7.67	8.71		9.00	9.65	8.76	7.67	9.32	8.18					
Krsek, Matěj (CZE) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 2 - 2022 European Athletics Championships (Munich, GER)																			
date	16-Aug-22	time	11.39	22.01	33.55	45.92	45.92	8 / 5											
reaction time	0.171	interval		10.62	11.54	12.37	12.37	# of strides	11.39	10.62	11.54	12.37	22.01	23.91	1.90				
		velocity	8.78	9.42	8.67	8.08	8.71		173.0	8.78	9.42	8.67	8.08	9.09	8.36				
Schneider, Patrick (GER) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 3 - 2022 European Athletics Championships (Munich, GER)																			
date	16-Aug-22	time	11.52	21.89	33.26	45.92	45.92	7 / 4											
reaction time	0.180	interval		10.37	11.37	12.66	12.66	# of strides	11.52	10.37	11.37	12.66	21.89	24.03	2.14				
		velocity	8.68	9.64	8.80	7.90	8.71		169.2	8.68	9.64	8.80	7.90	9.14	8.32				
Spitz, Lionel (SUI) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2023 Athletissima (Lausanne, SUI)																			
date	30-Jun-23	time	6.39	11.57	16.86	22.28	27.81	33.59	39.49	45.92	45.92	3 / 3							
reaction time	0.146	interval		5.18	5.29	5.42	5.53	5.78	5.90	6.43	6.43	# of strides	11.57	10.71	11.31	12.33	22.28	23.64	1.36
		velocity	7.82	9.65	9.45	9.23	9.04	8.65	8.47	7.78	8.71		8.64	9.34	8.84	8.11	8.98	8.46	
Scotti, Edoardo (ITA) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 3 - 2024 European Athletics Championships (Roma, ITA)																			
date	09-Jun-24	time	11.27	21.89	33.23	45.92	45.92	4 / 5											
reaction time	0.192	interval		10.62	11.34	12.69	12.69	# of strides	11.27	10.62	11.34	12.69	21.89	24.03	2.14				
		velocity	8.87	9.42	8.82	7.88	8.71		175.5	8.87	9.42	8.82	7.88	9.14	8.32				
Okezie, Chidi (NGR) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Repechage 2 - 2024 Olympic Games (Paris, FRA)																			
date	05-Aug-24	time	6.36	11.47	16.71	22.14	27.72	33.49	39.50	45.92	45.92	4 / 5							
reaction time	0.172	interval		5.11	5.24	5.43	5.58	5.77	6.01	6.42	6.42	# of strides	11.47	10.67	11.35	12.43	22.14	23.78	1.64
		velocity	7.86	9.78	9.54	9.21	8.96	8.67	8.32	7.79	8.71		8.72	9.37	8.81	8.05	9.03	8.41	
Kitagawa, Takamasa (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2016 Japanese National Championships (Nagoya, JPN)																			
date	25-Jun-16	time	6.30	11.46	16.80	22.37	28.09	33.84	39.78	45.93	45.93	6 / 3							
reaction time	0.181	interval		5.16	5.34	5.57	5.72	5.75	5.94	6.15	6.15	# of strides	11.46	10.91	11.47	12.09	22.37	23.56	1.19
		velocity	7.94	9.69	9.36	8.98	8.74	8.70	8.42	8.13	8.71		8.73	9.17	8.72	8.27	8.94	8.49	
Mweresa, Boniface (KEN) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 2 - 2017 IAAF World Championships (London, GBR)																			
date	06-Aug-17	time	10.76	21.26	32.72	38.92	45.70	45.70	45.93	3 / 8									
reaction time	0.234	interval		10.50	11.46	6.20	6.78	6.78	6.78	6.78	6.78	# of strides	10.76	10.50	11.46	12.98	21.26	24.44	3.18
		velocity	9.29	9.52	8.73	8.06	7.37	8.71		182.3	9.29	9.52	8.73	7.70	9.41	8.18			
Taplin, Bralon (GRN) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2019 Shanghai (Shanghai, CHN)																			
date	18-May-19	time	11.7	22.0	32.8	45.93	45.93	6 / 5											
reaction time	0.164	interval		10.3	10.8	13.1	13.1	# of strides	11.70	10.30	10.80	13.13	22.00	23.93	1.93				
		velocity	8.55	9.71	9.26	7.62	8.71		182.0	8.55	9.71	9.26	7.62	9.09	8.36				

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Hudson-Smith, Matthew (GBR) (1994)																		
FINAL - 2021 Golden Gala Pietro Mennea (Florence, ITA)																		
date	10-Jun-21	time	6.5	11.6	16.9	22.3	27.8	33.4	39.4	45.93	4 / 3							
reaction time	0.131	interval	5.10	5.30	5.40	5.50	5.60	6.00	6.53		# of strides	11.60	10.70	11.10	12.53	22.30	23.63	1.33
		velocity	7.69	9.80	9.43	9.26	9.09	8.93	8.33	8.71		8.62	9.35	9.01	7.98	8.97	8.46	
Omega Timing (2021) - diamond league race analysis																		
Stewart, Trevor (USA) (1997)																		
FINAL - 2022 FBK Games (Hengelo, NED)																		
date	06-Jun-22	time	6.2	11.3	16.5	21.9	27.6	33.4	39.4	45.93	4 / 3							
reaction time	0.148	interval	5.10	5.20	5.40	5.70	5.80	6.00	6.53		# of strides	11.30	10.60	11.50	12.53	21.90	24.03	2.13
		velocity	8.06	9.80	9.62	9.26	8.77	8.62	8.33	8.71		8.85	9.43	8.70	7.98	9.13	8.32	
Omega Timing (2022) - continental tour race analysis																		
Makwala, Isaac (BOT) (1986)																		
Heat 4 - 2022 World Athletics Championships (Eugene, OR)																		
date	17-Jul-22	time			11.24		21.58		33.00	45.93	2 / 3							
reaction time	0.193	interval			10.34		11.42		12.93		# of strides	11.24	10.34	11.42	12.93	21.58	24.35	2.77
		velocity			8.90		9.67		8.76	8.71		183.2	8.90	9.67	8.76	7.73	9.27	8.21
Timing by Seiko (2022) - world athletics championships race analysis																		
Haydock-Wilson, Alex (GBR) (1999)																		
National FINAL - 2022 Weltklasse (Zürich, SUI)																		
date	08-Sep-22	time	6.14	11.15	16.43	21.79	27.23	32.92	39.07	45.93	6 / 5							
reaction time	0.145	interval	5.01	5.28	5.36	5.44	5.69	6.15	6.86		# of strides	11.15	10.64	11.13	13.01	21.79	24.14	2.35
		velocity	8.14	9.98	9.47	9.33	9.19	8.79	8.13	8.71		179.0	8.97	9.40	8.98	7.69	9.18	8.29
Omega Timing (2022) - diamond league race analysis																		
Sacoor, Jonathan (BEL) (1999)																		
FINAL - 2024 Memorial van damme (Brussels, BEL)																		
date	13-Sep-24	time	6.16	11.08	16.18	21.37	26.88	32.72	38.98	45.93	1 / 6							
reaction time	0.202	interval	4.92	5.10	5.19	5.51	5.84	6.26	6.95		# of strides	11.08	10.29	11.35	13.21	21.37	24.56	3.19
		velocity	8.12	10.16	9.80	9.63	9.07	8.56	7.99	8.71		172.0	9.03	9.72	8.81	7.57	9.36	8.14
Omega Timing (2024) - diamond league race analysis																		
Rhoden, George (JAM) (1926)																		
FINAL - 1950 International Athletics Meeting (Eskilstuna, SWE)																		
date	22-Aug-50	time			20.9				45.8	45.8	1 / 1							
reaction time		interval							24.9	WR	# of strides					20.90	24.90	4.00
		velocity			9.57				8.03	8.73						9.57	8.03	
Drake (1967) - der schnellste sprint der geschichte																		
Kaufmann, Carl (FRG) (1936)																		
FINAL - 1959 ???? (Köln, FRG) (500m track)																		
date	19-Sep-59	time			22.3				45.8	45.8	1 / 1							
reaction time		interval							23.5	AR	# of strides		22.30		45.80	22.30	23.50	1.20
		velocity			8.97				8.51	8.73			4.48		2.18	8.97	8.51	
Quercentani (2000). Athletics: A history of modern track and field athletics (1860-2000)																		
van Branteghem, Cédric (BEL) (1979)																		
Semi-Final 2 - 2002 European Championships (Munich, GER)																		
date	07-Aug-02	time			11.22		21.70		33.22	45.94	45.94	1 / 2						
reaction time	0.199	interval			10.48		11.52		12.72	PB	# of strides	11.22	10.48	11.52	12.72	21.70	24.24	2.54
		velocity			8.91		9.54		8.68	8.71		8.91	9.54	8.68	7.86	9.22	8.25	
Graubner (2009) - http://www.fgs.uni-halle.de																		
van Branteghem, Cédric (BEL) (1979)																		
Heat 1 - 2009 IAAF World Championships (Berlin, GER)																		
date	18-Aug-09	time			11.26		21.46		32.92	45.94	45.94	2 / 6						
reaction time	0.155	interval			10.20		11.46		13.02		# of strides	11.26	10.20	11.46	13.02	21.46	24.48	3.02
		velocity			8.88		9.80		8.73	8.71		8.88	9.80	8.73	7.68	9.32	8.17	
Graubner (2009) - biomechanical analyses at the 12th IAAF world championships																		
Hirose, Hideyuki (JPN) (1989)																		
Heat 3 - 2015 Japanese National Championships (Niigata, JPN)																		
date	27-Jun-15	time	6.29	11.28	16.42	21.76	27.42	33.23	39.32	45.94	7 / 1							
reaction time	0.151	interval	4.99	5.14	5.34	5.66	5.81	6.09	6.62		# of strides	1.28	20.48	11.47	12.71	21.76	24.18	2.42
		velocity	7.95	10.02	9.73	9.36	8.83	8.61	8.21	8.71		179.0	78.13	4.88	8.72	7.87	9.19	8.27
Kohei (2015) - 400m race analysis of male & female at major 2015 competitions																		
Ito, Rikiya (JPN) (1998)																		
FINAL - 2020 Japanese National Championships (Niigata, JPN)																		
date	02-Oct-20	time	6.16	11.19	16.33	21.82	27.44	33.31	39.37	45.94	4 / 1							
reaction time	0.136	interval	5.03	5.14	5.49	5.62	5.87	6.06	6.57		# of strides	11.19	10.63	11.49	12.63	21.82	24.12	2.30
		velocity	8.12	9.94	9.73	9.11	8.90	8.52	8.25	8.71		187.2	8.94	9.41	8.70	7.92	9.17	8.29
Yamanaka (2020) - 400m race analysis of men and women during 2020 season																		
Suzuki, Aoto (JPN) (2001)																		
B Final - 2021 Denka Athletics Challenge Cup (Niigata, JPN)																		
date	06-Jun-21	time	6.08	10.96	15.98	21.31	26.83	32.70	38.93	45.94	8 / 2							
reaction time		interval	4.88	5.02	5.33	5.52	5.87	6.23	7.01	PB	# of strides	10.96	10.35	11.39	13.24	21.31	24.63	3.32
		velocity	8.22	10.25	9.96	9.38	9.06	8.52	8.03	8.71		178.0	9.12	9.66	8.78	7.55	9.39	8.12
Yamanaka (2021) - race analysis of men's and women's 400m and 300m races in 2021 competition																		
Prevot, Loïc (FRA) (1998)																		
FINAL - 2022 Meeting de Paris (Paris, FRA)																		
date	16-Jun-22	time	6.05	10.99	16.18	21.55	27.21	33.12	39.24	45.94	3 / 6							
reaction time	0.152	interval	4.94	5.19	5.37	5.66	5.91	6.12	6.70		# of strides	10.99	10.56	11.57	12.82	21.55	24.39	2.84
		velocity	8.26	10.12	9.63	9.31	8.83	8.46	8.17	8.71		171.0	9.10	9.47	8.64	7.80	9.28	8.20
Omega Timing (2022) - diamond league race analysis																		
van Branteghem, Cédric (BEL) (1979)																		
FINAL - 2002 European Championships (Munich, GER)																		
date	08-Aug-02	time			11.30		21.75		33.18	45.95	45.95	1 / 6						
reaction time	0.201	interval			10.45		11.43		12.77		# of strides	11.30	10.45	11.43	12.77	21.75	24.20	2.45
		velocity			8.85		9.57		8.75	8.71		8.85	9.57	8.75	7.83	9.20	8.26	
Graubner (2009) - http://www.fgs.uni-halle.de																		
Clarke, Davian (JAM) (1976)																		
FINAL - 2005 Seiko Super Grand Prix (Yokohama, JPN)																		
Masaaki (2006) - time analysis in the 400m at the Seiko Super Grand Prix																		

date	19-Sep-05	time	11.22	21.63	32.75	38.95	45.95	45.95	6 / 5										
reaction time		interval		10.41	11.12	6.20	7.00		# of strides	11.22	10.41	11.12	13.20	21.63	24.32	2.69			
		velocity	8.91	9.61	8.99	8.06	7.14	8.71		8.91	9.61	8.99	7.58	9.25	8.22				
Swillims, Bastian (GER) (1982)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2007 European Cup (Munich, GER)																			
date	23-Jun-07	time	11.38	21.83	33.38	45.95	45.95	45.95	6 / 3										
reaction time	0.151	interval		10.45	11.55	12.57			# of strides	11.38	10.45	11.55	12.57	21.83	24.12	2.29			
		velocity	8.79	9.57	8.66	7.96	8.71			8.79	9.57	8.66	7.96	9.16	8.29				
Obuchi, Mizuki (JPN) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 1 - 2017 Japanese National Championships (Osaka, JPN)																			
date	23-Jun-17	time	11.50	22.19	33.79	45.95	45.95	45.95	6 / 4										
reaction time	0.190	interval		10.69	11.60	12.16			# of strides	11.50	10.69	11.60	12.16	22.19	23.76	1.57			
		velocity	8.70	9.35	8.62	8.22	8.71			188.5	8.70	9.35	8.62	8.22	9.01	8.42			
Sato, Kentaro (JPN) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2017 Japanese National Championships (Osaka, JPN)																			
date	24-Jun-17	time	6.17	11.17	16.14	21.41	26.89	32.72	39.02	45.95	5 / 2								
reaction time	0.176	interval		5.00	4.97	5.27	5.48	5.83	6.30	6.93	# of strides	11.17	10.24	11.31	13.23	21.41	24.54	3.13	
		velocity	8.10	10.00	10.06	9.49	9.12	8.58	7.94	7.22		183.0	8.95	9.77	8.84	7.56	9.34	8.15	
Re, Davide (ITA) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 3 - 2017 IAAF World Championships (London, GBR)																			
date	06-Aug-17	time	11.13	21.80	33.13	39.19	45.76	45.95	45.95	4 / 8									
reaction time	0.186	interval		10.67	11.33	6.06	6.57		# of strides	11.13	10.67	11.33	12.63	21.80	23.96	2.16			
		velocity	8.98	9.37	8.83	8.25	7.61	8.71		179.1	8.98	9.37	8.83	7.92	9.17	8.35			
Sato, Kentaro (JPN) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Final - 2021 Denka Athletics Challenge Cup (Niigata, JPN)																			
date	06-Jun-21	time	6.17	11.07	16.13	21.35	26.89	32.90	39.25	45.95	3 / 2								
reaction time		interval		4.90	5.06	5.22	5.54	6.01	6.35	6.70	# of strides	11.07	10.28	11.55	13.05	21.35	24.60	3.25	
		velocity	8.10	10.20	9.88	9.58	9.03	8.32	7.87	7.46		9.03	9.73	8.66	7.66	9.37	8.13		
Re, Davide (ITA) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2023 Athletissima (Lausanne, SU1)																			
date	30-Jun-23	time	6.38	11.57	16.86	22.25	27.79	33.55	39.52	45.95	2 / 4								
reaction time	0.161	interval		5.19	5.29	5.39	5.54	5.76	5.97	6.43	# of strides	11.57	10.68	11.30	12.40	22.25	23.70	1.45	
		velocity	7.84	9.63	9.45	9.28	9.03	8.68	8.38	7.78		8.64	9.36	8.85	8.06	8.99	8.44		
Juantorena, Alberto (CUB) (1950)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Quarter-Final 1 - 1972 Olympic Games (Munich, FRG)																			
date	04-Sep-72	time	12.2	23.0	34.0	46.00	45.96	45.96	2 / 1										
reaction time		interval		10.80	11.00	12.00			# of strides	12.20	10.80	11.00	12.00	23.00	23.00	0.00			
		velocity	8.20	9.26	9.09	8.33	8.70			8.20	9.26	9.09	8.33	8.70	8.70				
Kimura, Kazushi (JPN) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 3 - 2015 Japanese National Championships (Niigata, JPN)																			
date	27-Jun-15	time	6.57	11.75	17.12	22.53	28.10	33.61	39.47	45.96	8 / 2								
reaction time	0.181	interval		5.18	5.37	5.41	5.57	5.51	5.86	6.49	# of strides	11.75	10.78	11.08	12.35	22.53	23.43	0.90	
		velocity	7.61	9.65	9.31	9.24	8.98	9.07	8.53	7.70		184.0	8.51	9.28	9.03	8.10	8.88	8.54	
Cowan, Dwayne (GBR) (1985)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 1 - 2017 IAAF World Championships (London, GBR)																			
date	06-Aug-17	time	10.80	21.18	32.64	38.89	45.82	45.96	45.96	8 / 8									
reaction time	0.144	interval		10.38	11.46	6.25	6.93		# of strides	10.80	10.38	11.46	13.18	21.18	24.64	3.46			
		velocity	9.26	9.63	8.73	8.00	7.22	8.70		168.3	9.26	9.63	8.73	7.59	9.44	8.12			
Scotch, Leungo (BOT) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 1 - 2023 World Athletics Championships (Budapest, HUN)																			
date	22-Aug-23	time	11.23	21.56	33.09	45.96	45.96	45.96	3 / 8										
reaction time	0.162	interval		10.33	11.53	12.87			# of strides	11.23	10.33	11.53	12.87	21.56	24.40	2.84			
		velocity	8.90	9.68	8.67	7.77	8.70			8.90	9.68	8.67	7.77	9.28	8.20				
Newhouse, Fred (USA) (1948)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Quarter-Final 4 - 1976 Olympic Games (Montreal, CAN)																			
date	26-Jul-76	time	21.8	33.0	45.97	45.97	45.97	45.97	1 / 1										
reaction time		interval		11.2	12.97				# of strides					11.20	12.97	21.80	24.17	2.37	
		velocity	9.17	8.93	7.71	8.70								8.93	7.71	9.17	8.27		
Plawgo, Marek (POL) (1981)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 3 - 2002 European Championships (Munich, GER)																			
date	06-Aug-02	time	11.61	22.40	33.76	46.97	45.97	45.97	1 / 1										
reaction time	0.154	interval		10.79	11.36	13.21			# of strides	11.61	10.79	11.36	13.21	22.40	24.57	2.17			
		velocity	8.61	9.27	8.80	7.57	8.70			8.61	9.27	8.80	7.57	8.93	8.14				
Wieruszewski, Rafel (POL) (1981)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2006 European Championships (Göteborg, SWE)																			
date	09-Aug-06	time	22.4	33.0	45.97	45.97	45.97	45.97	1 / 7										
reaction time		interval		10.60	12.97				# of strides					22.40	10.60	12.97	22.40	23.57	1.17
		velocity	8.93	18.87	7.71	8.70								4.46	9.43	7.71	8.93	8.49	
Wissman, Johan (SWE) (1982)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2009 ISTAF (Berlin, GER)																			
date	14-Jun-09	time	11.35	21.74	33.09	45.97	45.97	45.97	5 / 4										
reaction time	0.273	interval		10.39	11.35	12.88			# of strides	11.35	10.39	11.35	12.88	21.74	24.23	2.49			
		velocity	8.81	9.62	8.81	7.76	8.70			8.81	9.62	8.81	7.76	9.20	8.25				

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Walsh, Julian Jrummi (JPN) (1996)																			
FINAL - 2018 Japanese National Championships (Yamaguchi, JPN)																			
date	23-Jun-18	time	6.04	11.05	16.17	21.54	27.20	33.17	39.39	45.97	45.97	5 / 1							
reaction time	0.143	interval		5.01	5.12	5.37	5.66	5.97	6.22	6.58		# of strides	11.05	10.49	11.63	12.80	21.54	24.43	2.89
		velocity	8.28	9.98	9.77	9.31	8.83	8.38	8.04	7.60	8.70	179.5	9.05	9.53	8.60	7.81	9.29	8.19	
Jinushi, Naohiro (JPN) (2001)																			
FINAL - 2023 Japanese National Championships (Osaka, JPN)																			
date	04-Jun-23	time	6.46	11.85	17.32	22.83	28.37	34.00	39.78	45.97	45.97	9 / 5							
reaction time	0.149	interval		5.39	5.47	5.51	5.54	5.63	5.78	6.19		# of strides	11.85	10.98	11.17	11.97	22.83	23.14	0.31
		velocity	7.74	9.28	9.14	9.07	9.03	8.88	8.65	8.08	8.70	8.44	9.11	8.95	8.35	8.76	8.64		
Watkin, Deandre (JAM) (2002)																			
Heat 1 - 2024 Olympic Games (Paris, FRA)																			
date	04-Aug-24	time	6.14	11.02	16.07	21.46	27.13	32.95	39.14	45.97	45.97	5 / 7							
reaction time	0.190	interval		4.88	5.05	5.39	5.67	5.82	6.19	6.83		# of strides	11.02	10.44	11.49	13.02	21.46	24.51	3.05
		velocity	8.14	10.25	9.90	9.28	8.82	8.59	8.08	7.32	8.70	180.0	9.07	9.58	8.70	7.68	9.32	8.16	
Dimótsios, Stilianós (GRE) (1974)																			
Semi-Final 1 - 2002 European Championships (Munich, GER)																			
date	07-Aug-02	time		11.77		22.60		33.91		45.98	45.98	/ 6							
reaction time	0.153	interval				10.83		11.31		12.07	PB	# of strides	11.77	10.83	11.31	12.07	22.60	23.38	0.78
		velocity		8.50		9.23		8.84		8.29	8.70	8.50	9.23	8.84	8.29	8.85	8.55		
Hirose, Hideyuki (JPN) (1989)																			
B FINAL - 2009 Shizuoka International Athletics Meeting (Fukuori, JPN)																			
date	03-May-09	time	6.31	11.71	17.02	22.50	28.10	33.86	39.77	45.98	45.98	/ 1							
reaction time		interval		5.40	5.31	5.48	5.60	5.76	5.91	6.21		# of strides	11.71	10.79	11.36	12.12	22.50	23.48	0.98
		velocity	7.92	9.26	9.42	9.12	8.93	8.68	8.46	8.05	8.70	8.54	9.27	8.80	8.25	8.89	8.52		
Ishitsuka, Yusuke (JPN) (1987)																			
FINAL - 2014 Shizuoka International Athletics Meeting (Fukuori, JPN)																			
date	03-May-14	time	6.12	11.24	16.35	21.72	27.32	33.20	39.37	45.98	45.98	/ 2							
reaction time		interval		5.12	5.11	5.37	5.60	5.88	6.17	6.61		# of strides	11.24	10.48	11.48	12.78	21.72	24.26	2.54
		velocity	8.17	9.77	9.78	9.31	8.93	8.50	8.10	7.56	8.70	8.90	9.54	8.71	7.82	9.21	8.24		
Kitakani, Naoki (JPN) (1998)																			
B FINAL - 2018 Shizuoka International Meeting (Fukuori, JPN)																			
date	03-May-18	time	6.23	11.43	16.70	22.15	27.84	33.71	39.71	45.98	45.98	8 / 2							
reaction time	0.180	interval		5.20	5.27	5.45	5.69	5.87	6.00	6.27	PB	# of strides	11.43	10.72	11.56	12.27	22.15	23.83	1.68
		velocity	8.03	9.62	9.49	9.17	8.79	8.52	8.33	7.97	8.70	8.75	9.33	8.65	8.15	9.03	8.39		
Makwala, Isaac (BOT) (1986)																			
FINAL - 2022 Müller Birmingham Diamond League (Birmingham, GBR)																			
date	21-May-22	time	6.23	11.29	16.50	21.91	27.46	33.19	39.23	45.98	45.98	7 / 5							
reaction time	0.187	interval		5.06	5.21	5.41	5.55	5.73	6.04	6.75		# of strides	11.29	10.62	11.28	12.79	21.91	24.07	2.16
		velocity	8.03	9.88	9.60	9.24	9.01	8.73	8.28	7.41	8.70	181.7	8.86	9.42	8.87	7.82	9.13	8.31	
Cox, Anthony (JAM) (2000)																			
Semi-Final 1 - 2022 Commonwealth Games (Birmingham, GBR)																			
date	05-Aug-22	time	6.4	11.4	16.7	22.2	27.8	33.6	39.6	45.98	45.98	5 / 3							
reaction time	0.202	interval		5.00	5.30	5.50	5.60	5.80	6.00	6.38		# of strides	11.40	10.80	11.40	12.38	22.20	23.78	1.58
		velocity	7.81	10.00	9.43	9.09	8.93	8.62	8.33	7.84	8.70	176.5	8.77	9.26	8.77	8.08	9.01	8.41	
Hall, Quincy (USA) (1998)																			
FINAL - 2024 Seashore Doha Meeting (Doha, QAT)																			
date	10-May-24	time	6.36	11.49	16.83	22.40	28.07	33.89	39.72	45.98	45.98	4 / 7							
reaction time	0.186	interval		5.13	5.34	5.57	5.67	5.82	5.83	6.26		# of strides	11.49	10.91	11.49	12.09	22.40	23.58	1.18
		velocity	7.86	9.75	9.36	8.98	8.82	8.59	8.58	7.99	8.70	8.70	9.17	8.70	8.27	8.93	8.48		
Parks, Maxie (USA) (1951)																			
Quarter-Final 3 - 1976 Olympic Games (Montreal, CAN)																			
date	26-Jul-76	time				22.1		33.3		45.99	45.99	2 / 3							
reaction time		interval						11.2		12.69		# of strides			11.20	12.69	22.10	23.89	1.79
		velocity				9.05		8.93		7.88	8.70				8.93	7.88	9.05	8.37	
Dabrowski, Daniel (POL) (1983)																			
FINAL - 2006 Seiko Super Grand Prix (Yokohama, JPN)																			
date	24-Sep-06	time	6.2	11.3	16.6	22.2	28.0	33.9	39.8	45.99	45.99	4 / 2							
reaction time		interval		5.10	5.30	5.60	5.80	5.90	5.90	6.19		# of strides	11.30	10.90	11.70	12.09	22.20	23.79	1.59
		velocity	8.06	9.80	9.43	8.93	8.62	8.47	8.47	8.08	8.70	8.85	9.17	8.55	8.27	9.01	8.41		
Sato, Fuga (JPN) (1996)																			
Heat 1 - 2017 Japanese National Championships (Osaka, JPN)																			
date	23-Jun-17	time		11.37		21.84		33.23		45.99	45.99	7 / 5							
reaction time	0.193	interval				10.47		11.39		12.76	PB	# of strides	11.37	10.47	11.39	12.76	21.84	24.15	2.31
		velocity		8.80		9.55		8.78		7.84	8.70	178.2	8.80	9.55	8.78	7.84	9.16	8.28	
Bamidele, Emmanuel (NGR) (1999)																			
National FINAL - 2019 Doha (Doha, QAT)																			
date	03-May-19	time		11.2		21.6		33.2		45.99	45.99	4 / 2							
reaction time	0.185	interval				10.4		11.6		12.8		# of strides	11.20	10.40	11.60	12.79	21.60	24.39	2.79
		velocity		8.93		9.62		8.62		7.82	8.70	8.93	9.62	8.62	7.82	9.26	8.20		
Beck, Alex (AUS) (1992)																			
Heat 5 - 2022 World Athletics Championships (Eugene, OR)																			

date	17-Jul-22	time	11.24	21.77	33.30	45.99	45.99	6 / 5										
reaction time	0.170	interval		10.53	11.53	12.69	12.69	# of strides	11.24	10.53	11.53	12.69	21.77	24.22	2.45			
		velocity	8.90	9.50	8.67	7.88	8.70	175.0	8.90	9.50	8.67	7.88	9.19	8.26				
Allen, Nathon (JAM) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 3 - 2022 Commonwealth Games (Birmingham, GBR)																		
date	05-Aug-22	time	6.1	11.0	16.3	21.7	27.2	33.2	39.3	45.99	45.99	5 / 2						
reaction time	0.155	interval		4.90	5.30	5.40	5.50	6.00	6.10	6.69	# of strides	11.00	10.70	11.50	12.79	21.70	24.29	2.59
		velocity	8.20	10.20	9.43	9.26	9.09	8.33	8.20	7.47	169.0	9.09	9.35	8.70	7.82	9.22	8.23	
Krsek, Matěj (CZE) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Heat 6 - 2023 World Athletics Championships (Budapest, HUN)																		
date	20-Aug-23	time	6.1	11.69	22.45	33.81	45.99	45.99	3 / 6									
reaction time	0.147	interval		10.76	11.36	12.18	12.18	8.70	# of strides	11.69	10.76	11.36	12.18	22.45	23.54	1.09		
		velocity	8.55	9.29	8.80	8.21	8.70	8.70	169.0	8.55	9.29	8.80	8.21	8.91	8.50			
Litvin, Mikhail (KAZ) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Heat 4 - 2022 World Athletics Championships (Eugene, OR)																		
date	17-Jul-22	time	6.1	11.33	21.49	33.27	46.00	46.00	8 / 4									
reaction time	0.206	interval		10.16	11.78	12.73	12.73	8.70	# of strides	11.33	10.16	11.78	12.73	21.49	24.51	3.02		
		velocity	8.83	9.84	8.49	7.86	8.70	8.70	169.0	8.83	9.84	8.49	7.86	9.31	8.16			
Moore, Obea (USA) (1979)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 1 - 1996 USA Olympic Trials (Atlanta, GA)																		
date	17-Jun-96	time	6.1	11.59	21.99	33.26	39.44	46.01	46.01	7 / 7								
reaction time		interval		10.40	11.27	6.18	6.57	6.57	# of strides	11.59	10.40	11.27	12.75	21.99	24.02	2.03		
		velocity	8.63	9.62	8.87	8.09	7.61	8.69	169.0	8.63	9.62	8.87	7.84	9.10	8.33			
Maybank, Anthuan (USA) (1969)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 2 - 2003 USATF National Championships (Palo Alto, CA)																		
date	20-Jun-03	time	6.1	11.44	21.44	33.18	39.29	46.01	46.01	6 / 4								
reaction time		interval		11.74	6.11	6.72	6.72	6.72	# of strides	11.44	10.40	11.27	12.75	21.99	24.02	2.03		
		velocity	8.63	9.62	8.87	8.09	7.61	8.69	169.0	8.63	9.62	8.87	7.84	9.10	8.33			
Walsh, Julian Jrummi (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 2 - 2018 Asian Games (Jakarta, INA)																		
date	25-Aug-18	time	6.13	11.15	16.34	21.81	27.45	33.34	39.49	46.01	46.01	6 / 2						
reaction time	0.147	interval		5.02	5.19	5.47	5.64	5.89	6.15	6.52	# of strides	11.15	10.66	11.53	12.67	21.81	24.20	2.39
		velocity	8.16	9.96	9.63	9.14	8.87	8.49	8.13	7.67	169.0	8.97	9.38	8.67	7.89	9.17	8.26	
O'Donnell, Christopher (IRL) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Heat 6 - 2022 World Athletics Championships (Eugene, OR)																		
date	17-Jul-22	time	6.1	11.60	22.48	33.81	46.01	46.01	8 / 4									
reaction time	0.133	interval		10.88	11.33	12.20	12.20	8.69	# of strides	11.60	10.88	11.33	12.20	22.48	23.53	1.05		
		velocity	8.62	9.19	8.83	8.20	8.69	8.69	178.0	8.62	9.19	8.83	8.20	8.90	8.50			
O'Donnell, Christopher (IRL) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 2 - 2022 World Athletics Championships (Eugene, OR)																		
date	20-Jul-22	time	6.1	11.54	22.20	33.52	46.01	46.01	2 / 7									
reaction time	0.162	interval		10.66	11.32	12.49	12.49	8.69	# of strides	11.54	10.66	11.32	12.49	22.20	23.81	1.61		
		velocity	8.67	9.38	8.83	8.01	8.69	8.69	180.0	8.67	9.38	8.83	8.01	9.01	8.40			
Imaizumi, Kenki (JPN) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Heat 1 - 2023 Japanese National Championships (Osaka, JPN)																		
date	03-Jun-23	time	6.23	11.34	16.58	22.02	27.63	33.49	39.57	46.01	46.01	5 / 2						
reaction time	0.168	interval		5.11	5.24	5.44	5.61	5.86	6.08	6.44	# of strides	11.34	10.68	11.47	12.52	22.02	23.99	1.97
		velocity	8.03	9.78	9.54	9.19	8.91	8.53	8.22	7.76	177.0	8.82	9.36	8.72	7.99	9.08	8.34	
Nielsen, Gustav Lundholm (DEN) (1991)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 2 - 2024 European Athletics Championships (Roma, ITA)																		
date	09-Jun-24	time	6.1	11.22	21.80	33.26	46.01	46.01	2 / 7									
reaction time	0.170	interval		10.58	11.46	12.75	12.75	8.69	# of strides	11.22	10.58	11.46	12.75	21.80	24.21	2.41		
		velocity	8.91	9.45	8.73	7.84	8.69	8.69	186.0	8.91	9.45	8.73	7.84	9.17	8.26			
Kimura, Kazushi (JPN) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2017 Japanese National Championships (Osaka, JPN)																		
date	24-Jun-17	time	6.13	11.18	16.33	21.63	27.11	32.97	39.28	46.02	46.02	7 / 3						
reaction time	0.184	interval		5.05	5.15	5.30	5.48	5.86	6.31	6.74	# of strides	11.18	10.45	11.34	13.05	21.63	24.39	2.76
		velocity	8.16	9.90	9.71	9.43	9.12	8.53	7.92	7.42	186.0	8.94	9.57	8.82	7.66	9.25	8.20	
Montgomery, Kahmari (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2019 Herculis Meeting International d'Athlétisme (Monaco, MON)																		
date	12-Jul-19	time	6.1	11.4	22.1	33.6	46.02	46.02	4 / 5									
reaction time	0.167	interval		10.7	11.5	12.4	12.4	8.69	# of strides	11.40	10.70	11.50	12.42	22.10	23.92	1.82		
		velocity	8.77	9.35	8.70	8.05	8.69	8.69	177.0	8.77	9.35	8.70	8.05	9.05	8.36			
Re, Davide (ITA) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 3 - 2022 European Athletics Championships (Munich, GER)																		
date	16-Aug-22	time	6.1	11.57	21.99	33.47	46.02	46.02	4 / 5									
reaction time	0.228	interval		10.42	11.48	12.55	12.55	8.69	# of strides	11.57	10.42	11.48	12.55	21.99	24.03	2.04		
		velocity	8.64	9.60	8.71	7.97	8.69	8.69	173.0	8.64	9.60	8.71	7.97	9.10	8.32			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Harries, Toby (GBR) (1998)																			
National FINAL - 2024 London Athletics Meet (London, GBR)																			
date	20-Jul-24	time	6.12	11.06	16.11	21.39	27.02	32.86	39.04	46.02	46.02								
reaction time	0.138	interval		4.94	5.05	5.28	5.63	5.84	6.18	6.98		# of strides	11.06	10.33	11.47	13.16	21.39	24.63	3.24
		velocity	8.17	10.12	9.90	9.47	8.88	8.56	8.09	7.16	8.69		9.04	9.68	8.72	7.60	9.35	8.12	
McKee, Paul (IRL) (1977)																			
Heat 2 - 2002 European Championships (Munich, GER)																			
date	06-Aug-02	time		11.38		22.00		33.47		46.03	46.03								
reaction time	0.243	interval			10.62		11.47		12.56			# of strides	11.38	10.62	11.47	12.56	22.00	24.03	2.03
		velocity		8.79	9.42		8.72		7.96	8.69	8.69	8.79	9.42	8.72	7.96	9.09	8.32		
Bláha, Karel (CZE) (1975)																			
Heat 4 - 2002 European Championships (Munich, GER)																			
date	06-Aug-02	time		11.75		22.46		33.74		46.03	46.03								
reaction time	0.154	interval			10.71		11.28		12.29			# of strides	11.75	10.71	11.28	12.29	22.46	23.57	1.11
		velocity		8.51	9.34		8.87		8.14	8.69	8.69	8.51	9.34	8.87	8.14	8.90	8.49		
Watanabe, Kazuya (JPN) (1988)																			
Heat 3 - 2015 Japanese National Championships (Niigata, JPN)																			
date	27-Jun-15	time	6.25	11.42	16.60	21.96	27.57	33.33	39.45	46.03	46.03								
reaction time	0.166	interval		5.17	5.18	5.36	5.61	5.76	6.12	6.58		# of strides	11.42	10.54	11.37	12.70	21.96	24.07	2.11
		velocity	8.00	9.67	9.65	9.33	8.91	8.68	8.17	7.60	8.69	8.76	9.49	8.80	7.87	9.11	8.31		
Wakabayashi, Kota (JPN) (1997)																			
Heat 2 - 2017 Japanese National Championships (Osaka, JPN)																			
date	23-Jun-17	time		11.22		21.52		32.88		46.03	46.03								
reaction time	0.175	interval			10.30		11.36		13.15			# of strides	11.22	10.30	11.36	13.15	21.52	24.51	2.99
		velocity		8.91	9.71		8.80		7.60	8.69	8.69	8.91	9.71	8.80	7.60	9.29	8.16		
Jones, Jonathan (BAR) (1999)																			
Heat 3 - 2023 World Athletics Championships (Budapest, HUN)																			
date	20-Aug-23	time		11.40		21.70		32.91		46.03	46.03								
reaction time	0.156	interval			10.30		11.21		13.12			# of strides	11.40	10.30	11.21	13.12	21.70	24.33	2.63
		velocity		8.77	9.71		8.92		7.62	8.69	8.69	8.77	9.71	8.92	7.62	9.22	8.22		
Sanders, Manuel (GER) (1998)																			
Semi-Final 3 - 2024 European Athletics Championships (Roma, ITA)																			
date	09-Jun-24	time		11.32		21.76		33.23		46.03	46.03								
reaction time	0.190	interval			10.44		11.47		12.80			# of strides	11.32	10.44	11.47	12.80	21.76	24.27	2.51
		velocity		8.83	9.58		8.72		7.81	8.69	8.69	8.83	9.58	8.72	7.81	9.19	8.24		
McKenley, Herb (JAM) (1922)																			
FINAL - 1946 Big 10 Championships (Champaign, IL)																			
date	01-Jun-46	time			20.8			45.9		45.9	45.9								
reaction time		interval						25.1				# of strides				20.80	25.10	4.30	
		velocity			9.62			7.97	8.71	8.71	8.71	(46.2/440y)				9.62	7.97		
McKenley, Herb (JAM) (1922)																			
FINAL - 1947 NCAA Championships (Salt Lake City, UT) (Altitude)																			
date	21-Jun-47	time		20.7				45.9		45.9	45.9								
reaction time		interval						25.2				# of strides				20.70	25.20	4.50	
		velocity		9.66				7.94	8.71	8.71	8.71	(46.2/440y)				9.66	7.94		
McKenley, Herb (JAM) (1922)																			
Heat 1 - 1948 AAU Championships (Milwaukee, WI)																			
date	02-Jul-48	time		20.9				45.9		45.9	45.9								
reaction time		interval						25.0		WR		# of strides				20.90	25.00	4.10	
		velocity		9.57				8.00	8.71	8.71	8.71	(46.00)				9.57	8.00		
Rhoden, George (JAM) (1926)																			
FINAL - 1952 Olympic Games (Helsinki, FIN)																			
date	25-Jul-52	time			22.2			45.9		45.9	45.9								
reaction time		interval						23.7		OR		# of strides		22.20		45.90	22.20	23.70	1.50
		velocity		9.01				8.44	8.71	8.71	8.71	(46.09)		4.50	2.18	9.01	8.44		
McKenley, Herb (JAM) (1922)																			
FINAL - 1952 Olympic Games (Helsinki, FIN)																			
date	25-Jul-52	time		22.7				45.9		45.9	45.9								
reaction time		interval						23.2		=OR		# of strides		22.70		45.90	22.70	23.20	0.50
		velocity		8.81				8.62	8.71	8.71	8.71	(46.20)		4.41	2.18	8.81	8.62		
Kinder, Manfred (FRG) (1938)																			
FINAL - 1960 Olympic Games (Rome, ITA)																			
date	06-Sep-60	time		22.1				33.5		45.9	45.9								
reaction time		interval						11.4		(46.04)		# of strides		22.10	11.40	12.40	22.10	23.80	1.70
		velocity		9.05				8.77	8.06	8.71	8.71		9.05	8.77	8.06	9.05	8.40		
Young, Earl (USA) (1941)																			
FINAL - 1960 Olympic Games (Rome, ITA)																			
date	06-Sep-60	time		22.0				33.1		45.9	45.9								
reaction time		interval						11.1		(46.07)		# of strides		22.00	11.10	12.80	22.00	23.90	1.90
		velocity		9.09				9.01	7.81	8.71	8.71		9.09	9.01	7.81	9.09	8.37		
Nuti, Andrea (ITA) (1967)																			
FINAL - 1991 European Cup (Frankfurt, GER)																			

date	29-Jun-91	time	11.59	21.99	33.23	46.04	46.04	/ 5											
reaction time		interval		10.40	11.24	12.81	12.81	# of strides	11.59	10.40	11.24	12.81	21.99	24.05	2.06				
		velocity	8.63	9.62	8.90	7.81	8.69		8.63	9.62	8.90	7.81	9.10	8.32					
Borzakovskiy, Yuriy (RUS) (1981)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	Semi-Final 1 - 2002 European Championships (Munich, GER)																		
date	07-Aug-02	time	11.96	22.78	34.08	46.04	46.04	/ 7											
reaction time	0.226	interval		10.82	11.30	11.96	11.96	# of strides	11.96	10.82	11.30	11.96	22.78	23.26	0.48				
		velocity	8.36	9.24	8.85	8.36	8.69		8.36	9.24	8.85	8.36	8.78	8.60					
Byrd, Leonard (USA) (1975)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	Semi-Final 1 - 2003 USATF National Championships (Palo Alto, CA)																		
date	20-Jun-03	time	21.54	33.10	39.21	46.04	46.04	9 / 4											
reaction time		interval		11.56	6.11	6.83	6.83	# of strides			11.56	12.94	21.54	24.50	2.96				
		velocity		9.29	8.65	8.18	7.32	8.69			8.65	7.73	9.29	8.16					
Dyldin, Maksim (RUS) (1987)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	FINAL - 2007 European Cup (Munich, GER)																		
date	23-Jun-07	time	11.52	22.04	33.42	46.04	46.04	/ 4											
reaction time	0.151	interval		10.52	11.38	12.62	12.62	# of strides	11.52	10.52	11.38	12.62	22.04	24.00	1.96				
		velocity	8.68	9.51	8.79	7.92	8.69		8.68	9.51	8.79	7.92	9.07	8.33					
Kanemaru, Yuzo (JPN) (1987)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	FINAL - 2014 Asian Games (Incheon, KOR)																		
date	28-Sep-14	time	6.19	11.35	16.52	21.92	27.58	33.57	39.60	46.04	46.04	/ 4							
reaction time	0.167	interval		5.16	5.17	5.40	5.66	5.99	6.03	6.44	6.44	# of strides	11.35	10.57	11.65	12.47	21.92	24.12	2.20
		velocity	8.08	9.69	9.67	9.26	8.83	8.35	8.29	7.76	8.69		8.81	9.46	8.58	8.02	9.12	8.29	
Wariner, Jeremy (USA) (1984)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	FINAL - 2016 Seiko Golden Grand Prix (Kawasaki, JPN)																		
date	08-May-16	time	6.20	11.21	16.42	21.79	27.36	33.08	39.29	46.04	46.04	4 / 3							
reaction time	0.157	interval		5.01	5.21	5.37	5.57	5.72	6.21	6.75	6.75	# of strides	11.21	10.58	11.29	12.96	21.79	24.25	2.46
		velocity	8.06	9.98	9.60	9.31	8.98	8.74	8.05	7.41	8.69		8.92	9.45	8.86	7.72	9.18	8.25	
Wakabayashi, Kota (JPN) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	FINAL - 2019 Japanese World Championships Trials (Fujiyoshida, JPN)																		
date	01-Sep-19	time	6.25	11.23	16.35	21.68	27.31	33.23	39.38	46.04	46.04	4 / 2							
reaction time		interval		4.98	5.12	5.33	5.63	5.92	6.15	6.66	6.66	# of strides	11.23	10.45	11.55	12.81	21.68	24.36	2.68
		velocity	8.00	10.04	9.77	9.38	8.88	8.45	8.13	7.51	8.69		173.0	8.90	9.57	8.66	7.81	9.23	8.21
Sato, Fuga (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	Final - 2021 Denka Athletics Challenge Cup (Niigata, JPN)																		
date	06-Jun-21	time	6.22	11.27	16.43	21.82	27.37	33.26	39.43	46.04	46.04	8 / 3							
reaction time		interval		5.05	5.16	5.39	5.55	5.89	6.17	6.61	6.61	# of strides	11.27	10.55	11.44	12.78	21.82	24.22	2.40
		velocity	8.04	9.90	9.69	9.28	9.01	8.49	8.10	7.56	8.69		178.7	8.87	9.48	8.74	7.82	9.17	8.26
Montgomery, Kahmari (USA) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	FINAL - 2022 Prefontaine Classic (Eugene, OR)																		
date	28-May-22	time	6.01	10.99	16.15	21.66	27.27	33.05	39.22	46.04	46.04	1 / 9							
reaction time	0.135	interval		4.98	5.16	5.51	5.61	5.78	6.17	6.82	6.82	# of strides	10.99	10.67	11.39	12.99	21.66	24.38	2.72
		velocity	8.32	10.04	9.69	9.07	8.91	8.65	8.10	7.33	8.69		178.2	9.10	9.37	8.78	7.70	9.23	8.20
Makwala, Isaac (BOT) (1986)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	Semi-Final 3 - 2022 World Athletics Championships (Eugene, OR)																		
date	20-Jul-22	time	11.40	21.89	32.87	46.04	46.04	7 / 8											
reaction time	0.158	interval		10.49	10.98	13.17	13.17	# of strides	11.40	10.49	10.98	13.17	21.89	24.15	2.26				
		velocity	8.77	9.53	9.11	7.59	8.69		174.0	8.77	9.53	9.11	7.59	9.14	8.28				
Haydock-Wilson, Alex (GBR) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	Heat 2 - 2024 European Athletics Championships (Roma, ITA)																		
date	08-Jun-24	time	11.36	21.92	33.27	46.04	46.04	6 / 3											
reaction time	0.177	interval		10.56	11.35	12.77	12.77	# of strides	11.36	10.56	11.35	12.77	21.92	24.12	2.20				
		velocity	8.80	9.47	8.81	7.83	8.69		8.80	9.47	8.81	7.83	9.12	8.29					
Kanemaru, Yuzo (JPN) (1987)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	FINAL - 2006 Seiko Super Grand Prix (Yokohama, JPN)																		
date	24-Sep-06	time	6.2	11.1	16.2	21.6	27.4	33.4	39.7	46.05	46.05	5 / 3							
reaction time		interval		4.90	5.10	5.40	5.80	6.00	6.30	6.35	6.35	# of strides	11.10	10.50	11.80	12.65	21.60	24.45	2.85
		velocity	8.06	10.20	9.80	9.26	8.62	8.33	7.94	7.87	8.69		9.01	9.52	8.47	7.91	9.26	8.18	
Re, Davide (ITA) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	FINAL - 2019 The Match - Europe v USA (Minsk, BLR)																		
date	09-Sep-19	time	11.34	21.96	33.45	46.05	46.05	4 / 3											
reaction time	0.154	interval		10.62	11.49	12.60	12.60	# of strides	11.34	10.62	11.49	12.60	21.96	24.09	2.13				
		velocity	8.82	9.42	8.70	7.94	8.69		176.0	8.82	9.42	8.70	7.94	9.11	8.30				
Nielsen, Gustav Lundholm (DEN) (1991)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	Heat 4 - 2022 European Athletics Championships (Munich, GER)																		
date	15-Aug-22	time	11.36	21.98	33.28	46.05	46.05	6 / 5											
reaction time	0.165	interval		10.62	11.30	12.77	12.77	# of strides	11.36	10.62	11.30	12.77	21.98	24.07	2.09				
		velocity	8.80	9.42	8.85	7.83	8.69		8.80	9.42	8.85	7.83	9.10	8.31					
Liang Baotang (CHN) (2003)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	FINAL - 2024 Chinese National Championships (Quzhou, CHN)																		
date	16-Sep-24	time	12.00	22.71	34.05	39.86	46.05	46.05	6 / 1										
reaction time	0.185	interval		10.71	11.34	5.81	6.19	6.19	# of strides	12.00	10.71	11.34	12.00	22.71	23.34	0.63			
		velocity	8.33	9.34	8.82	8.61	8.08	8.69		193.0	8.33	9.34	8.82	8.33	8.81	8.57			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Caines, Daniel (GBR) (1979)																			
Heat 4 - 2002 European Championships (Munich, GER)																			
date	06-Aug-02	time	11.26		21.88		33.42		46.06	46.06	/ 2								
reaction time	0.150	interval			10.62		11.54		12.64		# of strides	11.26	10.62	11.54	12.64	21.88	24.18	2.30	
		velocity	8.88		9.42		8.67		7.91	8.68		8.88	9.42	8.67	7.91	9.14	8.27		
Walsh, Julian Jrummi (JPN) (1996)																			
FINAL - 2016 Shizuoka International Meeting (Fukurui, JPN)																			
date	03-May-16	time	6.16	11.18	16.32	21.62	27.27	33.24	39.44	46.06	46.06								
reaction time		interval		5.02	5.14	5.30	5.65	5.97	6.20	6.62		# of strides	11.18	10.44	11.62	12.82	21.62	24.44	2.82
		velocity	8.12	9.96	9.73	9.43	8.85	8.38	8.06	7.55	8.68		8.94	9.58	8.61	7.80	9.25	8.18	
Kawauchi, Mitsuki (JPN) (1997)																			
Heat 1 - 2017 Japanese National Championships (Osaka, JPN)																			
date	23-Jun-17	time			11.29		21.69		33.15	46.06	46.06	8 / 6							
reaction time	0.181	interval			10.40		11.46		12.91	PB	# of strides	11.29	10.40	11.46	12.91	21.69	24.37	2.68	
		velocity			8.86		9.62		8.73	8.68	184.5	8.86	9.62	8.73	7.75	9.22	8.21		
Sato, Kentaro (JPN) (1994)																			
FINAL - 2021 Japanese National Championships (Osaka, JPN)																			
date	25-Jun-21	time	6.18	11.18	16.33	21.77	27.46	33.45	39.57	46.08	46.06	4 / 2							
reaction time	0.217	interval		5.00	5.15	5.44	5.69	5.99	6.12	6.51		# of strides	11.18	10.59	11.68	12.63	21.77	24.31	2.54
		velocity	8.09	10.00	9.71	9.19	8.79	8.35	8.17	7.68	8.68		8.94	9.44	8.56	7.92	9.19	8.23	
Samukonga, Muzala (ZAM) (2002)																			
Semi-Final 2 - 2022 Commonwealth Games (Birmingham, GBR)																			
date	05-Aug-22	time	6.3	11.4	16.9	22.6	28.3	34.1	39.8	46.06	46.06	6 / 2							
reaction time	0.244	interval		5.10	5.50	5.70	5.70	5.80	5.70	6.26		# of strides	11.40	11.20	11.50	11.96	22.60	23.46	0.86
		velocity	7.94	9.80	9.09	8.77	8.77	8.62	8.77	7.99	8.68	176.0	8.77	8.93	8.70	8.36	8.85	8.53	
Brier, Joseph (GBR) (1999)																			
Heat 2 - 2022 European Athletics Championships (Munich, GER)																			
date	15-Aug-22	time			11.53		22.11		33.34	46.06	46.06	4 / 5							
reaction time	0.213	interval			10.58		11.23		12.72		# of strides	11.53	10.58	11.23	12.72	22.11	23.95	1.84	
		velocity			8.67		9.45		8.90	8.68		8.67	9.45	8.90	7.86	9.05	8.35		
Sato, Kentaro (JPN) (1994)																			
Heat 2 - 2023 Japanese National Championships (Osaka, JPN)																			
date	03-Jun-23	time	6.15	11.21	16.33	21.62	27.16	33.13	39.43	46.06	46.06	7 / 1							
reaction time	0.185	interval		5.06	5.12	5.29	5.54	5.97	6.30	6.63		# of strides	11.21	10.41	11.51	12.93	21.62	24.44	2.82
		velocity	8.13	9.88	9.77	9.45	9.03	8.38	7.94	7.54	8.68	179.0	8.92	9.61	8.69	7.73	9.25	8.18	
Devantay, Charles (SUI) (1998)																			
B Race - 2024 Athletissima (Lausanne, SUI)																			
date	22-Aug-24	time	6.20	11.33	16.63	22.13	27.74	33.56	39.56	46.06	46.06	4 / 2							
reaction time	0.134	interval		5.13	5.30	5.50	5.61	5.82	6.00	6.50		# of strides	11.33	10.80	11.43	12.50	22.13	23.93	1.80
		velocity	8.06	9.75	9.43	9.09	8.91	8.59	8.33	7.69	8.68		8.83	9.26	8.75	8.00	9.04	8.36	
Omalla, Eugene (NED) (2000)																			
FINAL - 2024 Athletissima (Lausanne, SUI)																			
date	22-Aug-24	time	6.17	11.22	16.43	21.83	27.58	33.47	39.52	46.06	46.06	1 / 8							
reaction time	0.179	interval		5.05	5.21	5.40	5.75	5.89	6.05	6.54		# of strides	11.22	10.61	11.64	12.59	21.83	24.23	2.40
		velocity	8.10	9.90	9.60	9.26	8.70	8.49	8.26	7.65	8.68		8.91	9.43	8.59	7.94	9.16	8.25	
Whittle, Brian (GBR) (1964)																			
Semi-Final 2 - 1988 Olympic Games (Seoul, KOR)																			
date	26-Sep-88	time			11.34		21.88		33.42	46.07	46.07	7 / 8							
reaction time	0.176	interval			10.54		11.54		12.65		# of strides	11.34	10.54	11.54	12.65	21.88	24.19	2.31	
		velocity			8.82		9.49		8.67	7.91	8.68		8.82	9.49	8.67	7.91	9.14	8.27	
Benjamin, Tim (GBR) (1982)																			
Semi-Final 2 - 2002 European Championships (Munich, GER)																			
date	07-Aug-02	time			11.36		21.96		33.40	46.07	46.07	/ 3							
reaction time	0.139	interval			10.60		11.44		12.67		# of strides	11.36	10.60	11.44	12.67	21.96	24.11	2.15	
		velocity			8.80		9.43		8.74	7.89	8.68		8.80	9.43	8.74	7.89	9.11	8.30	
Harrison, Alvin (USA) (1974)																			
Semi-Final 1 - 2003 USATF National Championships (Palo Alto, CA)																			
date	20-Jun-03	time			21.61		32.97		39.11	46.07	46.07	2 / 7							
reaction time		interval			11.36		6.14		6.96	DV	# of strides			11.36	13.10	21.61	24.46	2.85	
		velocity			9.25		8.80		8.14	7.18	8.68			8.80	7.63	9.25	8.18		
Tamura, Tomoya (JPN) (1992)																			
Heat 2 - 2015 Japanese National Championships (Niigata, JPN)																			
date	27-Jun-15	time	6.17	11.18	16.25	21.48	27.15	32.89	39.12	46.07	46.07	3 / 2							
reaction time	0.216	interval		5.01	5.07	5.23	5.67	5.74	6.23	6.95	PB	# of strides	11.18	10.30	11.41	13.18	21.48	24.59	3.11
		velocity	8.10	9.98	9.86	9.56	8.82	8.71	8.03	7.19	8.68		8.94	9.71	8.76	7.59	9.31	8.13	
Abubaker, Abbas (BRN) (1996)																			
Heat 3 - 2018 Asian Games (Jakarta, INA)																			
date	25-Aug-18	time	6.29	11.51	16.69	22.06	27.67	33.43	39.43	46.07	46.07	2 / 1							
reaction time	0.173	interval		5.22	5.18	5.37	5.61	5.76	6.00	6.64		# of strides	11.51	10.55	11.37	12.64	22.06	24.01	1.95
		velocity	7.95	9.58	9.65	9.31	8.91	8.68	8.33	7.53	8.68		8.69	9.48	8.80	7.91	9.07	8.33	
Abbas, Abdulrahman Khamis (BRN)																			
Semi-Final 3 - 2018 Asian Games (Jakarta, INA)																			
date		time																	
reaction time		interval																	
		velocity																	

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential							
Yahia Ibrahim, Ammar Ismail (QAT) (1)																									
FINAL - 2021 Doha Diamond League (Doha, QAT)																<i>Omega Timing (2021) - diamond league race analysis</i>									
date	28-May-21	time	6.2	11.1	16.3	21.8	27.4	33.4	39.8	46.10	1 / 7														
reaction time	0.142	interval		4.90	5.20	5.50	5.60	6.00	6.40	6.30	# of strides	11.10	10.70	11.60	12.70	21.80	24.30	2.50							
		velocity	8.06	10.20	9.62	9.09	8.93	8.33	7.81	7.94	8.68	9.01	9.35	8.62	7.87	9.17	8.23								
Cañal, Iñaki (ESP) (1997)																									
Semi-Final 2 - 2022 European Athletics Championships (Munich, GER)																<i>European Athletics (2022) - european athletics championships race analysis</i>									
date	16-Aug-22	time								33.07	46.10	46.10	1 / 6												
reaction time	0.159	interval								10.31	11.48	13.03	# of strides	11.28	10.31	11.48	13.03	21.59	24.51	2.92					
		velocity								8.87	9.70	8.71	7.67	8.68	8.87	9.70	8.71	7.67	9.26	8.16					
Golovastov, Dmitriy (RUS) (1971)																									
FINAL - 2001 European Cup (Bremen, GER)																<i>Graubner (2007) - http://www.fgs.uni-halle.de</i>									
date	23-Jun-01	time	11.34							33.29	46.11	46.11	/ 6												
reaction time		interval								10.56	11.39	12.82	# of strides	11.34	10.56	11.39	12.82	21.90	24.21	2.31					
		velocity								8.82	9.47	8.78	7.80	8.67	8.82	9.47	8.78	7.80	9.13	8.26					
Kato, Nobuya (JPN) (1995)																									
FINAL - 2013 Japanese National High School Championships (Oita, JPN)																<i>Yanagiya (2014) - research on athlete performance and technique- 2014 data book</i>									
date	30-Jul-13	time	6.52	11.97	17.35	22.68	28.29	33.99	39.92	46.11	46.11	4 / 1													
reaction time		interval								5.70	5.93	6.19	# of strides	11.97	10.71	11.31	12.12	22.68	23.43	0.75					
		velocity								7.67	9.17	9.29	9.38	8.91	8.77	8.43	8.08	8.67	8.35	9.34	8.84	8.25	8.82	8.54	
Walsh, Julian Jrummi (JPN) (1996)																									
Heat 2 - 2015 Japanese National Championships (Niigata, JPN)																<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>									
date	27-Jun-15	time	6.24	11.34	16.53	21.77	27.23	33.17	39.40	46.11	46.11	1 / 3													
reaction time	0.177	interval								5.94	6.23	6.71	# of strides	11.34	10.43	11.40	12.94	21.77	24.34	2.57					
		velocity								8.01	9.80	9.63	9.54	9.16	8.42	8.03	7.45	8.67	8.82	9.59	8.77	7.73	9.19	8.22	
Rooney, Martyn (GBR) (1987)																									
National FINAL - 2018 Müller Anniversary Games (London, GBR)																<i>Omega Timing (2018) - diamond league race analysis</i>									
date	21-Jul-18	time	11.4							33.3	46.11	46.11	5 / 2												
reaction time	0.140	interval								10.6	11.3	12.8	# of strides	11.40	10.60	11.30	12.81	22.00	24.11	2.11					
		velocity								8.77	9.43	8.85	7.81	8.67	8.77	9.43	8.85	7.81	9.09	8.30					
Bonevacia, Liemarvin (NED) (1989)																									
FINAL - 2022 FBK Games (Hengelo, NED)																<i>Omega Timing (2022) - continental tour race analysis</i>									
date	06-Jun-22	time	6.2	11.2	16.3	21.7	27.3	33.2	39.3	46.11	46.11	5 / 4													
reaction time	0.148	interval								5.00	5.10	5.40	5.60	5.90	6.10	6.81									
		velocity								8.06	10.00	9.80	9.26	8.93	8.47	8.20	7.34	8.67	184.0	8.93	9.52	8.70	7.75	9.22	8.19
Mabille, Florent (BEL) (1996)																									
B Race - 2023 Memorial van Damme (Brussels, BEL)																<i>Omega Timing (2023) - diamond league race analysis</i>									
date	08-Sep-23	time	6.29	11.18	16.27	21.65	27.24	33.00	39.20	46.11	46.11	3 / 7													
reaction time	0.164	interval								4.89	5.09	5.38	5.59	5.76	6.20	6.91									
		velocity								7.95	10.22	9.82	9.29	8.94	8.68	8.06	7.24	8.67	8.94	9.55	8.81	7.63	9.24	8.18	
Hooker, Ja'Warren (USA) (1978)																									
Semi-Final 2 - 2003 USATF National Championships (Palo Alto, CA)																<i>USATF Women's Sprint Development (2003)</i>									
date	20-Jun-03	time								33.42	39.46	46.12	46.12	5 / 5											
reaction time		interval								11.65	6.04	6.66	# of strides			11.65	12.70	21.77	24.35	2.58					
		velocity														8.58	7.87	9.19	8.21						
Sato, Kentaro (JPN) (1994)																									
FINAL - 2015 Japanese National Championships (Niigata, JPN)																<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>									
date	28-Jun-15	time	6.36	11.32	16.38	21.72	27.29	33.16	39.35	46.12	46.12	3 / 2													
reaction time	0.151	interval								4.96	5.06	5.34	5.57	5.87	6.19	6.77									
		velocity								7.86	10.08	9.88	9.36	8.98	8.52	8.08	7.39	8.67	8.83	9.62	8.74	7.72	9.21	8.20	
Krsek, Matěj (CZE) (2000)																									
Heat 3 - 2022 European Athletics Championships (Munich, GER)																<i>European Athletics (2022) - european athletics championships race analysis</i>									
date	15-Aug-22	time								33.51	46.12	46.12	4 / 3												
reaction time	0.173	interval								10.69	11.32	12.61	# of strides	11.50	10.69	11.32	12.61	22.19	23.93	1.74					
		velocity								8.70	9.35	8.83	7.93	8.67	8.70	9.35	8.83	7.93	9.01	8.36					
Omalla, Eugene (NED) (2000)																									
National FINAL - 2024 FBK Games (Hengelo, NED)																<i>Omega Timing (2024) - continental tour gold race analysis</i>									
date	07-Jul-24	time	6.15	11.05	16.05	21.26	26.84	32.72	39.04	46.12	46.12	5 / 2													
reaction time	0.192	interval								4.90	5.00	5.21	5.58	5.88	6.32	7.08									
		velocity								8.13	10.20	10.00	9.60	8.96	8.50	7.91	7.06	8.67	9.05	9.79	8.73	7.46	9.41	8.05	
Aceti, Vladimir (ITA) (1998)																									
FINAL - 2024 Weltklasse (Zürich, SUI)																<i>Omega Timing (2024) - diamond league race analysis</i>									
date	05-Sep-24	time	6.32	11.36	16.53	21.85	27.40	33.21	39.43	46.12	46.12	1 / 6													
reaction time	0.202	interval								5.04	5.17	5.32	5.55	5.81	6.22	6.69									
		velocity								7.91	9.92	9.67	9.40	9.01	8.61	8.04	7.47	8.67	8.80	9.53	8.80	7.75	9.15	8.24	
Rock, Andrew (USA) (1982)																									
Semi-Final 2 - 2003 USATF National Championships (Palo Alto, CA)																<i>USATF Women's Sprint Development (2003)</i>									
date	20-Jun-03	time								33.55	39.54	46.13	46.13	7 / 6											
reaction time		interval								11.88	5.99	6.59	# of strides			11.88	12.58	21.67	24.46	2.79					
		velocity														8.42	7.95	9.23	8.18						
Kato, Nobuya (JPN) (1995)																									
FINAL - 2014 Asian Games (Incheon, KOR)																<i>Maho (2014) - race analysis of men's 400m run in the 2014 season</i>									

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Homewood, Dirk (USA) (1982)																			
FINAL - 2005 USATF National Championships (Carson, CA)																			
date	25-Jun-05	time			22.12	27.57	33.31	39.66	46.15	46.15	9 / 9								
reaction time		interval				5.45	5.74	6.35	6.49		# of strides			11.19	12.84	22.12	24.03	1.91	
		velocity			9.04	9.17	8.71	7.87	7.70	8.67				8.94	7.79	9.04	8.32		
Diaz, Yunior (CUB) (1987)																			
Decathlon - Heat 2 - 2009 IAAF World Championships (Berlin, GER)																			
date	19-Aug-09	time			11.27			33.50	46.15	46.15	8 / 1								
reaction time	0.180	interval				10.67		11.56	12.65	PB	# of strides	11.27	10.67	11.56	12.65	21.94	24.21	2.27	
		velocity			8.87	9.37		8.65	7.91	8.67		8.87	9.37	8.65	7.91	9.12	8.26		
Tamura, Tomoya (JPN) (1992)																			
FINAL - 2016 Japanese National Championships (Nagoya, JPN)																			
date	25-Jun-16	time	6.23	11.29	16.45	21.75	27.30	33.16	39.29	46.15	2 / 4								
reaction time	0.195	interval			5.06	5.16	5.30	5.55	5.86	6.13	# of strides	11.29	10.46	11.41	12.99	21.75	24.40	2.65	
		velocity	8.03	9.88	9.69	9.43	9.01	8.53	8.16	7.29	8.67	8.86	9.56	8.76	7.70	9.20	8.20		
Kitakani, Naoki (JPN) (1998)																			
Heat 3 - 2017 Japanese National Championships (Osaka, JPN)																			
date	23-Jun-17	time			11.38			33.27	46.15	46.15	4 / 3								
reaction time	0.170	interval				10.42		11.47	12.88	PB	# of strides	11.38	10.42	11.47	12.88	21.80	24.35	2.55	
		velocity			8.79	9.60		8.72	7.76	8.67	177.7	8.79	9.60	8.72	7.76	9.17	8.21		
Sato, Fuga (JPN) (1996)																			
FINAL - 2020 World Athletics Trials (Fuji, JPN)																			
date	06-Sep-20	time	6.39	11.58	16.83	22.19	27.70	33.38	39.44	46.15	3 / 1								
reaction time		interval			5.19	5.25	5.36	5.51	5.68	6.06	# of strides	11.58	10.61	11.19	12.77	22.19	23.96	1.77	
		velocity	7.82	9.63	9.52	9.33	9.07	8.80	8.25	7.45	8.67	8.64	9.43	8.94	7.83	9.01	8.35		
Ito, Rikiya (JPN) (1998)																			
FINAL - 2021 Ready Steady Tokyo (Tokyo, JPN)																			
date	09-May-21	time	6.02	10.92	15.93	21.22	26.88	32.86	39.23	46.15	6 / 2								
reaction time	0.128	interval			4.90	5.01	5.29	5.66	5.98	6.37	# of strides	10.92	10.30	11.64	13.29	21.22	24.93	3.71	
		velocity	8.31	10.20	9.98	9.45	8.83	8.36	7.85	7.23	8.67	187.0	9.16	9.71	8.59	7.52	9.43	8.02	
Ito, Rikiya (JPN) (1998)																			
Final - 2021 Denka Athletics Challenge Cup (Niigata, JPN)																			
date	06-Jun-21	time	6.24	11.26	16.35	21.68	27.25	33.19	39.46	46.15	7 / 4								
reaction time		interval			5.02	5.09	5.33	5.57	5.94	6.27	# of strides	11.26	10.42	11.51	12.96	21.68	24.47	2.79	
		velocity	8.01	9.96	9.82	9.38	8.98	8.42	7.97	7.47	8.67	185.2	8.88	9.60	8.69	7.72	9.23	8.17	
Kawabata, Kaito (JPN) (1998)																			
Final - 2021 Denka Athletics Challenge Cup (Niigata, JPN)																			
date	06-Jun-21	time	6.16	10.99	15.93	21.18	26.69	32.67	39.12	46.19	5 / 5								
reaction time		interval			4.83	4.94	5.25	5.51	5.98	6.45	# of strides	10.99	10.19	11.49	13.52	21.18	25.01	3.83	
		velocity	8.12	10.35	10.12	9.52	9.07	8.36	7.75	7.07	8.67	9.10	9.81	8.70	7.40	9.44	8.00		
Steffensen, John (AUS) (1982)																			
FINAL - 2007 IAAF World Athletic Final (Stuttgart, GER)																			
date	22-Sep-07	time			11.23			39.71	46.16	46.16	8 / 5								
reaction time	0.151	interval				10.39		18.09	6.45		# of strides	11.23	10.39	18.09	6.45	21.62	24.54	2.92	
		velocity			8.90	9.62		5.53	15.50	8.67		8.90	9.62	5.53	15.50	9.25	8.15		
Venel, Teddy (FRA) (1985)																			
Heat 6 - 2009 IAAF World Championships (Berlin, GER)																			
date	18-Aug-09	time			11.16			33.03	46.16	46.16	2 / 3								
reaction time	0.161	interval				10.48		11.39	13.13		# of strides	11.16	10.48	11.39	13.13	21.64	24.52	2.88	
		velocity			8.96	9.54		8.78	7.62	8.67		8.96	9.54	8.78	7.62	9.24	8.16		
Kobayashi, Naoki (JPN) (1990)																			
Heat 3 - 2017 Japanese National Championships (Osaka, JPN)																			
date	23-Jun-17	time			11.26			33.09	46.16	46.16	7 / 4								
reaction time	0.144	interval				10.37		11.46	13.07		# of strides	11.26	10.37	11.46	13.07	21.63	24.53	2.90	
		velocity			8.88	9.64		8.73	7.65	8.67	179.0	8.88	9.64	8.73	7.65	9.25	8.15		
Petruciani, Ricky (SUI) (2000)																			
FINAL - 2022 Golden Gala Pietro Mennea (Rome, ITA)																			
date	09-Jun-22	time	6.18	11.24	16.49	21.95	27.54	33.33	39.49	46.16	1 / 9								
reaction time	0.150	interval			5.06	5.25	5.46	5.59	5.79	6.16	# of strides	11.24	10.71	11.38	12.83	21.95	24.21	2.26	
		velocity	8.09	9.88	9.52	9.16	8.94	8.64	8.12	7.50	8.67	8.90	9.34	8.79	7.79	9.11	8.26		
Jedrusik, Tomasz (POL) (1969)																			
Semi-Final 1 - 1988 Olympic Games (Seoul, KOR)																			
date	26-Sep-88	time			11.18			33.09	46.17	46.17	1 / 8								
reaction time	0.280	interval				10.53		11.38	13.08		# of strides	11.18	10.53	11.38	13.08	21.71	24.46	2.75	
		velocity			8.94	9.50		8.79	7.65	8.66		8.94	9.50	8.79	7.65	9.21	8.18		
Roun, Jindrich (TCH) (1965)																			
FINAL - 1991 European Cup (Frankfurt, GER)																			
date	29-Jun-91	time			11.56			33.24	46.17	46.17	/ 6								
reaction time		interval				10.45		11.23	12.93		# of strides	11.56	10.45	11.23	12.93	22.01	24.16	2.15	
		velocity			8.65	9.57		8.90	7.73	8.66		8.65	9.57	8.90	7.73	9.09	8.28		
Kato, Nobuya (JPN) (1995)																			
FINAL - 2014 IAAF World Junior Championships (Eugene, OR)																			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Guijarro, Manuel (ESP) (1998)																				
Heat 4 - 2022 European Athletics Championships (Munich, GER)		European Athletics (2022) - european athletics championships race analysis																		
date	15-Aug-22	time	11.17		21.41		32.81		46.18	46.18	5 / 6									
reaction time	0.248	interval			10.24		11.40		13.37		# of strides	11.17	10.24	11.40	13.37	21.41	24.77	3.36		
		velocity	8.95		9.77		8.77		7.48	8.66		8.95	9.77	8.77	7.48	9.34	8.07			
Sacoor, Jonathan (BEL) (1999)																				
B Race - 2023 Memorial van Damme (Brussels, BEL)		Omega Timing (2023) - diamond league race analysis																		
date	08-Sep-23	time	6.25	11.23	16.42	21.75	27.23	33.03	39.28	46.18	46.18	2 / 8								
reaction time	0.141	interval		4.98	5.19	5.33	5.48	5.80	6.25	6.90		# of strides	11.23	10.52	11.28	13.15	21.75	24.43	2.68	
		velocity	8.00	10.04	9.63	9.38	9.12	8.62	8.00	7.25	8.66		8.90	9.51	8.87	7.60	9.20	8.19		
Koch, Marc (GER) (1994)																				
Heat 2 - 2024 European Athletics Championships (Roma, ITA)		European Athletics (2024) - 2024 european athletics championships - results book																		
date	08-Jun-24	time			11.72		22.40		33.82	46.18	46.18	9 / 5								
reaction time	0.205	interval			10.68		11.42		12.36		# of strides	11.72	10.68	11.42	12.36	22.40	23.78	1.38		
		velocity			8.53		9.36		8.76	8.09	8.66		8.53	9.36	8.76	8.09	8.93	8.41		
Swillims, Bastian (GER) (1982)																				
Semi-Final 2 - 2002 European Championships (Munich, GER)		Graubner (2009) - http://www.fgs.uni-halle.de																		
date	07-Aug-02	time	11.57		22.24		33.54		46.19	46.19	/ 6									
reaction time	0.191	interval			10.67		11.30		12.65	PB	# of strides	11.57	10.67	11.30	12.65	22.24	23.95	1.71		
		velocity	8.64		9.37		8.85		7.91	8.66		8.64	9.37	8.85	7.91	8.99	8.35			
Obuchi, Mizuki (JPN) (1997)																				
Division 1 FINAL - 2017 Kanto Collegiate Championships (Yokohama, JPN)		tfdata-store.com/2017/06/01/post-786/																		
date	26-May-17	time	11.48		22.38		33.99		46.19	46.19	7 / 2									
reaction time		interval			10.90		11.61		12.20	PB	# of strides	11.48	10.90	11.61	12.20	22.38	23.81	1.43		
		velocity	8.71		9.17		8.61		8.20	8.66	189.0	8.71	9.17	8.61	8.20	8.94	8.40			
Sato, Kentaro (JPN) (1994)																				
FINAL - 2019 Japanese National Championships (Fukuoka, JPN)		Yamanaka (2019) - research on athlete performance and technique- 2019 data book																		
date	28-Jun-19	time	6.18	11.14	16.23	21.55	27.17	33.15	39.41	46.19	46.19	7 / 3								
reaction time	0.165	interval		4.96	5.09	5.32	5.62	5.98	6.26	6.78		# of strides	11.14	10.41	11.60	13.04	21.55	24.64	3.09	
		velocity	8.09	10.08	9.82	9.40	8.90	8.36	7.99	7.37	8.66	181.0	8.98	9.61	8.62	7.67	9.28	8.12		
Feliz, Lidio Andres (DOM) (1997)																				
Semi-Final 1 - 2022 World Athletics Championships (Eugene, OR)		Timing by Seiko (2022) - world athletics championships race analysis																		
date	20-Jul-22	time	11.04		21.38		32.96		46.19	46.19	8 / 7									
reaction time	0.192	interval			10.34		11.58		13.23		# of strides	11.04	10.34	11.58	13.23	21.38	24.81	3.43		
		velocity	9.06		9.67		8.64		7.56	8.66		9.06	9.67	8.64	7.56	9.35	8.06			
Schlegel, Marvin (GER) (1998)																				
Heat 2 - 2022 European Athletics Championships (Munich, GER)		European Athletics (2022) - european athletics championships race analysis																		
date	15-Aug-22	time	11.32		21.67		33.08		46.19	46.19	6 / 6									
reaction time	0.257	interval			10.35		11.41		13.11		# of strides	11.32	10.35	11.41	13.11	21.67	24.52	2.85		
		velocity	8.83		9.66		8.76		7.63	8.66		8.83	9.66	8.76	7.63	9.23	8.16			
Jones, William (USA) (2003)																				
Semi-Final 3 - 2024 USA Olympic Trials (Eugene, OR)		USATF and Karmarush (2024) - USA Olympic trials results and race analysis																		
date	23-Jun-24	time	11.16		21.84		33.37		46.19	46.19	3 / 4									
reaction time		interval			10.68		11.53		12.82		# of strides	11.16	10.68	11.53	12.82	21.84	24.35	2.51		
		velocity	8.96		9.36		8.67		7.80	8.66		8.96	9.36	8.67	7.80	9.16	8.21			
Biron, Gilles (FRA) (1995)																				
Heat 6 - 2024 Olympic Games (Paris, FRA)		Paris 2024 Olympic Games - Results Book (2024)																		
date	04-Aug-24	time	6.31	11.35	16.43	21.67	27.22	33.12	39.40	46.19	46.19	4 / 7								
reaction time	0.194	interval		5.04	5.08	5.24	5.55	5.90	6.28	6.79		# of strides	11.35	10.32	11.45	13.07	21.67	24.52	2.85	
		velocity	7.92	9.92	9.84	9.54	9.01	8.47	7.96	7.36	8.66	180.0	8.81	9.69	8.73	7.65	9.23	8.16		
Okoro, Efekemo (GBR) (1992)																				
Invitational - 2024 Memorial van damme (Brussels, BEL)		Omega Timing (2024) - diamond league race analysis																		
date	13-Sep-24	time	6.28	11.34	16.49	21.84	27.40	33.24	39.41	46.19	46.19	5 / 4								
reaction time	0.164	interval		5.06	5.15	5.35	5.56	5.84	6.17	6.78		# of strides	11.34	10.50	11.40	12.95	21.84	24.35	2.51	
		velocity	7.96	9.88	9.71	9.35	8.99	8.56	8.10	7.37	8.66	8.82	9.52	8.77	7.72	9.16	8.21			
Swillims, Bastian (GER) (1982)																				
Heat 1 - 2002 European Championships (Munich, GER)		Graubner (2009) - http://www.fgs.uni-halle.de																		
date	06-Aug-02	time	11.56		22.27		33.84		46.20	46.20	/ 3									
reaction time	0.158	interval			10.71		11.57		12.36	PB	# of strides	11.56	10.71	11.57	12.36	22.27	23.93	1.66		
		velocity	8.65		9.34		8.64		8.09	8.66		8.65	9.34	8.64	8.09	8.98	8.36			
Ishitsuka, Yusuke (JPN) (1987)																				
FINAL - 2011 Japanese National Championships (Kumagaya, JPN)		Maho (2013) - race analysis of the men's 400m run in competition																		
date	12-Jun-11	time	6.10	11.06	16.28	21.75	27.46	33.29	39.46	46.20	46.20	/ 3								
reaction time		interval		4.96	5.22	5.47	5.71	5.83	6.17	6.74	PB	# of strides	11.06	10.69	11.54	12.91	21.75	24.45	2.70	
		velocity	8.20	10.08	9.58	9.14	8.76	8.58	8.10	7.42	8.66	9.04	9.35	8.67	7.75	9.20	8.18			
Kobayashi, Naoki (JPN) (1990)																				
FINAL - 2014 Shizuoka International Athletics Meeting (Fukuori, JPN)		Maho (2014) - race analysis of men's 400m run in the 2014 season																		
date	03-May-14	time	6.32	11.44	16.67	21.98	27.61	33.52	39.64	46.20	46.20	/ 3								
reaction time		interval		5.12	5.23	5.31	5.63	5.91	6.12	6.56	PB	# of strides	11.44	10.54	11.54	12.68	21.98	24.22	2.24	
		velocity	7.91	9.77	9.56	9.42	8.88	8.46	8.17	7.62	8.66	8.74	9.49	8.67	7.89	9.10	8.26			
Kimura, Atsushi (JPN)																				
FINAL - 2018 Seiko Golden Grand Prix (Osaka, JPN)		Yamanaka (2018) - Race analysis of men and women 400m at 2018 competition																		

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Solomon, Steven (AUS) (1993)																			
FINAL - 2022 Commonwealth Games (Birmingham, GBR)																			
date	07-Aug-22	time	6.4	11.5	16.8	22.3	28.0	33.8	39.7	46.22	46.22								
reaction time	0.173	interval		5.10	5.30	5.50	5.70	5.80	5.90	6.52	# of strides	11.50	10.80	11.50	12.42	22.30	23.92	1.62	
		velocity	7.81	9.80	9.43	9.09	8.77	8.62	8.47	7.67	8.65	8.70	9.26	8.70	8.05	8.97	8.36		
Ju Tianqi (CHN) (2002)																			
Semi-Final 1 - 2023 Chinese National Championships (Quzhou, CHN)																			
date	21-Jul-23	time		11.58				22.27	33.90	39.91	46.22	46.22							
reaction time	0.209	interval					10.69	11.63	6.01	6.31	PB	# of strides	11.58	10.69	11.63	12.32	22.27	23.95	1.68
		velocity		8.64			9.35	8.60	8.32	7.92	8.65	175.7	8.64	9.35	8.60	8.12	8.98	8.35	
van Branteghem, Cédric (BEL) (1979)																			
Heat 3 - 2002 European Championships (Munich, GER)																			
date	06-Aug-02	time		11.44			22.14		33.64		46.23	46.23							
reaction time	0.180	interval				10.70	11.50		12.59		# of strides	11.44	10.70	11.50	12.59	22.14	24.09	1.95	
		velocity		8.74		9.35	8.70		7.94	8.65	8.74	9.35	8.70	7.94	9.03	8.30			
Szeglet, Zsolt (HUN) (1977)																			
Heat 4 - 2002 European Championships (Munich, GER)																			
date	06-Aug-02	time		11.61			22.29		33.50		46.23	46.23							
reaction time	0.205	interval				10.68	11.21		12.73		# of strides	11.61	10.68	11.21	12.73	22.29	23.94	1.65	
		velocity		8.61		9.36	8.92		7.86	8.65	8.61	9.36	8.92	7.86	8.97	8.35			
Régas, Dimitrios (GRE) (1986)																			
FINAL - 2006 European Championships (Göteborg, SWE)																			
date	09-Aug-06	time				22.6		33.2		46.23	46.23								
reaction time		interval					10.60		13.03		# of strides		22.60	10.60	13.03	22.60	23.63	1.03	
		velocity				8.85	18.87		7.67	8.65		4.42	9.43	7.67	8.85	8.46			
Nakano, Hiroyuki (JPN) (1988)																			
FINAL - 2012 Japanese National Championships (Osaka, JPN)																			
date	09-Jun-12	time	6.37	11.66	17.12	22.76	28.40	34.06	39.93	46.23	46.23								
reaction time		interval		5.29	5.46	5.64	5.64	5.66	5.87	6.30	# of strides	11.66	11.10	11.30	12.17	22.76	23.47	0.71	
		velocity	7.85	9.45	9.16	8.87	8.87	8.83	8.52	7.94	8.65	182.7	8.58	9.01	8.85	8.22	8.79	8.52	
Dobber, Jochem (NED) (1997)																			
FINAL - 2020 Bauhaus Galan (Stockholm, SWE)																			
date	23-Aug-20	time	6.3	11.2	16.5	21.9	27.6	33.5	39.7	46.23	46.23								
reaction time	0.190	interval		4.90	5.30	5.40	5.70	5.90	6.20	6.53	# of strides	11.20	10.70	11.60	12.73	21.90	24.33	2.43	
		velocity	7.94	10.20	9.43	9.26	8.77	8.47	8.06	7.66	8.65	8.93	9.35	8.62	7.86	9.13	8.22		
Nene, Zakhiti (RSA) (1998)																			
FINAL - 2021 Golden Gala Pietro Mennea (Florence, ITA)																			
date	10-Jun-21	time	6.3	11.3	16.5	21.9	27.5	33.3	39.4	46.23	46.23								
reaction time	0.142	interval		5.00	5.20	5.40	5.60	5.80	6.10	6.83	# of strides	11.30	10.60	11.40	12.93	21.90	24.33	2.43	
		velocity	7.94	10.00	9.62	9.26	8.93	8.62	8.20	7.32	8.65	179.0	8.85	9.43	8.77	7.73	9.13	8.22	
Eastman, Benjamin (USA) (1911)																			
FINAL - 1932 Los Angeles AC vs Stanford University (Stanford, CA) (yards)																			
date	26-Mar-32	time				21.2			46.1	46.1	46.1								
reaction time		interval							24.9	WR yards	# of strides					21.20	24.90	3.70	
		velocity				9.43			8.03	8.68	(46.4/440y)					9.43	8.03		
Klemmer, Grover (USA) (1921)																			
FINAL - 1941 Pacific Coast Championships (Champaign, IL)																			
date	31-May-41	time				22.6			46.1	46.1	46.1								
reaction time		interval							23.5	=WR yards	# of strides					22.60	23.50	0.90	
		velocity				8.85			8.51	8.68	(46.4/440y)					8.85	8.51		
Williams, Archie (USA) (1915)																			
Heat 2 - 1936 NCAA Championships (Chicago, IL)																			
date	19-Jun-36	time				21.6			46.1	46.1	46.1								
reaction time		interval							24.5		# of strides					21.60	24.50	2.90	
		velocity				9.26			8.16	8.68						9.26	8.16		
Zachoval, Radek (CZE) (1978)																			
Semi-Final 1 - 2002 European Championships (Munich, GER)																			
date	07-Aug-02	time		11.52				33.55		46.24	46.24								
reaction time	0.161	interval				10.61		11.42		12.69	PB	# of strides	11.52	10.61	11.42	12.69	22.13	24.11	1.98
		velocity		8.68		9.43		8.76		7.88	8.65	8.68	9.43	8.76	7.88	9.04	8.30		
Itahana, Kohei (JPN) (1994)																			
FINAL - 2018 Japanese Corporate Championships (Osaka, JPN)																			
date	23-Sep-18	time	6.38	11.76	17.20	22.79	28.42	34.07	39.94	46.24	46.24								
reaction time	0.181	interval		5.38	5.44	5.59	5.63	5.65	5.87	6.30	PB	# of strides	11.76	11.03	11.28	12.17	22.79	23.45	0.66
		velocity	7.84	9.29	9.19	8.94	8.88	8.85	8.52	7.94	8.65	8.50	9.07	8.87	8.22	8.78	8.53		
Petrucciani, Ricky (SUI) (2000)																			
FINAL - 2021 Golden Gala Pietro Mennea (Florence, ITA)																			
date	10-Jun-21	time	6.3	11.4	16.8	22.2	27.8	33.6	39.7	46.24	46.24								
reaction time	0.169	interval		5.10	5.40	5.40	5.60	5.80	6.10	6.54	# of strides	11.40	10.80	11.40	12.64	22.20	24.04	1.84	
		velocity	7.94	9.80	9.26	9.26	8.93	8.62	8.20	7.65	8.65	8.77	9.26	8.77	7.91	9.01	8.32		
Baker, Nicklas (GBR) (1994)																			
FINAL - 2021 Müller British Grand Prix (Gateshead, GBR)																			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential				
Kimura, Kazushi (JPN) (1993)		FINAL - 2018 Seiko Golden Grand Prix (Osaka, JPN)																				
date		20-May-18	time	6.24	11.30	16.48	21.86	27.37	33.23	39.50	46.26	46.26	5 / 3	<i>Yamanaka (2018) - Race analysis of men and women 400m at 2018 competition</i>								
reaction time	0.174	interval	5.06	5.18	5.38	5.51	5.86	6.27	6.76			# of strides	11.30	10.56	11.37	13.03	21.86	24.40	2.54			
		velocity	8.01	9.88	9.65	9.29	9.07	8.53	7.97	7.40	8.65	188.0	8.85	9.47	8.80	7.67	9.15	8.20				
Kawauchi, Mitsuki (JPN) (1997)		FINAL - 2019 Japanese National Championships (Fukuoka, JPN)																				
date		28-Jun-19	time	6.37	11.51	16.80	22.26	27.92	33.77	39.84	46.26	46.26	9 / 4	<i>Yamanaka (2019) - research on athlete performance and technique- 2019 data book</i>								
reaction time	0.187	interval	5.14	5.29	5.46	5.66	5.85	6.07	6.42			# of strides	11.51	10.75	11.51	12.49	22.26	24.00	1.74			
		velocity	7.85	9.73	9.45	9.16	8.83	8.55	8.24	7.79	8.65	183.2	8.69	9.30	8.69	8.01	8.98	8.33				
Chambers, Marcus (USA) (1994)		FINAL - 2019 Müller Anniversary Games (London, GBR)																				
date		21-Jul-19	time		11.2		21.8		33.4		46.26	46.26	2 / 9	<i>Omega Timing (2019) - diamond league race analysis</i>								
reaction time	0.165	interval			10.6		11.6		12.9			# of strides	11.20	10.60	11.60	12.86	21.80	24.46	2.66			
		velocity			8.93		9.43		8.62		7.78	8.65	8.93	9.43	8.62	7.78	9.17	8.18				
Benati, Lorenzo (ITA) (2002)		Heat 1 - 2022 World Athletics Championships (Eugene, OR)																				
date		17-Jul-22	time		11.64		22.18		33.58		46.26	46.26	5 / 5	<i>Timing by Seiko (2022) - world athletics championships race analysis</i>								
reaction time	0.229	interval			10.54		11.40		12.68			# of strides	11.64	10.54	11.40	12.68	22.18	24.08	1.90			
		velocity			8.59		9.49		8.77		7.89	8.65	8.59	9.49	8.77	7.89	9.02	8.31				
Liang Baotang (CHN) (2003)		FINAL - 2023 Chinese National Championships (Quzhou, CHN)																				
date		22-Jul-23	time		11.78		22.52		34.03	39.93	46.26	46.26	4 / 1	<i>Shandong Athletics Sport Science (2023)</i>								
reaction time	0.146	interval			10.74		11.51	5.90	6.33			# of strides	11.78	10.74	11.51	12.23	22.52	23.74	1.22			
		velocity			8.49		9.31	8.69	8.47	7.90	8.65	196.0	8.49	9.31	8.69	8.18	8.88	8.42				
Tiaoh, Gabriel (CIV) (1963)		FINAL - 1987 IAAF World Championship (Rome, ITA)																				
date		03-Sep-87	time		11.56		22.17		33.56		46.27	46.27	9 / 7	<i>Moravec (1990) - time analysis of the sprints - Rome 1987 Scientific Report (2nd ed)</i>								
reaction time		interval			10.61		11.39		12.71			# of strides	11.56	10.61	11.39	12.71	22.17	24.10	1.93			
		velocity			8.65		9.43		8.78		7.87	8.64	8.65	9.43	8.78	7.87	9.02	8.30				
Francique, Alleyne (GRN) (1976)		FINAL - 2007 IAAF World Athletic Final (Stuttgart, GER)																				
date		22-Sep-07	time		11.38		21.92		39.62		46.27	46.27	7 / 7	<i>Graubner (2007) - http://www.fgs.uni-halle.de</i>								
reaction time	0.156	interval			10.54		17.70		6.65			# of strides	11.38	10.54	17.70	6.65	21.92	24.35	2.43			
		velocity			8.79		9.49		5.65		15.04	8.64	8.79	9.49	5.65	15.04	9.12	8.21				
Borlée, Jonathan (BEL) (1988)		FINAL - 2018 Müller Grand Prix (Birmingham, GBR)																				
date		18-Aug-18	time		11.4		22.3		33.9		46.27	46.27	1 / 6	<i>Omega Timing (2018) - diamond league race analysis</i>								
reaction time	0.149	interval			10.9		11.6		12.4			# of strides	11.40	10.90	11.60	12.37	22.30	23.97	1.67			
		velocity			8.77		9.17		8.62		8.08	8.64	179.2	8.77	9.17	8.62	8.08	8.97	8.34			
Wakabayashi, Kota (JPN) (1997)		Heat 2 - 2019 Japanese National Championships (Fukuoka, JPN)																				
date		27-Jun-19	time	6.24	11.25	16.40	21.86	27.57	33.53	39.67	46.27	46.27	6 / 1	<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>								
reaction time	0.177	interval	5.01	5.15	5.46	5.71	5.96	6.14	6.60			# of strides	11.25	10.61	11.67	12.74	21.86	24.41	2.55			
		velocity	8.01	9.98	9.71	9.16	8.76	8.39	8.14	7.58	8.64		8.89	9.43	8.57	7.85	9.15	8.19				
Vedel, Benjamin Lobo (DEN) (1997)		Heat 2 - 2022 World Athletics Championships (Eugene, OR)																				
date		17-Jul-22	time		11.33		22.08		33.55		46.27	46.27	5 / 5	<i>Timing by Seiko (2022) - world athletics championships race analysis</i>								
reaction time	0.134	interval			10.75		11.47		12.72			# of strides	11.33	10.75	11.47	12.72	22.08	24.19	2.11			
		velocity			8.83		9.30		8.72		7.86	8.64	173.0	8.83	9.30	8.72	7.86	9.06	8.27			
Wu Yuang (CHN) (1998)		FINAL - 2023 Chinese World Championship & Asian Games Trials (Shenyang, CHN)																				
date		28-Jun-23	time		11.41		21.95		33.75	39.82	46.27	46.27	7 / 1	<i>Shandong Athletics Sport Science (2023)</i>								
reaction time	0.182	interval			10.54		11.80	6.07	6.45			# of strides	11.41	10.54	11.80	12.52	21.95	24.32	2.37			
		velocity			8.76		9.49	8.47	8.24	7.75	8.64	181.5	8.76	9.49	8.47	7.99	9.11	8.22				
Canal, David (ESP) (1978)		FINAL - 1997 European Cup (Munich, GER)																				
date		21-Jun-97	time		11.57		22.33		33.79		46.28	46.28	/ 2	<i>Jung (2003) - http://www.fgs.uni-halle.de</i>								
reaction time		interval			10.76		11.46		12.49			# of strides	11.57	10.76	11.46	12.49	22.33	23.95	1.62			
		velocity			8.64		9.29		8.73		8.01	8.64	8.64	9.29	8.73	8.01	8.96	8.35				
Borzakovskiy, Yuriy (RUS) (1981)		Heat 1 - 2002 European Championships (Munich, GER)																				
date		06-Aug-02	time		12.04		22.94		34.26		46.28	46.28	/ 5	<i>Graubner (2009) - http://www.fgs.uni-halle.de</i>								
reaction time	0.249	interval			10.90		11.32		12.02			# of strides	12.04	10.90	11.32	12.02	22.94	23.34	0.40			
		velocity			8.31		9.17		8.83		8.32	8.64	8.31	9.17	8.83	8.32	8.72	8.57				
Haroun, Abdalelah (QAT) (1997)		Heat 4 - 2018 Asian Games (Jakarta, INA)																				
date		25-Aug-18	time	6.34	11.53	16.82	22.29	27.95	33.85	39.91	46.28	46.28	3 / 1	<i>Yamanaka (2018) - Race analysis of men and women 400m at 2018 competition</i>								
reaction time	0.192	interval	5.19	5.29	5.47	5.66	5.90	6.06	6.37			# of strides	11.53	10.76	11.56	12.43	22.29	23.99	1.70			
		velocity	7.89	9.63	9.45	9.14	8.83	8.47	8.25	7.85	8.64		8.67	9.29	8.65	8.05	8.97	8.34				
Tamura, Tomoya (JPN) (1992)		FINAL - 2019 Japanese World Championships Trials (Fujiyoshida, JPN)																				
		<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>																				

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Šorm, Patrik (CZE) (1993)																			
FINAL - 2022 FBK Games (Hengelo, NED)																			
date	06-Jun-22	time	6.3	11.3	16.6	21.9	27.6	33.5	39.7	46.30	46.30	2 / 5							
reaction time	0.146	interval		5.00	5.30	5.30	5.70	5.90	6.20	6.60		# of strides	11.30	10.60	11.60	12.80	21.90	24.40	2.50
		velocity	7.94	10.00	9.43	9.43	8.77	8.47	8.06	7.58	8.64		8.85	9.43	8.62	7.81	9.13	8.20	
Solomon, Steven (AUS) (1993)																			
Semi-Final 1 - 2022 Commonwealth Games (Birmingham, GBR)																			
date	05-Aug-22	time	6.3	11.3	16.6	22.2	27.7	33.5	39.6	46.30	46.30	6 / 4							
reaction time	0.168	interval		5.00	5.30	5.60	5.50	5.80	6.10	6.70		# of strides	11.30	10.90	11.30	12.80	22.20	24.10	1.90
		velocity	7.94	10.00	9.43	8.93	9.09	8.62	8.20	7.46	8.64	178.0	8.85	9.17	8.85	7.81	9.01	8.30	
Nielsen, Gustav Lundholm (DEN) (1993)																			
Semi-Final 1 - 2022 European Athletics Championships (Munich, GER)																			
date	16-Aug-22	time	11.30			22.05		33.51		46.30	46.30	1 / 8							
reaction time	0.190	interval			10.75		11.46		12.79			# of strides	11.30	10.75	11.46	12.79	22.05	24.25	2.20
		velocity			8.85	9.30	8.73		7.82	8.64	180.5	8.85	9.30	8.73	7.82	9.07	8.25		
Nakano, Hiroyuki (JPN) (1988)																			
FINAL - 2011 Japanese National Championships (Kumagaya, JPN)																			
date	12-Jun-11	time	6.19	11.42	16.78	22.29	27.99	33.76	39.77	46.31	46.31	/ 4							
reaction time		interval		5.23	5.36	5.51	5.70	5.77	6.01	6.54		# of strides	11.42	10.87	11.47	12.55	22.29	24.02	1.73
		velocity	8.08	9.56	9.33	9.07	8.77	8.67	8.32	7.65	8.64		8.76	9.20	8.72	7.97	8.97	8.33	
Obuchi, Mizuki (JPN) (1997)																			
Heat 2 - 2019 Japanese National Championships (Fukuoka, JPN)																			
date	27-Jun-19	time	6.12	11.10	16.27	21.76	27.54	33.52	39.68	46.31	46.31	7 / 2							
reaction time	0.169	interval		4.98	5.17	5.49	5.78	5.98	6.16	6.63		# of strides	11.10	10.66	11.76	12.79	21.76	24.55	2.79
		velocity	8.17	10.04	9.67	9.11	8.65	8.36	8.12	7.54	8.64		9.01	9.38	8.50	7.82	9.19	8.15	
Kawauchi, Mitsuki (JPN) (1997)																			
Final - 2021 Denka Athletics Challenge Cup (Niigata, JPN)																			
date	06-Jun-21	time	6.34	11.55	16.85	22.30	27.88	33.77	39.87	46.31	46.31	9 / 6							
reaction time		interval		5.21	5.30	5.45	5.58	5.89	6.10	6.44		# of strides	11.55	10.75	11.47	12.54	22.30	24.01	1.71
		velocity	7.89	9.60	9.43	9.17	8.96	8.49	8.20	7.76	8.64		8.66	9.30	8.72	7.97	8.97	8.33	
Li Yiqing (CHN) (2005)																			
Semi-Final 1 - 2023 Chinese National Championships (Quzhou, CHN)																			
date	21-Jul-23	time	11.44			22.06		33.72	39.84	46.31	46.31	5 / 2							
reaction time	0.213	interval			10.62		11.66	6.12	6.47	PB		# of strides	11.44	10.62	11.66	12.59	22.06	24.25	2.19
		velocity	8.74		9.42		8.58	8.17	7.73	8.64	185.0	8.74	9.42	8.58	7.94	9.07	8.25		
Ayre, Sanjay (JAM) (1980)																			
FINAL - 2007 IAAF World Athletic Final (Stuttgart, GER)																			
date	22-Sep-07	time	11.20			21.90		39.78		46.32	46.32	2 / 8							
reaction time	0.155	interval			10.70		17.88		6.54			# of strides	11.20	10.70	17.88	6.54	21.90	24.42	2.52
		velocity	8.93		9.35		5.59		15.29	8.64		8.93	9.35	5.59	15.29	9.13	8.19		
Smith, Miles (USA) (1984)																			
Semi-Final 2 - 2008 USA Olympic Trials (Eugene, OR)																			
date	30-Jun-08	time	11.18			21.90	27.54	33.53	39.57	46.32	46.32	1 / 6							
reaction time		interval			10.72	5.64	5.99	6.04	6.75			# of strides	11.18	10.72	11.63	12.79	21.90	24.42	2.52
		velocity	8.94		9.33	8.87	8.35	8.28	7.41	8.64		8.94	9.33	8.60	7.82	9.13	8.19		
Sato, Fuga (JPN) (1996)																			
Division 2 FINAL - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time	11.22			21.51		33.04		46.32	46.32	5 / 1							
reaction time		interval			10.29		11.53		13.28	PB		# of strides	11.22	10.29	11.53	13.28	21.51	24.81	3.30
		velocity	8.91		9.72		8.67		7.53	8.64	181.2	8.91	9.72	8.67	7.53	9.30	8.06		
Herron, Brian (USA) (2000)																			
Heat 1 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time	10.87			21.32		32.98		46.32	46.32	5 / 6							
reaction time		interval			10.45		11.66		13.34			# of strides	10.87	10.45	11.66	13.34	21.32	25.00	3.68
		velocity	9.20		9.57		8.58		7.50	8.64	170.0	9.20	9.57	8.58	7.50	9.38	8.00		
Schuer, Juno (NED) (2002)																			
National FINAL - 2024 FBK Games (Hengelo, NED)																			
date	07-Jul-24	time	6.35	11.44	16.63	22.15	27.86	33.70	39.76	46.32	46.32	8 / 3							
reaction time	0.150	interval		5.09	5.19	5.52	5.71	5.84	6.06	6.56	PB	# of strides	11.44	10.71	11.55	12.62	22.15	24.17	2.02
		velocity	7.87	9.82	9.63	9.06	8.76	8.56	8.25	7.62	8.64		8.74	9.34	8.66	7.92	9.03	8.27	
Coombs, Joseph (TRI) (1952)																			
FINAL - 1980 Olympic Games (Moscow, URS)																			
date	30-Jul-80	time						32.8		46.4	46.33	5 / 8							
reaction time	0.140	interval								13.60		# of strides			13.60				
		velocity						9.15		7.35	8.63				7.35				
Alekseyev, Denis (RUS) (1987)																			
FINAL - 2009 ISTAF (Berlin, GER)																			
date	14-Jun-09	time	11.52			21.98		33.51		46.33	46.33	1 / 5							
reaction time	0.282	interval			10.46		11.53		12.82			# of strides	11.52	10.46	11.53	12.82	21.98	24.35	2.37
		velocity	8.68		9.56		8.67		7.80	8.63		8.68	9.56	8.67	7.80	9.10	8.21		
Azuma, Kaiki (JPN) (1993)																			
Heat 3 - 2017 Japanese National Championships (Osaka, JPN)																			

date	23-Jun-17	time	11.38	21.66	32.82	46.33	46.33	6 / 5												
reaction time	0.178	interval		10.28	11.16	13.51	PB	# of strides	11.38	10.28	11.16	13.51	21.66	24.67	3.01					
		velocity	8.79	9.73	8.96	7.40	8.63	186.2	8.79	9.73	8.96	7.40	9.23	8.11						
Scotch, Leungo (BOT) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Semi-Final 3 - 2022 Commonwealth Games (Birmingham, GBR)																				
<i>Longines Timing (2022) - commonwealth games race analysis</i>																				
date	05-Aug-22	time	6.0	10.9	16.1	21.4	27.0	33.1	39.3	46.33	46.33	7 / 3								
reaction time	0.170	interval		4.90	5.20	5.30	5.60	6.10	6.20	7.03	# of strides	10.90	10.50	11.70	13.23	21.40	24.93	3.53		
		velocity	8.33	10.20	9.62	9.43	8.93	8.20	8.06	7.11	8.63	181.0	9.17	9.52	8.55	7.56	9.35	8.02		
Fu Haoran (CHN) (2005)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2024 Chinese National Championships (Quzhou, CHN)																				
<i>Shandong Athletics Sport Science (2024)</i>																				
date	16-Sep-24	time		11.53	22.34	33.92	39.99	46.33	46.33	7 / 3										
reaction time	0.193	interval			10.81	11.58	6.07	6.34	# of strides	11.53	10.81	11.58	12.41	22.34	23.99	1.65				
		velocity		8.67	9.25	8.64	8.24	7.89	8.63	180.5	8.67	9.25	8.64	8.06	8.95	8.34				
Carr, William (USA) (1909)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 1932 Olympic Games (Los Angeles, CA)																				
<i>Querretani (2005) - a world history of the one-lap race: 1850-2004</i>																				
date	05-Aug-32	time		10.9	22.1	33.8	46.2	46.2	4 / 1											
reaction time		interval			11.20	11.70	12.40	WR	# of strides	10.90	11.20	11.70	12.40	22.10	24.10	2.00				
		velocity		9.17	8.93	8.55	8.06	8.66	181.0	9.17	8.93	8.55	8.06	9.05	8.30					
Wint, Arthur (JAM) (1920)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 1948 Olympic Games (London, GBR)																				
<i>Parienté (1978) - la fabuleuse histoire de l'athlétisme</i>																				
date	05-Aug-48	time		22.2	46.2	46.2	3 / 1													
reaction time		interval			24.0	=OR	# of strides	22.20	24.00	1.80										
		velocity		9.01	8.33	8.66		9.01	8.33											
Hurtault, Erison (USA) (1984)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Semi-Final 2 - 2008 USA Olympic Trials (Eugene, OR)																				
<i>USATF Women's Sprint Development with HPC (2008)</i>																				
date	30-Jun-08	time		11.14	21.70	27.22	33.21	39.32	46.34	46.34	7 / 7									
reaction time		interval			10.56	5.52	5.99	6.11	7.02	# of strides	11.14	10.56	11.51	13.13	21.70	24.64	2.94			
		velocity		8.98	9.47	9.06	8.35	8.18	7.12	8.63	8.98	9.47	8.69	7.62	9.22	8.12				
Wakabayashi, Kota (JPN) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2019 Japanese National Championships (Fukuoka, JPN)																				
<i>Yamanaka (2019) - research on athlete performance and technique- 2019 data book</i>																				
date	28-Jun-19	time	6.17	11.16	16.32	21.67	27.29	33.26	39.50	46.34	46.34	5 / 5								
reaction time	0.166	interval		4.99	5.16	5.35	5.62	5.97	6.24	6.84	# of strides	11.16	10.51	11.59	13.08	21.67	24.67	3.00		
		velocity	8.10	10.02	9.69	9.35	8.90	8.38	8.01	7.31	8.63	175.2	8.96	9.51	8.63	7.65	9.23	8.11		
Brier, Joseph (GBR) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2021 Müller British Grand Prix (Gateshead, GBR)																				
<i>Omega Timing (2021) - diamond league race analysis</i>																				
date	13-Jul-21	time	6.3	11.4	16.7	22.1	27.6	33.3	39.5	46.34	46.34	2 / 2								
reaction time	0.178	interval		5.10	5.30	5.40	5.50	5.70	6.20	6.84	# of strides	11.40	10.70	11.20	13.04	22.10	24.24	2.14		
		velocity	7.94	9.80	9.43	9.26	9.09	8.77	8.06	7.31	8.63	8.77	9.35	8.93	7.67	9.05	8.25			
Kawabata, Kaito (JPN) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 6 - 2022 World Athletics Championships (Eugene, OR)																				
<i>Timing by Seiko (2022) - world athletics championships race analysis</i>																				
date	17-Jul-22	time		11.14	21.79	33.37	46.34	46.34	4 / 5											
reaction time	0.128	interval			10.65	11.58	12.97	# of strides	11.14	10.65	11.58	12.97	21.79	24.55	2.76					
		velocity		8.98	9.39	8.64	7.71	8.63	187.7	8.98	9.39	8.64	7.71	9.18	8.15					
Thebe, Baboloki (BOT) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2018 Müller Grand Prix (Birmingham, GBR)																				
<i>Omega Timing (2018) - diamond league race analysis</i>																				
date	18-Aug-18	time		11.5	22.6	33.8	46.35	46.35	2 / 7											
reaction time	0.167	interval			11.1	11.2	12.6	# of strides	11.50	11.10	11.20	12.55	22.60	23.75	1.15					
		velocity		8.70	9.01	8.93	7.97	8.63	181.0	8.70	9.01	8.93	7.97	8.85	8.42					
Nose, Daiki (JPN) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2021 Shizuoka International Athletics Meeting (Fukuroi, JPN)																				
<i>Yamanaka (2021) - race analysis of men's and women's 400m and 300m races in 2021 competition</i>																				
date	03-May-21	time	6.16	11.28	16.53	21.93	27.57	33.49	39.64	46.35	46.35	4 / 2								
reaction time	0.164	interval		5.12	5.25	5.40	5.64	5.92	6.15	6.71	# of strides	11.28	10.65	11.56	12.86	21.93	24.42	2.49		
		velocity	8.12	9.77	9.52	9.26	8.87	8.45	8.13	7.45	8.63	183.0	8.87	9.39	8.65	7.78	9.12	8.19		
Jinushi, Naohiro (JPN) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 2 - 2023 Japanese National Championships (Osaka, JPN)																				
<i>Yamanaka (2024) - analysis of men's and women's 400m and 300m runs in the 2023 season</i>																				
date	03-Jun-23	time	6.37	11.68	17.07	22.51	28.04	33.80	39.86	46.35	46.35	5 / 2								
reaction time	0.174	interval		5.31	5.39	5.44	5.53	5.76	6.06	6.49	# of strides	11.68	10.83	11.29	12.55	22.51	23.84	1.33		
		velocity	7.85	9.42	9.28	9.19	9.04	8.68	8.25	7.70	8.63	177.2	8.56	9.23	8.86	7.97	8.88	8.39		
Yui, Kaisei (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 2 - 2015 Japanese National Championships (Niigata, JPN)																				
<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>																				
date	27-Jun-15	time	6.39	11.54	16.70	22.04	27.59	33.43	39.59	46.36	46.36	8 / 4								
reaction time	0.145	interval		5.15	5.16	5.34	5.55	5.84	6.16	6.77	# of strides	11.54	10.50	11.39	12.93	22.04	24.32	2.28		
		velocity	7.82	9.71	9.69	9.36	9.01	8.56	8.12	7.39	8.63	183.0	8.67	9.52	8.78	7.73	9.07	8.22		
Sato, Kentaro (JPN) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2019 Japanese World Championships Trials (Fujiyoshida, JPN)																				
<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>																				
date	01-Sep-19	time	6.30	11.32	16.52	21.95	27.59	33.56	39.75	46.36	46.36	6 / 4								
reaction time		interval		5.02	5.20	5.43	5.64	5.97	6.19	6.61	# of strides	11.32	10.63	11.61	12.80	21.95	24.41	2.46		
		velocity	7.94	9.96	9.62	9.21	8.87	8.38	8.08	7.56	8.63	179.0	8.83	9.41	8.61	7.81	9.11	8.19		
Dobber, Jochem (NED) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 2 - 2022 European Athletics Championships (Munich, GER)																				
<i>European Athletics (2022) - european athletics championships race analysis</i>																				
date	15-Aug-22	time		11.38	21.78	33.18	46.36	46.36	2 / 7											
reaction time	0.281	interval			10.40	11.40	13.18	# of strides	11.38	10.40	11.40	13.18	21.78	24.58	2.80					
		velocity		8.79	9.62	8.77	7.59	8.63	181.0	8.79	9.62	8.77	7.59	9.18	8.14					

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Maslák, Pavel (CZE) (1991)																			
Semi-Final 3 - 2022 European Athletics Championships (Munich, GER)																			
date	16-Aug-22	time	11.52		22.24		33.77		46.36	46.36	2 / 6								
reaction time	0.197	interval			10.72		11.53		12.59		# of strides	11.52	10.72	11.53	12.59	22.24	24.12	1.88	
		velocity	8.68		9.33		8.67		7.94	8.63	181.0	8.68	9.33	8.67	7.94	8.99	8.29		
Mukai, Yukihiko (JPN) (1980)																			
FINAL - 2006 Seiko Super Grand Prix (Yokohama, JPN)																			
date	24-Sep-06	time	6.3	11.4	16.7	22.3	28.1	33.9	39.9	46.37	46.37	2 / 5							
reaction time		interval		5.10	5.30	5.60	5.80	5.80	6.00	6.47		# of strides	11.40	10.90	11.60	12.47	22.30	24.07	1.77
		velocity	7.94	9.80	9.43	8.93	8.62	8.62	8.33	7.73	8.63	8.77	9.17	8.62	8.02	8.97	8.31		
Hogans, Obra (USA) (1982)																			
Semi-Final 2 - 2008 USA Olympic Trials (Eugene, OR)																			
date	30-Jun-08	time			22.14	27.64	33.45	39.60	46.37	46.37	2 / 8								
reaction time		interval			10.93	5.50	5.81	6.15	6.77		# of strides	11.21	10.93	11.31	12.92	22.14	24.23	2.09	
		velocity			8.92	9.15	9.09	8.61	8.13	7.39	8.63	8.92	9.15	8.84	7.74	9.03	8.25		
Walsh, Julian Jrummi (JPN) (1996)																			
Heat 4 - 2016 Olympic Games (Rio de Janeiro, BRA)																			
date	12-Aug-16	time			21.76		33.32		46.37	46.37	8 / 1								
reaction time	0.149	interval			10.62		11.56		13.05		# of strides	11.14	10.62	11.56	13.05	21.76	24.61	2.85	
		velocity			8.98		9.42		8.65	7.66	8.63	8.98	9.42	8.65	7.66	9.19	8.13		
Bonevacija, Liemarvin (NED) (1989)																			
FINAL - 2022 Müller Birmingham Diamond League (Birmingham, GBR)																			
date	21-May-22	time	6.37	11.41	16.53	21.83	27.39	33.36	39.61	46.37	46.37	3 / 6							
reaction time	0.159	interval		5.04	5.12	5.30	5.56	5.97	6.25	6.76		# of strides	11.41	10.42	11.53	13.01	21.83	24.54	2.71
		velocity	7.85	9.92	9.77	9.43	8.99	8.38	8.00	7.40	8.63	8.76	9.60	8.67	7.69	9.16	8.15		
Kobayashi, Naoki (JPN) (1990)																			
FINAL - 2014 Japanese National Championships (Fukushima, JPN)																			
date	08-Jun-14	time	6.14	11.36	16.45	21.83	27.56	33.45	39.65	46.38	46.38	6 / 3							
reaction time		interval		5.22	5.09	5.38	5.73	5.89	6.20	6.73		# of strides	11.36	10.47	11.62	12.93	21.83	24.55	2.72
		velocity	8.14	9.58	9.82	9.29	8.73	8.49	8.06	7.43	8.62	184.7	8.80	9.55	8.61	7.73	9.16	8.15	
Imoto, Yoshinobu (JPN) (1999)																			
U19 FINAL - 2017 National Sports Festival (Matsuyama, JPN)																			
date	09-Oct-17	time			11.22		22.26		33.80	46.38	46.38	4 / 1							
reaction time	0.165	interval			11.04		11.54		12.58	PB		# of strides	11.22	11.04	11.54	12.58	22.26	24.12	1.86
		velocity			8.91		9.06		8.67	7.95	8.62	201.0	8.91	9.06	8.67	7.95	8.98	8.29	
Kanemaru, Yuzo (JPN) (1987)																			
A FINAL - 2018 Shizuoka International Meeting (Fukuroi, JPN)																			
date	03-May-18	time	6.20	11.24	16.54	22.06	27.78	33.71	39.88	46.38	46.38	8 / 1							
reaction time	0.168	interval		5.04	5.30	5.52	5.72	5.93	6.17	6.50		# of strides	11.24	10.82	11.65	12.67	22.06	24.32	2.26
		velocity	8.06	9.92	9.43	9.06	8.74	8.43	8.10	7.69	8.62	180.5	8.90	9.24	8.58	7.89	9.07	8.22	
Richard, Tyrell (USA) (1997)																			
FINAL - 2019 The Match - Europe v USA (Minsk, BLR)																			
date	09-Sep-19	time			11.54		22.51		34.09	46.38	46.38	9 / 4							
reaction time	0.145	interval			10.97		11.58		12.29		# of strides	11.54	10.97	11.58	12.29	22.51	23.87	1.36	
		velocity			8.67		9.12		8.64	8.14	8.62	176.7	8.67	9.12	8.64	8.14	8.88	8.38	
Scotti, Edoardo (ITA) (2000)																			
FINAL - 2021 Golden Gala Pietro Mennea (Florence, ITA)																			
date	10-Jun-21	time	6.5	11.6	16.7	22.1	27.7	33.6	39.8	46.38	46.38	7 / 6							
reaction time	0.169	interval		5.10	5.10	5.40	5.60	5.90	6.20	6.58		# of strides	11.60	10.50	11.50	12.78	22.10	24.28	2.18
		velocity	7.69	9.80	9.80	9.26	8.93	8.47	8.06	7.60	8.62	174.0	8.62	9.52	8.70	7.82	9.05	8.24	
Petrucciani, Ricky (SUI) (2000)																			
FINAL - 2021 Weltklasse (Zürich, SUI)																			
date	09-Sep-21	time	7.3	11.3	16.4	21.8	27.4	33.3	39.6	46.38	46.38	2 / 7							
reaction time	0.165	interval		4.00	5.10	5.40	5.60	5.90	6.30	6.78		# of strides	11.30	10.50	11.50	13.08	21.80	24.58	2.78
		velocity	6.85	12.50	9.80	9.26	8.93	8.47	7.94	7.37	8.62	8.85	9.52	8.70	7.65	9.17	8.14		
Sato, Fuga (JPN) (1996)																			
Heat 3 - 2021 All Japan Corporate Championships (Osaka, JPN)																			
date	25-Sep-21	time			10.99		21.52		33.23	46.21	46.38	5 / 1							
reaction time	0.202	interval			10.53		11.71		12.98		# of strides	10.99	10.53	11.71	12.98	21.52	24.69	3.17	
		velocity			9.10		9.50		8.54	7.70	8.62	9.10	9.50	8.54	7.70	9.29	8.10		
Dair, Hamza (MAR) (2002)																			
National FINAL - 2022 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR)																			
date	05-Jun-22	time	6.38	11.59	17.00	22.47	28.33	34.28	40.16	46.38	46.38	4 / 1							
reaction time	0.176	interval		5.21	5.41	5.47	5.86	5.95	5.88	6.22	PB	# of strides	11.59	10.88	11.81	12.10	22.47	23.91	1.44
		velocity	7.84	9.60	9.24	9.14	8.53	8.40	8.50	8.04	8.62	8.63	9.19	8.47	8.26	8.90	8.36		
Xie Zhiyu (CHN) (2000)																			
FINAL - 2023 Chinese National Grand Prix 4 (Chongqing, CHN)																			
date	02-Jun-23	time			11.70		22.52		33.82	39.83	46.38	46.38	8 / 2						
reaction time	0.253	interval			10.82		11.30		6.01	6.55		# of strides	11.70	10.82	11.30	12.56	22.52	23.86	1.34
		velocity			8.55		9.24		8.85	8.32	7.63	8.62	167.7	8.55	9.24	8.85	7.96	8.88	8.38
Petrucciani, Ricky (SUI) (2000)																			
FINAL - 2023 Athletissima (Lausanne, SUI)																			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Šorm, Patrik (CZE) (1993)																			
Heat 2 - 2024 European Athletics Championships (Roma, ITA)																			
date	08-Jun-24	time	11.55		22.17		33.63		46.40	46.40	8 / 7								
reaction time	0.205	interval			10.62		11.46		12.77		# of strides	11.55	10.62	11.46	12.77	22.17	24.23	2.06	
		velocity	8.66		9.42		8.73		7.83	8.62		8.66	9.42	8.73	7.83	9.02	8.25		
Roosen, Sven (NED) (2001)																			
Decathlon - Heat 3 - 2024 Olympic Games (Paris, FRA)																			
date	02-Aug-24	time	6.49	11.66	16.94	22.40	28.15	34.13	40.16	46.40	46.40	2 / 2							
reaction time	0.170	interval		5.17	5.28	5.46	5.75	5.98	6.03	6.24	PB	# of strides	11.66	10.74	11.73	12.27	22.40	24.00	1.60
		velocity	7.70	9.67	9.47	9.16	8.70	8.36	8.29	8.01	8.62	183.0	8.58	9.31	8.53	8.15	8.93	8.33	
Wariner, Jeremy (USA) (1984)																			
FINAL - 2003 USATF National Junior Championships (Palo Alto, CA)																			
date	22-Jun-03	time			22.06		33.80	39.74	46.41	46.41	5 / 2								
reaction time		interval					11.74	5.94	6.67		# of strides			11.74	12.61	22.06	24.35	2.29	
		velocity			9.07		8.52	8.42	7.50	8.62				8.52	7.93	9.07	8.21		
Tamesue, Dai (JPN) (1978)																			
FINAL - 2006 Seiko Super Grand Prix (Yokohama, JPN)																			
date	24-Sep-06	time	6.1	11.4	16.7	22.3	27.9	33.8	40.0	46.41	46.41	8 / 6							
reaction time		interval		5.30	5.30	5.60	5.60	5.90	6.20	6.41		# of strides	11.40	10.90	11.50	12.61	22.30	24.11	1.81
		velocity	8.20	9.43	9.43	8.93	8.93	8.47	8.06	7.80	8.62		8.77	9.17	8.70	7.93	8.97	8.30	
Fujiwara, Takeshi (JPN) (1985)																			
FINAL - 2016 Japanese National Championships (Nagoya, JPN)																			
date	25-Jun-16	time	6.41	11.53	16.78	22.21	27.72	33.58	39.79	46.41	46.41	3 / 6							
reaction time	0.208	interval		5.12	5.25	5.43	5.51	5.86	6.21	6.62		# of strides	11.53	10.68	11.37	12.83	22.21	24.20	1.99
		velocity	7.80	9.77	9.52	9.21	9.07	8.53	8.05	7.55	8.62		8.67	9.36	8.80	7.79	9.00	8.26	
Kitakani, Naoki (JPN) (1998)																			
Semi-Final 1 - 2016 IAAF World Junior Championships (Bydgoszcz, POL)																			
date	21-Jul-16	time	6.36	11.39	16.51	21.96	27.76	33.62	39.82	46.41	46.41	8 / 4							
reaction time	0.162	interval		5.03	5.12	5.45	5.80	5.86	6.20	6.59	PB	# of strides	11.39	10.57	11.66	12.79	21.96	24.45	2.49
		velocity	7.86	9.94	9.77	9.17	8.62	8.53	8.06	7.59	8.62		8.78	9.46	8.58	7.82	9.11	8.18	
Fujiwara, Takeshi (JPN) (1985)																			
Heat 2 - 2017 Japanese National Championships (Osaka, JPN)																			
date	23-Jun-17	time			11.57		22.34		33.72	46.41	46.41	5 / 4							
reaction time	0.199	interval					10.77		11.38	12.69		# of strides	11.57	10.77	11.38	12.69	22.34	24.07	1.73
		velocity			8.64		9.29		8.79	7.88	8.62	179.5	8.64	9.29	8.79	7.88	8.95	8.31	
Abubaker, Abbas (BRN) (1996)																			
FINAL - 2018 Asian Games (Jakarta, INA)																			
date	26-Aug-18	time	6.37	11.39	16.50	21.84	27.37	33.15	39.38	46.41	46.41	6 / 7							
reaction time	0.170	interval		5.02	5.11	5.34	5.53	5.78	6.23	7.03		# of strides	11.39	10.45	11.31	13.26	21.84	24.57	2.73
		velocity	7.85	9.96	9.78	9.36	9.04	8.65	8.03	7.11	8.62	178.7	8.78	9.57	8.84	7.54	9.16	8.14	
Angela, Ramsey (NED) (1999)																			
National FINAL - 2022 Weltklasse (Zürich, SUI)																			
date	08-Sep-22	time	6.48	11.74	17.12	22.66	28.32	34.11	40.12	46.41	46.41	8 / 6							
reaction time	0.195	interval		5.26	5.38	5.54	5.66	5.79	6.01	6.29		# of strides	11.74	10.92	11.45	12.30	22.66	23.75	1.09
		velocity	7.72	9.51	9.29	9.03	8.83	8.64	8.32	7.95	8.62		8.52	9.16	8.73	8.13	8.83	8.42	
Zharov, Innokentiy (RUS) (1968)																			
FINAL - 1997 European Cup (Munich, GER)																			
date	21-Jun-97	time			11.51		22.34		34.07	46.42	46.42	/ 4							
reaction time		interval					10.83		11.73	12.35		# of strides	11.51	10.83	11.73	12.35	22.34	24.08	1.74
		velocity			8.69		9.23		8.53	8.10	8.62		8.69	9.23	8.53	8.10	8.95	8.31	
Hori, Kosuke (JPN) (1994)																			
FINAL - 2017 Japanese National Championships (Osaka, JPN)																			
date	24-Jun-17	time	6.23	11.46	16.77	22.25	27.85	33.81	39.83	46.42	46.42	2 / 4							
reaction time	0.170	interval		5.23	5.31	5.48	5.60	5.96	6.02	6.59		# of strides	11.46	10.79	11.56	12.61	22.25	24.17	1.92
		velocity	8.03	9.56	9.42	9.12	8.93	8.39	8.31	7.59	8.62		8.73	9.27	8.65	7.93	8.99	8.27	
Petruciani, Ricky (SUI) (2000)																			
FINAL - 2021 Athletissima (Lausanne, SUI)																			
date	26-Aug-21	time	6.3	11.4	16.7	22.3	27.8	33.5	39.6	46.42	46.42	3 / 7							
reaction time	0.141	interval		5.10	5.30	5.60	5.50	5.70	6.10	6.82		# of strides	11.40	10.90	11.20	12.92	22.30	24.12	1.82
		velocity	7.94	9.80	9.43	8.93	9.09	8.77	8.20	7.33	8.62		8.77	9.17	8.93	7.74	8.97	8.29	
Powell, Jevaughn (JAM) (2000)																			
Heat 3 - 2022 World Athletics Championships (Eugene, OR)																			
date	17-Jul-22	time			11.26		21.99		33.53	46.42	46.42	6 / 4							
reaction time	0.142	interval					10.73		11.54	12.89		# of strides	11.26	10.73	11.54	12.89	21.99	24.43	2.44
		velocity			8.88		9.32		8.67	7.76	8.62	180.0	8.88	9.32	8.67	7.76	9.10	8.19	
Husillos, Óscar (ESP) (1993)																			
Heat 3 - 2022 European Athletics Championships (Munich, GER)																			
date	15-Aug-22	time			11.31		21.78		33.29	46.42	46.42	3 / 5							
reaction time	0.212	interval					10.47		11.51	13.13		# of strides	11.31	10.47	11.51	13.13	21.78	24.64	2.86
		velocity			8.84		9.55		8.69	7.62	8.62		8.84	9.55	8.69	7.62	9.18	8.12	
Walsh, Julian Jrummi (JPN) (1996)																			
A FINAL - 2018 Shizuoka International Meeting (Fukuuroi, JPN)																			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Anderson, Nathaniel (USA) (1987)																			
FINAL - 2005 USATF National Junior Championships (Carson, CA)																			
date	25-Jun-05	time	11.53	16.96	22.56	28.22	33.77	39.89	46.47	46.47	5 / 2								
reaction time		interval		5.43	5.60	5.66	5.55	6.12	6.58	PB	# of strides	11.53	11.03	11.21	12.70	22.56	23.91	1.35	
		velocity	8.67	9.21	8.93	8.83	9.01	8.17	7.60	8.61		8.67	9.07	8.92	7.87	8.87	8.36		
Avilés, Luis (MEX) (2002)																			
Heat 2 - 2022 World Athletics Championships (Eugene, OR)																			
date	17-Jul-22	time	11.41		22.56		34.24		46.47	46.47	2 / 6								
reaction time	0.140	interval			11.15		11.68		12.23		# of strides	11.41	11.15	11.68	12.23	22.56	23.91	1.35	
		velocity	8.76		8.97		8.56		8.18	8.61		8.76	8.97	8.56	8.18	8.87	8.36		
Yang Wang (CHN) (1996)																			
Semi-Final 1 - 2023 Chinese National Championships (Quzhou, CHN)																			
date	21-Jul-23	time	11.25		21.67		33.47		39.79	46.47	7 / 3								
reaction time	0.165	interval			10.42		11.80		6.32	6.68	PB	# of strides	11.25	10.42	11.80	13.00	21.67	24.80	
		velocity	8.89		9.60		8.47		7.91	7.49	8.61	186.0	8.89	9.60	8.47	7.69	9.23	8.06	
Wissman, Johan (SWE) (1982)																			
FINAL - 2008 IAAF World Athletic Final (Stuttgart, GER)																			
date	13-Sep-08	time	11.41		22.08		33.70		46.48	46.48	7 / 8								
reaction time	0.174	interval			10.67		11.62		12.78		# of strides	11.41	10.67	11.62	12.78	22.08	24.40	2.32	
		velocity	8.76		9.37		8.61		7.82	8.61		8.76	9.37	8.61	7.82	9.06	8.20		
Takase, Kei (JPN) (1988)																			
FINAL - 2012 Kokutai National Sport Festival (Gifu, JPN)																			
date	08-Oct-12	time	6.06	11.01	16.05	21.33	27.01	33.02	39.35	46.48	/ 3								
reaction time		interval		4.95	5.04	5.28	5.68	6.01	6.33	7.13	# of strides	11.01	10.32	11.69	13.46	21.33	25.15	3.82	
		velocity	8.25	10.10	9.92	9.47	8.80	8.32	7.90	7.01	8.61	9.08	9.69	8.55	7.43	9.38	7.95		
Kimura, Jun (JPN) (1991)																			
Heat 3 - 2017 Japanese National Championships (Osaka, JPN)																			
date	23-Jun-17	time	11.20		21.67		33.18		46.48	46.48	3 / 6								
reaction time	0.141	interval			10.47		11.51		13.30		# of strides	11.20	10.47	11.51	13.30	21.67	24.81	3.14	
		velocity	8.93		9.55		8.69		7.52	8.61	180.2	8.93	9.55	8.69	7.52	9.23	8.06		
Montgomery, Kahmari (USA) (1997)																			
FINAL - 2016 IAAF World Junior Championships (Bydgoszcz, POL)																			
date	22-Jul-16	time	6.24	11.49	16.82	22.28	27.88	33.62	39.71	46.48	8 / 5								
reaction time	0.203	interval		5.25	5.33	5.46	5.60	5.74	6.09	6.77	# of strides	11.49	10.79	11.34	12.86	22.28	24.20	1.92	
		velocity	8.01	9.52	9.38	9.16	8.93	8.71	8.21	7.39	8.61	8.70	9.27	8.82	7.78	8.98	8.26		
Kawauchi, Mitsuki (JPN) (1997)																			
A FINAL - 2019 Shizuoka International Athletics Meeting (Fukuroi, JPN)																			
date	03-May-19	time	6.27	11.42	16.67	22.07	27.73	33.68	39.86	46.48	5 / 1								
reaction time		interval		5.15	5.25	5.40	5.66	5.95	6.18	6.62	# of strides	11.42	10.65	11.61	12.80	22.07	24.41	2.34	
		velocity	7.97	9.71	9.52	9.26	8.83	8.40	8.09	7.55	8.61	189.7	8.76	9.39	8.61	7.81	9.06	8.19	
Inoue, Daichi (JPN) (1999)																			
FINAL - 2020 Japanese National Championships (Niigata, JPN)																			
date	02-Oct-20	time	6.30	11.27	16.47	22.04	27.75	33.71	39.82	46.48	3 / 2								
reaction time	0.215	interval		4.97	5.20	5.57	5.71	5.96	6.11	6.66	# of strides	11.27	10.77	11.67	12.77	22.04	24.44	2.40	
		velocity	7.94	10.06	9.62	8.98	8.76	8.39	8.18	7.51	8.61	175.2	8.87	9.29	8.57	7.83	9.07	8.18	
Suzuki, Aoto (JPN) (2001)																			
FINAL - 2021 Japanese National Championships (Osaka, JPN)																			
date	25-Jun-21	time	6.15	11.32	16.57	22.07	27.78	33.78	39.93	46.48	2 / 3								
reaction time	0.163	interval		5.17	5.25	5.50	5.71	6.00	6.15	6.55	# of strides	11.32	10.75	11.71	12.70	22.07	24.41	2.34	
		velocity	8.13	9.67	9.52	9.09	8.76	8.33	8.13	7.63	8.61	8.83	9.30	8.54	7.87	9.06	8.19		
Makwala, Isaac (BOT) (1986)																			
FINAL - 2023 FBK Games (Hengelo, NED)																			
date	04-Jun-23	time	6.27	11.31	16.50	21.77	27.32	33.14	39.45	46.48	1 / 6								
reaction time	0.183	interval		5.04	5.19	5.27	5.55	5.82	6.31	7.03	# of strides	11.31	10.46	11.37	13.34	21.77	24.71	2.94	
		velocity	7.97	9.92	9.63	9.49	9.01	8.59	7.92	7.11	8.61	8.84	9.56	8.80	7.50	9.19	8.09		
Kato, Nobuya (JPN) (1995)																			
FINAL - 2014 Japanese National Championships (Fukushima, JPN)																			
date	08-Jun-14	time	6.44	11.65	16.95	22.35	27.93	33.79	39.89	46.49	8 / 4								
reaction time		interval		5.21	5.30	5.40	5.58	5.86	6.10	6.60	# of strides	11.65	10.70	11.44	12.70	22.35	24.14	1.79	
		velocity	7.76	9.60	9.43	9.26	8.96	8.53	8.20	7.58	8.60	170.0	8.58	9.35	8.74	7.87	8.95	8.29	
Horii, Kosuke (JPN) (1994)																			
FINAL - 2018 Seiko Golden Grand Prix (Osaka, JPN)																			
date	20-May-18	time	6.27	11.37	16.58	22.15	27.99	33.97	40.11	46.49	7 / 6								
reaction time	0.169	interval		5.10	5.21	5.57	5.84	5.98	6.14	6.38	# of strides	11.37	10.78	11.82	12.52	22.15	24.34	2.19	
		velocity	7.97	9.80	9.60	8.98	8.56	8.36	8.14	7.84	8.60	185.2	8.80	9.28	8.46	7.99	9.03	8.22	
Ito, Rikiya (JPN) (1998)																			
FINAL - 2018 National Sports Festival (Fukui, JPN)																			
date	08-Oct-18	time	6.36	11.57	16.93	22.47	28.21	34.10	40.09	46.49	6 / 2								
reaction time	0.166	interval		5.21	5.36	5.54	5.74	5.89	5.99	6.40	PB	# of strides	11.57	10.90	11.63	12.39	22.47	24.02	1.55
		velocity	7.86	9.60	9.33	9.03	8.71	8.49	8.35	7.81	8.60	8.64	9.17	8.60	8.07	8.90	8.33		
Haydock-Wilson, Alex (GBR) (1999)																			
FINAL - 2022 Müller Birmingham Diamond League (Birmingham, GBR)																			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential				
Bujna, Šimon (SVK) (1995)																						
Heat 2 - 2024 European Athletics Championships (Roma, ITA)																						
date	08-Jun-24	time	11.46		22.16		33.77		46.52	46.52	2 / 9											
reaction time	0.165	interval			10.70		11.61		12.75		# of strides	11.46	10.70	11.61	12.75	22.16	24.36	2.20				
		velocity	8.73		9.35		8.61		7.84	8.60		8.73	9.35	8.61	7.84	9.03	8.21					
Campbell, Milton (USA) (1976)																						
Semi-Final 2 - 2003 USATF National Championships (Palo Alto, CA)																						
date	20-Jun-03	time			21.77		33.79		39.77	46.53	46.53	3 / 8										
reaction time		interval					12.02		5.98	6.76		# of strides			12.02	12.74	21.77	24.76	2.99			
		velocity			9.19		8.32		8.36	7.40	8.60				8.32	7.85	9.19	8.08				
Watanabe, Kazuya (JPN) (1988)																						
FINAL - 2014 Shizuoka International Athletics Meeting (Fukuori, JPN)																						
date	03-May-14	time	6.29		11.52		16.75		22.12	27.69	33.61	39.87	46.53	46.53	/ 6							
reaction time		interval			5.08		5.23		5.37	5.57	5.92	6.26	6.66		# of strides	11.52	10.60	11.49	12.92	22.12	24.41	2.29
		velocity	7.95		9.56		9.56		9.31	8.98	8.45	7.99	7.51	8.60		8.68	9.43	8.70	7.74	9.04	8.19	
Fields, Howard (USA) (1999)																						
FINAL - 2018 IAAF World Junior Championships (Tampere, FIN)																						
date	13-Jul-18	time	6.16		11.24		16.47		21.95	27.61	33.42	39.64	46.53	46.53	2 / 5							
reaction time	0.163	interval			5.08		5.23		5.48	5.66	5.81	6.22	6.89		# of strides	11.24	10.71	11.47	13.11	21.95	24.58	2.63
		velocity	8.12		9.84		9.56		9.12	8.83	8.61	8.04	7.26	8.60		8.90	9.34	8.72	7.63	9.11	8.14	
Devantay, Charles (SUI) (1998)																						
National FINAL - 2022 Weltklasse (Zürich, SUI)																						
date	08-Sep-22	time	6.27		11.41		16.72		22.16	27.82	33.77	39.96	46.53	46.53	2 / 7							
reaction time	0.144	interval			5.14		5.31		5.44	5.66	5.95	6.19	6.57		# of strides	11.41	10.75	11.61	12.76	22.16	24.37	2.21
		velocity	7.97		9.73		9.42		9.19	8.83	8.40	8.08	7.61	8.60		8.76	9.30	8.61	7.84	9.03	8.21	
Zalewski, Karol (POL) (1993)																						
Heat 5 - 2023 World Athletics Championships (Budapest, HUN)																						
date	20-Aug-23	time	11.37		22.03		33.80		46.53	46.53	2 / 6											
reaction time	0.168	interval			10.66		11.77		12.73		# of strides	11.37	10.66	11.77	12.73	22.03	24.50	2.47				
		velocity	8.80		9.38		8.50		7.86	8.60		8.80	9.38	8.50	7.86	9.08	8.16					
Eastman, Benjamin (USA) (1911)																						
FINAL - 1932 Olympic Games (Los Angeles, CA)																						
date	05-Aug-32	time	10.8		21.9		33.6		46.4	46.4	2 / 2											
reaction time		interval			11.10		11.70		12.80	(46.50)	# of strides	10.80	11.10	11.70	12.80	21.90	24.50	2.60				
		velocity	9.26		9.01		8.55		7.81	8.62		9.26	9.01	8.55	7.81	9.13	8.16					
McKenley, Herb (JAM) (1922)																						
FINAL - 1948 Olympic Games (London, GBR)																						
date	05-Aug-48	time			21.4				46.4	46.4	2 / 2											
reaction time		interval						25.0			# of strides					21.40	25.00	3.60				
		velocity			9.35			8.00	8.62		(46.53)					9.35	8.00					
Rapnouil, Jean-Louis (FRA) (1965)																						
FINAL - 1997 European Cup (Munich, GER)																						
date	21-Jun-97	time	11.70		22.67		34.14		46.46	46.54	/ 5											
reaction time		interval			10.97		11.47		12.32		# of strides	11.70	10.97	11.47	12.32	22.67	23.79	1.12				
		velocity	8.55		9.12		8.72		8.12	8.59		8.55	9.12	8.72	8.12	8.82	8.41					
Semyonov, Andrey (RUS) (1977)																						
Heat 3 - 2002 European Championships (Munich, GER)																						
date	06-Aug-02	time	11.65		22.26		33.70		46.54	46.54	/ 3											
reaction time	0.138	interval			10.61		11.44		12.84		# of strides	11.65	10.61	11.44	12.84	22.26	24.28	2.02				
		velocity	8.58		9.43		8.74		7.79	8.59		8.58	9.43	8.74	7.79	8.98	8.24					
Walsh, Julian Jrummi (JPN) (1996)																						
FINAL - 2015 Japanese National Junior Championships (Nagoya, JPN)																						
date	16-Oct-15	time	6.24		11.35		16.60		22.05	27.68	33.66	39.94	46.54	46.54	/ 1							
reaction time		interval			5.11		5.25		5.45	5.63	5.98	6.28	6.60		# of strides	11.35	10.70	11.61	12.88	22.05	24.49	2.44
		velocity	8.01		9.78		9.52		9.17	8.88	8.36	7.96	7.58	8.59		8.81	9.35	8.61	7.76	9.07	8.17	
Rhoden-Stevens, Jamal (GBR) (1994)																						
National FINAL - 2018 Müller Anniversary Games (London, GBR)																						
date	21-Jul-18	time	11.6		22.6		34.1		46.54	46.54	3 / 3											
reaction time	0.138	interval			11.0		11.5		12.4	PB	# of strides	11.60	11.00	11.50	12.44	22.60	23.94	1.34				
		velocity	8.62		9.09		8.70		8.04	8.59		8.62	9.09	8.70	8.04	8.85	8.35					
Wakabayashi, Kota (JPN) (1997)																						
FINAL - 2018 National Sports Festival (Fukui, JPN)																						
date	08-Oct-18	time	6.31		11.41		16.74		22.27	28.01	33.88	39.93	46.54	46.54	4 / 3							
reaction time	0.194	interval			5.10		5.33		5.53	5.74	5.87	6.05	6.61		# of strides	11.41	10.86	11.61	12.66	22.27	24.27	2.00
		velocity	7.92		9.80		9.38		9.04	8.71	8.52	8.26	7.56	8.59		8.76	9.21	8.61	7.90	8.98	8.24	
Gu Xiofei (CHN) (2001)																						
FINAL - 2023 Chinese World Championship & Asian Games Trials (Shenyang, CHN)																						
date	28-Jun-23	time	11.48		22.12		33.75		39.82	46.54	46.54	4 / 2										
reaction time	0.228	interval			10.64		11.63		6.07	6.72	# of strides	11.48	10.64	11.63	12.79	22.12	24.42	2.30				
		velocity	8.71		9.40		8.60		8.24	7.44	8.59	176.7	8.71	9.40	8.60	7.82	9.04	8.19				
Kitagawa, Takamasa (JPN) (1996)																						
FINAL - 2017 Shizuoka International Meeting (Fukuori, JPN)																						

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Tamura, Tomoya (JPN) (1992)																			
FINAL - 2018 Japanese National Championships (Yamaguchi, JPN)																			
date	23-Jun-18	time	6.18	11.33	16.58	22.07	27.75	33.62	39.82	46.58	46.58	8 / 4	<i>Yamanaka (2018) - Race analysis of men and women 400m at 2018 competition</i>						
reaction time	0.169	interval		5.15	5.25	5.49	5.68	5.87	6.20	6.76		# of strides	11.33	10.74	11.55	12.96	22.07	24.51	2.44
		velocity	8.09	9.71	9.52	9.11	8.80	8.52	8.06	7.40	8.59	185.7	8.83	9.31	8.66	7.72	9.06	8.16	
Obuchi, Mizuki (JPN) (1997)																			
FINAL - 2020 Japanese National Championships (Niigata, JPN)																			
date	02-Oct-20	time	6.31	11.40	16.80	22.52	28.36	34.30	40.21	46.58	46.58	7 / 5	<i>Yamanaka (2020) - 400m race analysis of men and women during 2020 season</i>						
reaction time	0.179	interval		5.09	5.40	5.72	5.84	5.94	5.91	6.37		# of strides	11.40	11.12	11.78	12.28	22.52	24.06	1.54
		velocity	7.92	9.82	9.26	8.74	8.56	8.42	8.46	7.85	8.59	192.2	8.77	8.99	8.49	8.14	8.88	8.31	
Ikeda, Kosuke (JPN) (1995)																			
FINAL - 2021 Ready Steady Tokyo (Tokyo, JPN)																			
date	09-May-21	time	6.25	11.27	16.40	21.83	27.49	33.42	39.77	46.58	46.58	9 / 4	<i>Yamanaka (2021) - race analysis of men's and women's 400m and 300m races in 2021 competition</i>						
reaction time	0.156	interval		5.02	5.13	5.43	5.66	5.93	6.35	6.81	PB	# of strides	11.27	10.56	11.59	13.16	21.83	24.75	2.92
		velocity	8.00	9.96	9.75	9.21	8.83	8.43	7.87	7.34	8.59	188.7	8.87	9.47	8.63	7.60	9.16	8.08	
Yoshiki, Tsubasa (JPN) (2003)																			
FINAL - 2021 Japanese U20 National Championships (Osaka, JPN)																			
date	25-Jun-21	time	6.22	11.27	16.45	21.86	27.36	33.18	39.58	46.58	46.58	6 / 1	<i>Yamanaka (2021) - race analysis of men's and women's 400m and 300m races in 2021 competition</i>						
reaction time	0.172	interval		5.05	5.18	5.41	5.50	5.82	6.40	7.00	PB	# of strides	11.27	10.59	11.32	13.40	21.86	24.72	2.86
		velocity	8.04	9.90	9.65	9.24	9.09	8.59	7.81	7.14	8.59	207.0	8.87	9.44	8.83	7.46	9.15	8.09	
Yang Wang (CHN) (1996)																			
FINAL - 2023 Chinese National Championships (Quzhou, CHN)																			
date	22-Jul-23	time		11.33		22.10		33.80	40.03	46.58	46.58	3 / 3	<i>Shandong Athletics Sport Science (2023)</i>						
reaction time	0.198	interval			10.77		11.70	6.23	6.55			# of strides	11.33	10.77	11.70	12.78	22.10	24.48	2.38
		velocity		8.83		9.29		8.55	8.03	7.63	8.59	186.2	8.83	9.29	8.55	7.82	9.05	8.17	
Sasaki, Yudai (JPN) (1986)																			
FINAL - 2006 Seiko Super Grand Prix (Yokohama, JPN)																			
date	24-Sep-06	time	6.3	11.5	16.6	22.1	27.8	33.7	39.8	46.59	46.59	1 / 7	<i>Hisashi (2007) - Super Grand Prix 2006 - sprinting speed changes in the 400m</i>						
reaction time		interval		5.20	5.10	5.50	5.70	5.90	6.10	6.79		# of strides	11.50	10.60	11.60	12.89	22.10	24.49	2.39
		velocity	7.94	9.62	9.80	9.09	8.77	8.47	8.20	7.36	8.59	187.0	8.70	9.43	8.62	7.76	9.05	8.17	
Uike, Yuji (JPN) (1998)																			
FINAL - 2016 Japanese National Junior Championships (Mizuho, JPN)																			
date	21-Oct-16	time	6.56	11.93	17.32	22.83	28.54	34.39	40.39	46.59	46.59	3 / 1	<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>						
reaction time		interval		5.37	5.39	5.51	5.71	5.85	6.00	6.20	PB	# of strides	11.93	10.90	11.56	12.20	22.83	23.76	0.93
		velocity	7.62	9.31	9.28	9.07	8.76	8.55	8.33	8.06	8.59	183.8	8.38	9.17	8.65	8.20	8.76	8.42	
Uike, Yuji (JPN) (1998)																			
Heat 2 - 2017 Japanese National Championships (Osaka, JPN)																			
date	23-Jun-17	time		11.27		21.80		33.27		46.59	46.59	6 / 5	<i>(2017) - tfdata-store.com/2017/07/08/post-965/</i>						
reaction time	0.194	interval			10.53		11.47		13.32		=PB	# of strides	11.27	10.53	11.47	13.32	21.80	24.79	2.99
		velocity		8.87		9.50		8.72	7.51	8.59	185.2	8.87	9.50	8.72	7.51	9.17	8.07		
Ito, Rikiya (JPN) (1998)																			
Final - 2021 Japanese National Championships (Osaka, JPN)																			
date	25-Jun-21	time	6.28	11.36	16.60	22.11	27.91	33.90	40.00	46.58	46.59	7 / 4	<i>Yamanaka (2021) - race analysis of men's and women's 400m and 300m races in 2021 competition</i>						
reaction time	0.174	interval		5.08	5.24	5.51	5.80	5.99	6.10	6.58		# of strides	11.36	10.75	11.79	12.68	22.11	24.47	2.36
		velocity	7.96	9.84	9.54	9.07	8.62	8.35	8.20	7.60	8.59	188.0	8.80	9.30	8.48	7.89	9.05	8.17	
Higgins, Ben (GBR) (2000)																			
B FINAL - 2022 Müller Birmingham Diamond League (Birmingham, GBR)																			
date	21-May-22	time	6.3	11.4	16.6	22.0	27.7	33.8	40.0	46.59	46.59	3 / 3	<i>Omega Timing (2022) - diamond league race analysis</i>						
reaction time	0.134	interval		5.10	5.20	5.40	5.70	6.10	6.20	6.59		# of strides	11.40	10.60	11.80	12.79	22.00	24.59	2.59
		velocity	7.94	9.80	9.62	9.26	8.77	8.20	8.06	7.59	8.59	194.0	8.77	9.43	8.47	7.82	9.09	8.13	
Willie, Ryan (USA) (2002)																			
Heat 5 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time		11.45		22.30		34.02		46.59	46.59	7 / 7	<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>						
reaction time		interval			10.85		11.72		12.57			# of strides	11.45	10.85	11.72	12.57	22.30	24.29	1.99
		velocity		8.73		9.22		8.53	7.96	8.59	172.2	8.73	9.22	8.53	7.96	8.97	8.23		
Boase, Jordan (USA) (1985)																			
Semi-Final 1 - 2008 USA Olympic Trials (Eugene, OR)																			
date	30-Jun-08	time		11.42		22.12	27.66	33.72	39.82	46.60	46.60	3 / 7	<i>USATF Women's Sprint Development with HPC (2008)</i>						
reaction time		interval			10.70	5.54	6.06	6.10	6.78			# of strides	11.42	10.70	11.60	12.88	22.12	24.48	2.36
		velocity		8.76		9.35	9.03	8.25	8.20	7.37	8.58	187.6	8.76	9.35	8.62	7.76	9.04	8.17	
Kawauchi, Mitsuki (JPN) (1997)																			
FINAL - 2017 Kansai Regional University Championships (Osaka, JPN)																			
date	11-May-17	time		11.42		22.01		33.47		46.60	46.60	5 / 1	<i>(2017) - tfdata-store.com/2017/05/13/post-441/</i>						
reaction time		interval			10.59		11.46		13.13		PB	# of strides	11.42	10.59	11.46	13.13	22.01	24.59	2.58
		velocity		8.76		9.44		8.73	7.62	8.58	186.7	8.76	9.44	8.73	7.62	9.09	8.13		
Janežič, Luka (SLO) (1995)																			
FINAL - 2019 Bauhaus Galan (Stockholm, SWE)																			
date	30-May-19	time		11.4		22.2		33.8		46.60	46.60	8 / 5	<i>Omega Timing (2019) - diamond league race analysis</i>						
reaction time	0.162	interval			10.8		11.6		12.8			# of strides	11.40	10.80	11.60	12.80	22.20	24.40	2.20
		velocity		8.77		9.26		8.62	7.81	8.58	170.0	8.77	9.26	8.62	7.81	9.01	8.20		
Watrin, Julien (BEL) (1992)																			
National FINAL - 2019 Memorial van Damme (Brussels, BEL)																			

Song Jiahui (CHN) (2002)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2023 Chinese National Grand Prix 4 (Chongqing, CHN)		Shandong Athletics Sport Science (2023)																	
date	02-Jun-23	time	11.61	22.14	33.68	39.81	46.63	46.63	3 / 3										
reaction time	0.228	interval		10.53	11.54	6.13	6.82	PB	# of strides	11.61	10.53	11.54	12.95	22.14	24.49	2.35			
		velocity	8.61	9.50	8.67	8.16	7.33	8.58	168.0	8.61	9.50	8.67	7.72	9.03	8.17				
Hirakawa, Kei (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2023 Japanese National High School Championships (Sapporo, JPN)		Takashima (2023) - national high school sports festival - biomechanics data																	
date	02-Aug-23	time	11.26	22.12	33.85	46.63	46.63	46.63	5 / 1										
reaction time	0.205	interval		10.86	11.73	12.78	8.58	8.58	# of strides	11.26	10.86	11.73	12.78	22.12	24.51	2.39			
		velocity	8.88	9.21	8.53	7.82	8.58	8.58	8.88	9.21	8.53	7.82	9.04	8.16					
Williams, Archie (USA) (1915)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 1936 Olympic Games (Berlin, GER)		Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016																	
date	07-Aug-36	time		22.0	46.50	46.5	46.5	46.5	5 / 1										
reaction time		interval			24.5	8.60	8.60	8.60	# of strides					46.50	22.00	24.50	2.50		
		velocity		9.09	8.16	8.60	8.60	8.60	189.7					2.15	9.09	8.16			
Wrighton, John (GBR) (1933)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 1958 European Championships (Stockholm, SWE)		(1959) - der 400-m-hürdenlauf in stockholm																	
date	21-Aug-58	time		22.4	46.3	46.5	46.5	46.5	/ 1										
reaction time		interval			23.9	8.60	8.60	8.60	# of strides							22.40	23.90	1.50	
		velocity		8.93	8.37	8.60	8.60	8.60								8.93	8.37		
Hirose, Hideyuki (JPN) (1989)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2016 Japanese National Championships (Nagoya, JPN)		Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016																	
date	25-Jun-16	time	6.34	11.53	16.78	22.20	27.87	33.79	39.98	46.64	46.64	1 / 8							
reaction time	0.176	interval		5.19	5.25	5.42	5.67	5.92	6.19	6.66	6.66	# of strides	11.53	10.67	11.59	12.85	22.20	24.44	
		velocity	7.89	9.63	9.52	9.23	8.82	8.45	8.08	7.51	8.58	8.67	9.37	8.63	7.78	9.01	8.18	2.24	
Strother, Nathan (USA) (1995)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2019 Bauhaus Galan (Stockholm, SWE)		Omega Timing (2019) - diamond league race analysis																	
date	30-May-19	time	11.5	22.5	34.1	46.64	46.64	46.64	7 / 6										
reaction time	0.199	interval		11.0	11.6	12.5	12.5	12.5	# of strides	11.50	11.00	11.60	12.54	22.50	24.14	1.64			
		velocity	8.70	9.09	8.62	7.97	8.58	8.58	179.7	8.70	9.09	8.62	7.97	8.89	8.29				
Daichi, Tomita (JPN) (2001)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
U20 FINAL - 2019 Japanese National U18/U20 Championships (Hiroshima, JPN)		Kijima (2019) - research on athlete performance and technique- 2019 data book																	
date	18-Oct-19	time	6.30	11.48	16.77	22.38	28.13	34.07	40.16	46.64	46.64	5 / 1							
reaction time	0.189	interval		5.18	5.29	5.61	5.75	5.94	6.09	6.48	6.48	# of strides	11.48	10.90	11.69	12.57	22.38	24.26	
		velocity	7.94	9.65	9.45	8.91	8.70	8.42	8.21	7.72	8.58	181.0	8.71	9.17	8.55	7.96	8.94	8.24	
Re, Davide (ITA) (1993)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2021 Weltklasse (Zürich, SUI)		Omega Timing (2021) - diamond league race analysis																	
date	09-Sep-21	time	6.4	11.7	17.1	22.6	28.2	34.1	40.3	46.64	46.64	1 / 8							
reaction time	0.146	interval		5.30	5.40	5.50	5.60	5.90	6.20	6.34	6.34	# of strides	11.70	10.90	11.50	12.54	22.60	24.04	
		velocity	7.81	9.43	9.26	9.09	8.93	8.47	8.06	7.89	8.58	8.55	9.17	8.70	7.97	8.85	8.32	1.44	
Borlée, Kevin (BEL) (1988)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2022 Meeting de Paris (Paris, FRA)		Omega Timing (2022) - diamond league race analysis																	
date	16-Jun-22	time	6.43	11.68	17.05	22.48	28.10	33.91	39.96	46.64	46.64	1 / 7							
reaction time	0.154	interval		5.25	5.37	5.43	5.62	5.81	6.05	6.68	6.68	# of strides	11.68	10.80	11.43	12.73	22.48	24.16	
		velocity	7.78	9.52	9.31	9.21	8.90	8.61	8.26	7.49	8.58	176.0	8.56	9.26	8.75	7.86	8.90	8.28	
Uozato, Yusuke (JPN) (1994)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Race B - 2016 Shizuoka International Meeting (Fukuroi, JPN)		Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016																	
date	03-May-16	time	6.23	11.40	16.68	22.12	27.82	33.79	40.01	46.65	46.65	1 / 1							
reaction time		interval		5.17	5.28	5.44	5.70	5.97	6.22	6.64	6.64	# of strides	11.40	10.72	11.67	12.86	22.12	24.53	
		velocity	8.03	9.67	9.47	9.19	8.77	8.38	8.04	7.53	8.57	8.77	9.33	8.57	7.78	9.04	8.15	2.41	
Kimura, Kazushi (JPN) (1993)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Heat 2 - 2018 Japanese National Championships (Yamaguchi, JPN)		Yamanaka (2018) - Race analysis of men and women 400m at 2018 competition																	
date	22-Jun-18	time	6.32	11.56	17.02	22.66	28.36	34.12	40.07	46.65	46.65	5 / 1							
reaction time	0.184	interval		5.24	5.46	5.64	5.70	5.76	5.95	6.58	6.58	# of strides	11.56	11.10	11.46	12.53	22.66	23.99	
		velocity	7.91	9.54	9.16	8.87	8.77	8.68	8.40	7.60	8.57	8.65	9.01	8.73	7.98	8.83	8.34	1.33	
Spitz, Lionel (SUI) (2001)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
B Race - 2021 Athletissima (Lausanne, SUI)		Omega Timing (2021) - diamond league race analysis																	
date	26-Aug-21	time	6.4	11.6	17.0	22.6	28.4	34.3	40.3	46.65	46.65	5 / 1							
reaction time	0.153	interval		5.20	5.40	5.60	5.80	5.90	6.00	6.35	6.35	# of strides	11.60	11.00	11.70	12.35	22.60	24.05	
		velocity	7.81	9.62	9.26	8.93	8.62	8.47	8.33	7.87	8.57	8.62	9.09	8.55	8.10	8.85	8.32	1.45	
Tomlyanovich, TJ (USA) (2003)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Semi-Final 3 - 2024 USA Olympic Trials (Eugene, OR)		USATF and Karmarush (2024) - USA Olympic trials results and race analysis																	
date	23-Jun-24	time		11.14	22.00	33.62	46.65	46.65	46.65	4 / 7									
reaction time		interval		10.86	11.62	13.03	8.57	8.57	# of strides	11.14	10.86	11.62	13.03	22.00	24.65	2.65			
		velocity		8.98	9.21	8.61	7.67	8.57		8.98	9.21	8.61	7.67	9.09	8.11				
Wakabayashi, Kota (JPN) (1997)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Heat 2 - 2017 National Sports Festival (Matsuyama, JPN)		(2017) - ifdata-store.com/2017/10/12/post-1100/																	
date	08-Oct-17	time		11.45	21.92	33.69	46.66	46.66	3 / 1										
reaction time	0.191	interval		10.47	11.77	12.97	8.57	8.57	# of strides	11.45	10.47	11.77	12.97	21.92	24.74	2.82			
		velocity		8.73	9.55	8.50	7.71	8.57	173.2	8.73	9.55	8.50	7.71	9.12	8.08				
Sacoor, Jonathan (BEL) (1999)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2021 Memorial van Damme (Brussels, BEL)		Omega Timing (2021) - diamond league race analysis																	

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Ishitsuka, Yusuke (JPN) (1987)																			
FINAL - 2014 Japanese National Championships (Fukushima, JPN)																			
date	08-Jun-14	time	6.15	11.25	16.48	21.91	27.58	33.52	39.81	46.69	46.69	9 / 5							
reaction time		interval		5.10	5.23	5.43	5.67	5.94	6.29	6.88		# of strides	11.25	10.66	11.61	13.17	21.91	24.78	2.87
		velocity	8.13	9.80	9.56	9.21	8.82	8.42	7.95	7.27	8.57	180.7	8.89	9.38	8.61	7.59	9.13	8.07	
Matsukiyo, Kazuki (JPN) (1997)																			
Semi-Final 2 - 2016 IAAF World Junior Championships (Bydgoszcz, POL)																			
date	21-Jul-16	time	6.36	11.56	17.00	22.58	28.27	34.06	40.11	46.69	46.69	5 / 2							
reaction time	0.139	interval		5.20	5.44	5.58	5.69	5.79	6.05	6.58	PB	# of strides	11.56	11.02	11.48	12.63	22.58	24.11	1.53
		velocity	7.86	9.62	9.19	8.96	8.79	8.64	8.26	7.60	8.57	8.65	9.07	8.71	7.92	8.86	8.30		
Matsukiyo, Kazuki (JPN) (1997)																			
FINAL - 2016 IAAF World Junior Championships (Bydgoszcz, POL)																			
date	22-Jul-16	time	6.49	11.72	17.15	22.66	28.34	34.16	40.19	46.69	46.69	9 / 7							
reaction time	0.196	interval		5.23	5.43	5.51	5.68	5.82	6.03	6.50	=PB	# of strides	11.72	10.94	11.50	12.53	22.66	24.03	1.37
		velocity	7.70	9.56	9.21	9.07	8.80	8.59	8.29	7.69	8.57	8.53	9.14	8.70	7.98	8.83	8.32		
Obuchi, Mizuki (JPN) (1997)																			
FINAL - 2017 Japanese National Championships (Osaka, JPN)																			
date	24-Jun-17	time		11.47		22.30		33.91		46.69	46.69	3 / 5							
reaction time	0.169	interval				10.83		11.61		12.78		# of strides	11.47	10.83	11.61	12.78	22.30	24.39	2.09
		velocity		8.72		9.23		8.61		7.82	8.57	194.0	8.72	9.23	8.61	7.82	8.97	8.20	
Kawauchi, Mitsuki (JPN) (1997)																			
FINAL - 2019 Seiko Golden Grand Prix (Osaka, JPN)																			
date	19-May-19	time	6.26	11.49	16.83	22.23	27.89	33.92	40.10	46.69	46.69	5 / 3							
reaction time	0.164	interval		5.23	5.34	5.40	5.66	6.03	6.18	6.59		# of strides	11.49	10.74	11.69	12.77	22.23	24.46	2.23
		velocity	7.99	9.56	9.36	9.26	8.83	8.29	8.09	7.59	8.57	190.2	8.70	9.31	8.55	7.83	9.00	8.18	
Borlée, Dylan (BEL) (1992)																			
National FINAL - 2019 Memorial van Damme (Brussels, BEL)																			
date	06-Sep-19	time	6.3	11.2	16.3	21.7	27.3	33.4	39.8	46.69	46.69	7 / 6							
reaction time		interval		4.9	5.1	5.4	5.6	6.1	6.4	13.3		# of strides	11.20	10.50	11.70	13.29	21.70	24.99	3.29
		velocity	7.94	10.20	9.80	9.26	8.93	8.20	7.81	7.52	8.57	8.93	9.52	8.55	7.52	9.22	8.00		
Chalmers, Cameron (GBR) (1997)																			
B FINAL - 2022 Müller Birmingham Diamond League (Birmingham, GBR)																			
date	21-May-22	time	6.2	11.2	16.4	21.7	27.5	33.6	39.9	46.69	46.69	6 / 5							
reaction time	0.199	interval		5.00	5.20	5.30	5.80	6.10	6.30	6.79		# of strides	11.20	10.50	11.90	13.09	21.70	24.99	3.29
		velocity	8.06	10.00	9.62	9.43	8.62	8.20	7.94	7.36	8.57	173.0	8.93	9.52	8.40	7.64	9.22	8.00	
Boers, Isayah (NED) (1999)																			
FINAL - 2022 FBK Games (Hengelo, NED)																			
date	06-Jun-22	time	6.0	10.9	15.9	21.3	26.9	33.0	39.5	46.69	46.69	2 / 6							
reaction time	0.159	interval		4.90	5.00	5.40	5.60	6.10	6.50	7.19		# of strides	10.90	10.40	11.70	13.69	21.30	25.39	4.09
		velocity	8.33	10.20	10.00	9.26	8.93	8.20	7.69	6.95	8.57	9.17	9.62	8.55	7.30	9.39	7.88		
Johansson, Emil (SWE) (2002)																			
National FINAL - 2023 Bauhaus Galan (Stockholm, SWE)																			
date	02-Jul-23	time	6.33	11.39	16.61	22.03	27.75	33.81	40.01	46.69	46.69	5 / 1							
reaction time	0.169	interval		5.06	5.22	5.42	5.72	6.06	6.20	6.68	PB	# of strides	11.39	10.64	11.78	12.88	22.03	24.66	2.63
		velocity	7.90	9.88	9.58	9.23	8.74	8.25	8.06	7.49	8.57	8.78	9.40	8.49	7.76	9.08	8.11		
Karam, Youssef (KUW) (1993)																			
Heat A - West Asian Championships - 2024 Seashore Doha Meeting (Doha, QAT)																			
date	10-May-24	time	6.23	11.41	16.81	22.36	28.18	34.21	40.29	46.69	46.69	5 / 1							
reaction time	0.145	interval		5.18	5.40	5.55	5.82	6.03	6.08	6.40		# of strides	11.41	10.95	11.85	12.48	22.36	24.33	1.97
		velocity	8.03	9.65	9.26	9.01	8.59	8.29	8.22	7.81	8.57	8.76	9.13	8.44	8.01	8.94	8.22		
Krsek, Matěj (CZE) (2000)																			
Heat 1 - 2024 European Athletics Championships (Roma, ITA)																			
date	08-Jun-24	time		11.72		22.51		34.06		46.69	46.69	6 / 7							
reaction time	0.145	interval				10.79		11.55		12.63		# of strides	11.72	10.79	11.55	12.63	22.51	24.18	1.67
		velocity		8.53		9.27		8.66		7.92	8.57	8.53	9.27	8.66	7.92	8.88	8.27		
Wakabayashi, Kota (JPN) (1997)																			
Division 2 FINAL - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time		11.62		22.24		34.02		46.70	46.70	7 / 2							
reaction time		interval				10.62		11.78		12.68	PB	# of strides	11.62	10.62	11.78	12.68	22.24	24.46	2.22
		velocity		8.61		9.42		8.49		7.89	8.57	172.2	8.61	9.42	8.49	7.89	8.99	8.18	
Obuchi, Mizuki (JPN) (1997)																			
Heat 2 - 2020 Japanese National Championships (Niigata, JPN)																			
date	01-Oct-20	time	6.23	11.23	16.42	21.96	27.70	33.72	40.00	46.70	46.70	5 / 2							
reaction time	0.176	interval		5.00	5.19	5.54	5.74	6.02	6.28	6.70		# of strides	11.23	10.73	11.76	12.98	21.96	24.74	2.78
		velocity	8.03	10.00	9.63	9.03	8.71	8.31	7.96	7.46	8.57	8.90	9.32	8.50	7.70	9.11	8.08		
Sato, Fuga (JPN) (1996)																			
Final - 2021 Japanese National Championships (Osaka, JPN)																			
date	25-Jun-21	time	6.29	11.47	16.82	22.42	28.18	34.09	40.17	46.70	46.70	3 / 5							
reaction time	0.190	interval		5.18	5.35	5.60	5.76	5.91	6.08	6.53		# of strides	11.47	10.95	11.67	12.61	22.42	24.28	1.86
		velocity	7.95	9.65	9.35	8.93	8.68	8.46	8.22	7.66	8.57	8.72	9.13	8.57	7.93	8.92	8.24		
Wen Junji (CHN) (2001)																			
FINAL - 2024 Chinese National Championships (Quzhou, CHN)																			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Kinoshita, Yuichi (JPN) (2002)																			
FINAL - 2021 Japanese U20 National Championships (Osaka, JPN)																			
date	25-Jun-21	time	6.22	11.48	16.86	22.46	28.22	34.13	40.29	46.74	46.74								
reaction time	0.161	interval		5.26	5.38	5.60	5.76	5.91	6.16	6.45		# of strides	11.48	10.98	11.67	12.61	22.46	24.28	1.82
		velocity	8.04	9.51	9.29	8.93	8.68	8.46	8.12	7.75	8.56		187.0	8.71	9.11	8.57	7.93	8.90	8.24
Re, Davide (ITA) (1993)																			
Heat 5 - 2024 Olympic Games (Paris, FRA)																			
date	04-Aug-24	time	6.31	11.42	16.65	22.07	27.76	33.75	40.02	46.74	46.74								
reaction time	0.157	interval		5.11	5.23	5.42	5.69	5.99	6.27	6.72		# of strides	11.42	10.65	11.68	12.99	22.07	24.67	2.60
		velocity	7.92	9.78	9.56	9.23	8.79	8.35	7.97	7.44	8.56		181.2	8.76	9.39	8.56	7.70	9.06	8.11
Sato, Kentaro (JPN) (1994)																			
FINAL - 2016 Seiko Golden Grand Prix (Kawasaki, JPN)																			
date	08-May-16	time	6.31	11.35	16.52	21.92	27.54	33.49	39.86	46.75	46.75								
reaction time	0.151	interval		5.04	5.17	5.40	5.62	5.95	6.37	6.89		# of strides	11.35	10.57	11.57	13.26	21.92	24.83	2.91
		velocity	7.92	9.92	9.67	9.26	8.90	8.40	7.85	7.26	8.56		184	8.81	9.46	8.64	7.54	9.12	8.05
Yousif, Rabah (GBR) (1986)																			
FINAL - 2019 The Match - Europe v USA (Minsk, BLR)																			
date	09-Sep-19	time		11.42		21.89		33.48		46.76	46.76								
reaction time	0.166	interval				10.47		11.59		13.28		# of strides	11.42	10.47	11.59	13.28	21.89	24.87	2.98
		velocity		8.76		9.55		8.63		7.53	8.55		167.0	8.76	9.55	8.63	7.53	9.14	8.04
O'Donnell, Christopher (IRL) (1998)																			
Heat 5 - 2023 World Athletics Championships (Budapest, HUN)																			
date	20-Aug-23	time		11.55		22.30		33.88		46.76	46.76								
reaction time	0.159	interval				10.75		11.58		12.88		# of strides	11.55	10.75	11.58	12.88	22.30	24.46	2.16
		velocity		8.66		9.30		8.64		7.76	8.55		8.66	9.30	8.64	7.76	8.97	8.18	
Haley, Roddie (USA) (1965)																			
FINAL - 1987 IAAF World Championship (Rome, ITA)																			
date	03-Sep-87	time		10.88		21.30		32.79		46.77	46.77								
reaction time		interval				10.42		11.49		13.98		# of strides	10.88	10.42	11.49	13.98	21.30	25.47	4.17
		velocity		9.19		9.60		8.70		7.15	8.55		9.19	9.60	8.70	7.15	9.39	7.85	
Sato, Kentaro (JPN) (1994)																			
FINAL - 2016 Shizuoka International Meeting (Fukuroi, JPN)																			
date	03-May-16	time	6.25	11.34	16.68	22.20	27.89	33.85	40.12	46.77	46.77								
reaction time		interval		5.09	5.34	5.52	5.69	5.96	6.27	6.65		# of strides	11.34	10.86	11.65	12.92	22.20	24.57	2.37
		velocity	8.00	9.82	9.36	9.06	8.79	8.39	7.97	7.52	8.55		8.82	9.21	8.58	7.74	9.01	8.14	
Ito, Rikiya (JPN) (1998)																			
A FINAL - 2019 Shizuoka International Athletics Meeting (Fukuroi, JPN)																			
date	03-May-19	time	6.20	11.20	16.30	21.63	27.28	33.39	39.83	46.77	46.77								
reaction time		interval		5.00	5.10	5.33	5.65	6.11	6.44	6.94		# of strides	11.20	10.43	11.76	13.38	21.63	25.14	3.51
		velocity	8.06	10.00	9.80	9.38	8.85	8.18	7.76	7.20	8.55		190.0	8.93	9.59	8.50	7.47	9.25	7.96
Sato, Kentaro (JPN) (1994)																			
Heat 1 - 2020 Japanese National Championships (Niigata, JPN)																			
date	01-Oct-20	time	6.13	11.13	16.20	21.53	27.12	33.35	39.84	46.77	46.77								
reaction time	0.183	interval		5.00	5.07	5.33	5.59	6.23	6.49	6.93		# of strides	11.13	10.40	11.82	13.42	21.53	25.24	3.71
		velocity	8.16	10.00	9.86	9.38	8.94	8.03	7.70	7.22	8.55		8.98	9.62	8.46	7.45	9.29	7.92	
Xie Yuqiang (CHN) (1997)																			
FINAL - 2023 Chinese National Grand Prix 3 (Taizhou, CHN)																			
date	26-May-23	time		11.28		22.17		33.90	40.11	46.77	46.77								
reaction time	0.167	interval				10.89		11.73	6.21	6.66		# of strides	11.28	10.89	11.73	12.87	22.17	24.60	2.43
		velocity		8.87		9.18		8.53	8.05	7.51	8.55		177.5	8.87	9.18	8.53	7.77	9.02	8.13
Jordier, Thomas (FRA) (1994)																			
FINAL - 2023 Athletissima (Lausanne, SUI)																			
date	30-Jun-23	time	6.25	11.33	16.52	21.99	27.68	33.62	39.83	46.77	46.77								
reaction time	0.140	interval		5.08	5.19	5.47	5.69	5.94	6.21	6.94		# of strides	11.33	10.66	11.63	13.15	21.99	24.78	2.79
		velocity	8.00	9.84	9.63	9.14	8.79	8.42	8.05	7.20	8.55		8.83	9.38	8.60	7.60	9.10	8.07	
Devantay, Charles (SUI) (1998)																			
FINAL - 2023 Athletissima (Lausanne, SUI)																			
date	30-Jun-23	time	6.27	11.33	16.54	21.99	27.69	33.67	39.98	46.77	46.77								
reaction time	0.131	interval		5.06	5.21	5.45	5.70	5.98	6.31	6.79		# of strides	11.33	10.66	11.68	13.10	21.99	24.78	2.79
		velocity	7.97	9.88	9.60	9.17	8.77	8.36	7.92	7.36	8.55		8.83	9.38	8.56	7.63	9.10	8.07	
Ju Tianqi (CHN) (2002)																			
FINAL - 2024 Chinese National Championships (Quzhou, CHN)																			
date	16-Sep-24	time		11.66		22.39		33.95	39.99	46.77	46.77								
reaction time	0.224	interval				10.73		11.56	6.04	6.78		# of strides	11.66	10.73	11.56	12.82	22.39	24.38	1.99
		velocity		8.58		9.32		8.65	8.28	7.37	8.55		171.2	8.58	9.32	8.65	7.80	8.93	8.20
Shorts, Albert (USA) (1953)																			
FINAL - 1980 USA Olympic Trials (Eugene, OR)																			
date	27-Jun-80	time				22.4		46.78		46.78		# of strides							
reaction time		interval						24.4								22.40	24.38	1.98	
		velocity				8.93		8.20		8.55					8.93	8.20			
Yui, Kaisei (JPN) (1996)																			
FINAL - 2014 Shizuoka International Athletics Meeting (Fukuori, JPN)																			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Sato, Kentaro (JPN) (1994)		FINAL - 2020 Japanese National Championships (Niigata, JPN)																		
date		02-Oct-20	time	6.10	11.06	16.15	21.61	27.30	33.40	39.75	46.81	46.81	6 / 6	<i>Yamanaka (2020) - 400m race analysis of men and women during 2020 season</i>						
reaction time	0.175	interval	4.96	5.09	5.46	5.69	6.10	6.35	7.06			# of strides	11.06	10.55	11.79	13.41	21.61	25.20	3.59	
		velocity	8.20	10.08	9.82	9.16	8.79	8.20	7.87	7.08	8.55	178.2	9.04	9.48	8.48	7.46	9.25	7.94		
Ding Wenhao (CHN) (2003)		Semi-Final 1 - 2023 Chinese National Championships (Quzhou, CHN)																		
date		21-Jul-23	time	11.38				22.42	34.32	40.41	46.81	46.81	1 / 4	<i>Shandong Athletics Sport Science (2023)</i>						
reaction time	0.205	interval					11.04	11.90	6.09	6.40	PB	# of strides	11.38	11.04	11.90	12.49	22.42	24.39	1.97	
		velocity	8.79	9.06	8.40	8.21	7.81	8.55	170.0	8.79	9.06	8.40	8.01	8.92	8.20					
Qiao Zhiyang (CHN) (1999)		Semi-Final 2 - 2023 Chinese National Championships (Quzhou, CHN)																		
date		21-Jul-23	time	11.49				22.27	34.16	40.31	46.81	46.81	2 / 1	<i>Shandong Athletics Sport Science (2023)</i>						
reaction time	0.208	interval					10.78	11.89	6.15	6.50	PB	# of strides	11.49	10.78	11.89	12.65	22.27	24.54	2.27	
		velocity	8.70	9.28	8.41	8.13	7.69	8.55	177.0	8.70	9.28	8.41	7.91	8.98	8.15					
Bain, Andretti (BAH) (1985)		FINAL - 2009 ISTAF (Berlin, GER)																		
date		14-Jun-09	time	11.45				22.10	33.70	46.82	46.82	2 / 7	<i>Graubner (2009) - http://www.fgs.uni-halle.de</i>							
reaction time	0.232	interval					10.65	11.60	13.12			# of strides	11.45	10.65	11.60	13.12	22.10	24.72	2.62	
		velocity	8.73	9.39	8.62	7.62	8.54	8.73	9.39	8.62	7.62	9.05	8.09							
Kitagawa, Takamasa (JPN) (1996)		FINAL - 2016 Seiko Golden Grand Prix (Kawasaki, JPN)																		
date		08-May-16	time	6.40	11.52	16.83	22.33	28.02	33.95	40.24	46.82	46.82	3 / 7	<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>						
reaction time	0.177	interval	5.12	5.31	5.50	5.69	5.93	6.29	6.58			# of strides	11.52	10.81	11.62	12.87	22.33	24.49	2.16	
		velocity	7.81	9.77	9.42	9.09	8.79	8.43	7.95	7.60	8.54	176.2	8.68	9.25	8.61	7.77	8.96	8.17		
Horii, Kosuke (JPN) (1994)		FINAL - 2017 Nanbu Memorial Meeting (Sapporo, JPN)																		
date		09-Jul-17	time	11.54				22.65	34.54	46.82	46.82	6 / 2	<i>(2017) - tldata-store.com/2017/07/11/post-1010/</i>							
reaction time		interval					11.11	11.89	12.28			# of strides	11.54	11.11	11.89	12.28	22.65	24.17	1.52	
		velocity	8.67	9.00	8.41	8.14	8.54	184.0	8.67	9.00	8.41	8.14	8.83	8.27						
Rajiv, Arokia (IND) (1991)		Heat 4 - 2018 Asian Games (Jakarta, INA)																		
date		25-Aug-18	time	6.31	11.40	16.73	22.27	27.99	33.97	40.17	46.82	46.82	5 / 2	<i>Yamanaka (2018) - Race analysis of men and women 400m at 2018 competition</i>						
reaction time	0.184	interval	5.09	5.33	5.54	5.72	5.98	6.20	6.65			# of strides	11.40	10.87	11.70	12.85	22.27	24.55	2.28	
		velocity	7.92	9.82	9.38	9.03	8.74	8.36	8.06	7.52	8.54	8.77	9.20	8.55	7.78	8.98	8.15			
Matsukiyo, Kazuki (JPN) (1997)		FINAL - 2019 Japanese National Championships (Fukuoka, JPN)																		
date		28-Jun-19	time	6.54	11.77	17.14	22.71	28.35	34.13	40.15	46.82	46.82	2 / 7	<i>Yamanaka (2019) - research on athlete performance and technique- 2019 data book</i>						
reaction time	0.172	interval	5.23	5.37	5.57	5.64	5.78	6.02	6.67			# of strides	11.77	10.94	11.42	12.69	22.71	24.11	1.40	
		velocity	7.65	9.56	9.31	8.98	8.87	8.65	8.31	7.50	8.54	8.50	9.14	8.76	7.88	8.81	8.30			
Brier, Joseph (GBR) (1999)		FINAL - 2023 Weltklasse (Zürich, SUI)																		
date		31-Aug-23	time	6.22	11.29	16.60	22.08	27.70	33.60	39.90	46.82	46.82	2 / 7	<i>Omega Timing (2023) - diamond league race analysis</i>						
reaction time	0.200	interval	5.07	5.31	5.48	5.62	5.90	6.30	6.92			# of strides	11.29	10.79	11.52	13.22	22.08	24.74	2.66	
		velocity	8.04	9.86	9.42	9.12	8.90	8.47	7.94	7.23	8.54	8.86	9.27	8.68	7.56	9.06	8.08			
Grávalos, Dimítrios (GRE) (1984)		FINAL - 2007 European Cup (Munich, GER)																		
date		23-Jun-07	time	11.63				22.36	33.76	46.83	46.83	1 / 7	<i>Graubner (2007) - http://www.fgs.uni-halle.de</i>							
reaction time	0.139	interval					10.73	11.40	13.07			# of strides	11.63	10.73	11.40	13.07	22.36	24.47	2.11	
		velocity	8.60	9.32	8.77	7.65	8.54	8.60	9.32	8.77	7.65	8.94	8.17							
Yamazaki, Kengo (JPN) (1992)		FINAL - 2009 Japanese National High School Championships (Nara, JPN)																		
date		29-Jul-09	time	11.63				23.02	34.57	46.83	46.83	5 / 1	<i>Matsuo (2009) - 62nd high school championships: JAF scientific committee - biomechanics data</i>							
reaction time		interval					11.39	11.55	12.26			# of strides	11.63	11.39	11.55	12.26	23.02	23.81	0.79	
		velocity	8.60	8.78	8.66	8.16	8.54	8.60	8.78	8.66	8.16	8.69	8.40							
Momiki, Shogo (JPN) (1992)		FINAL - 2012 Japanese National Championships (Osaka, JPN)																		
date		09-Jun-12	time	6.15	11.28	16.48	22.02	27.72	33.58	39.82	46.83	46.83	6 / 4	<i>Maho (2013) - race analysis of the men's 400m run in competition</i>						
reaction time		interval	5.13	5.20	5.54	5.70	5.86	6.24	7.01			# of strides	11.28	10.74	11.56	13.25	22.02	24.81	2.79	
		velocity	8.13	9.75	9.62	9.03	8.77	8.53	8.01	7.13	8.54	194.0	8.87	9.31	8.65	7.55	9.08	8.06		
Azuma, Kaiki (JPN) (1993)		FINAL - 2018 Japanese Corporate Championships (Osaka, JPN)																		
date		23-Sep-18	time	6.39	11.74	17.22	22.79	28.38	34.06	39.99	46.83	46.83	7 / 3	<i>Yamanaka (2018) - Race analysis of men and women 400m at 2018 competition</i>						
reaction time	0.141	interval	5.35	5.48	5.57	5.59	5.68	5.93	6.84			# of strides	11.74	11.05	11.27	12.77	22.79	24.04	1.25	
		velocity	7.82	9.35	9.12	8.98	8.94	8.80	8.43	7.31	8.54	8.52	9.05	8.87	7.83	8.78	8.32			
Xie Yuqiang (CHN) (1997)		Semi-Final 1 - 2023 Chinese National Championships (Quzhou, CHN)																		
date		21-Jul-23	time	11.31				22.13	33.92	40.18	46.83	46.83	3 / 5	<i>Shandong Athletics Sport Science (2023)</i>						
reaction time	0.178	interval					10.82	11.79	6.26	6.65		# of strides	11.31	10.82	11.79	12.91	22.13	24.70	2.57	
		velocity	8.84	9.24	8.48	7.99	7.52	8.54	176.2	8.84	9.24	8.48	7.75	9.04	8.10					
Brand, Dany (SUI) (1996)		FINAL - 2023 Weltklasse (Zürich, SUI)																		
		<i>Omega Timing (2023) - diamond league race analysis</i>																		

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Sato, Fuga (JPN) (1996)																			
Heat 3 - 2020 Japanese National Championships (Niigata, JPN)																			
date	01-Oct-20	time	6.48	11.75	17.08	22.63	28.29	34.15	40.27	46.86	46.86								
reaction time	0.180	interval		5.27	5.33	5.55	5.66	5.86	6.12	6.59		# of strides	11.75	10.88	11.52	12.71	22.63	24.23	1.60
		velocity	7.72	9.49	9.38	9.01	8.83	8.53	8.17	7.59	8.54		8.51	9.19	8.68	7.87	8.84	8.25	
Sun Jiahao (CHN) (2002)																			
Semi-Final 2 - 2023 Chinese National Championships (Quzhou, CHN)																			
date	21-Jul-23	time	11.40			23.00		34.60	40.54	46.86	46.86								
reaction time	0.203	interval			11.60		11.60	5.94	6.32			# of strides	11.40	11.60	11.60	12.26	23.00	23.86	0.86
		velocity	8.77		8.62		8.62	8.42	7.91	8.54	8.54		8.77	8.62	8.62	8.16	8.70	8.38	
Rigau, Miguel (GER) (1985)																			
B FINAL - 2009 ISTAF (Berlin, GER)																			
date	14-Jun-09	time	11.38			22.11		33.83		46.87	46.87								
reaction time	0.255	interval			10.73		11.72		13.04	PB		# of strides	11.38	10.73	11.72	13.04	22.11	24.76	2.65
		velocity	8.79		9.32		8.53		7.67	8.53	8.53		8.79	9.32	8.53	7.67	9.05	8.08	
Kobayashi, Naoki (JPN) (1990)																			
FINAL - 2015 National Sports Festival (Wakayama, JPN)																			
date	04-Oct-15	time	6.33	11.61	17.15	22.93	28.72	34.53	40.54	46.87	46.87								
reaction time		interval		5.28	5.54	5.78	5.79	5.81	6.01	6.33		# of strides	11.61	11.32	11.60	12.34	22.93	23.94	1.01
		velocity	7.90	9.47	9.03	8.65	8.64	8.61	8.32	7.90	8.53		8.61	8.83	8.62	8.10	8.72	8.35	
Kobayashi, Naoki (JPN) (1990)																			
Heat 1 - 2016 Japanese National Championships (Nagoya, JPN)																			
date	24-Jun-16	time	6.43	11.55	16.80	22.14	27.65	33.55	39.89	46.87	46.87								
reaction time	0.153	interval		5.12	5.25	5.34	5.51	5.90	6.34	6.98		# of strides	11.55	10.59	11.41	13.32	22.14	24.73	2.59
		velocity	7.78	9.77	9.52	9.36	9.07	8.47	7.89	7.16	8.53		8.66	9.44	8.76	7.51	9.03	8.09	
Kimura, Kazushi (JPN) (1993)																			
FINAL - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time	6.20	11.41	16.90	22.50	28.25	34.14	40.24	46.87	46.87								
reaction time	0.202	interval		5.21	5.49	5.60	5.75	5.89	6.10	6.63		# of strides	11.41	11.09	11.64	12.73	22.50	24.37	1.87
		velocity	8.06	9.60	9.11	8.93	8.70	8.49	8.20	7.54	8.53		8.76	9.02	8.59	7.86	8.89	8.21	
Taplin, Bralon (GRN) (1992)																			
FINAL - 2019 Bauhaus Galan (Stockholm, SWE)																			
date	30-May-19	time	11.4			22.1		33.5		46.87	46.87								
reaction time	0.152	interval			10.7		11.4		13.4			# of strides	11.40	10.70	11.40	13.37	22.10	24.77	2.67
		velocity	8.77		9.35		8.77		7.48	8.53	8.53		8.77	9.35	8.77	7.48	9.05	8.07	
Yoshikawa, Ryo (JPN) (2001)																			
FINAL - 2019 Japanese National High School Championships (Okinawa, JPN)																			
date	04-Aug-19	time	6.61	11.92	17.19	22.57	28.25	34.21	40.35	46.87	46.87								
reaction time		interval		5.31	5.27	5.38	5.68	5.96	6.14	6.52	PB	# of strides	11.92	10.65	11.64	12.66	22.57	24.30	1.73
		velocity	7.56	9.42	9.49	9.29	8.80	8.39	8.14	7.67	8.53		8.39	9.39	8.59	7.90	8.86	8.23	
Ogando, Alexander (DOM) (2000)																			
FINAL - 2021 Bauhaus Galan (Stockholm, SWE)																			
date	04-Jul-21	time	6.4	11.6	17.0	22.4	28.1	34.0	40.2	46.87	46.87								
reaction time	0.137	interval		5.20	5.40	5.40	5.70	5.90	6.20	6.67		# of strides	11.60	10.80	11.60	12.87	22.40	24.47	2.07
		velocity	7.81	9.62	9.26	9.26	8.77	8.47	8.06	7.50	8.53		8.62	9.26	8.62	7.77	8.93	8.17	
Obuchi, Mizuki (JPN) (1997)																			
Heat 2 - 2021 All Japan Corporate Championships (Osaka, JPN)																			
date	25-Sep-21	time	11.36			22.14		33.75		46.85	46.85								
reaction time	0.183	interval			10.78		11.61		13.10			# of strides	11.36	10.78	11.61	13.10	22.14	24.71	2.57
		velocity	8.80		9.28		8.61		7.63	8.53	8.53		8.80	9.28	8.61	7.63	9.03	8.09	
Solomon, Steven (AUS) (1993)																			
Heat 1 - 2022 World Athletics Championships (Eugene, OR)																			
date	17-Jul-22	time	11.71			22.50		33.65		46.87	46.87								
reaction time	0.152	interval			10.79		11.15		13.22			# of strides	11.71	10.79	11.15	13.22	22.50	24.37	1.87
		velocity	8.54		9.27		8.97		7.56	8.53	8.53		8.54	9.27	8.97	7.56	8.89	8.21	
Ding Wenhao (CHN) (2003)																			
FINAL - 2023 Chinese National Championships (Quzhou, CHN)																			
date	22-Jul-23	time	11.16			21.95		33.62	39.86	46.87	46.87								
reaction time	0.216	interval			10.79		11.67	6.24	7.01			# of strides	11.16	10.79	11.67	13.25	21.95	24.92	2.97
		velocity	8.96		9.27		8.57	8.01	7.13	8.53	8.53		8.96	9.27	8.57	7.55	9.11	8.03	
Batman, Daniel (AUS) (1981)																			
FINAL - 2006 Seiko Super Grand Prix (Yokohama, JPN)																			
date	24-Sep-06	time	6.1	11.0	16.2	21.8	27.3	33.2	39.8	46.88	46.88								
reaction time		interval		4.90	5.20	5.60	5.50	5.90	6.60	7.08		# of strides	11.00	10.80	11.40	13.68	21.80	25.08	3.28
		velocity	8.20	10.20	9.62	8.93	9.09	8.47	7.58	7.06	8.53		9.09	9.26	8.77	7.31	9.17	7.97	
Faller, Ruwen (GER) (1980)																			
B FINAL - 2009 ISTAF (Berlin, GER)																			
date	14-Jun-09	time	11.73			22.72		34.20		46.88	46.88								
reaction time	0.346	interval			10.99		11.48		12.68			# of strides	11.73	10.99	11.48	12.68	22.72	24.16	1.44
		velocity	8.53		9.10		8.71		7.89	8.53	8.53		8.53	9.10	8.71	7.89	8.80	8.28	
Fujiyoshi, Shunta (JPN) (2001)																			
FINAL - 2019 Japanese National High School Championships (Okinawa, JPN)																			
date		time																	
reaction time		interval										# of strides							
		velocity																	

West, Austin (USA) (2000)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Decathlon - Heat 3 - 2024 USA Olympic Trials (Eugene, OR)		USATF and Karmarush (2024) - USA Olympic trials results and race analysis																		
date	21-Jun-24	time	11.37		21.91		33.79		46.91	46.91	8 / 3									
reaction time		interval			10.54		11.88		13.12		# of strides	11.37	10.54	11.88	13.12	21.91	25.00	3.09		
		velocity	8.80	9.49		8.42		7.62	8.53			8.80	9.49	8.42	7.62	9.13	8.00			
Tamura, Tomoya (JPN) (1992)		Kohei (2015) - 400m race analysis of male & female at major 2015 competitions																		
FINAL - 2015 National Sports Festival (Wakayama, JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
date	04-Oct-15	time	6.23	11.41	16.98	22.88	28.60	34.33	40.37	46.92	46.92	/ 2								
reaction time		interval		5.18	5.57	5.90	5.72	5.73	6.04	6.55		# of strides	11.41	11.47	11.45	12.59	22.88	24.04	1.16	
		velocity	8.03	9.65	8.98	8.47	8.74	8.73	8.28	7.63	8.53		8.76	8.72	8.73	7.94	8.74	8.32		
Yamaki, Kakeru (JPN) (1996)		(2017) - tfdata-store.com/2017/06/01/post-786/																		
Division 1 FINAL - 2017 Kanto Collegiate Championships (Yokohama, JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
date	26-May-17	time			11.33		22.16		33.79	46.92	46.92	6 / 3								
reaction time		interval					10.83		11.63	13.13		# of strides	11.33	10.83	11.63	13.13	22.16	24.76	2.60	
		velocity			8.83		9.23		8.60	7.62	8.53		8.83	9.23	8.60	7.62	9.03	8.08		
Sato, Kentaro (JPN) (1994)		Hirokawa (2019) - research on athlete performance and technique- 2019 data book																		
FINAL - 2019 Seiko Golden Grand Prix (Osaka, JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
date	19-May-19	time	6.27	11.35	16.54	21.92	27.51	33.64	40.06	46.92	46.92	3 / 4								
reaction time	0.167	interval		5.08	5.19	5.38	5.59	6.13	6.42	6.86		# of strides	11.35	10.57	11.72	13.28	21.92	25.00	3.08	
		velocity	7.97	9.84	9.63	9.29	8.94	8.16	7.79	7.29	8.53		8.81	9.46	8.53	7.53	9.12	8.00		
Horii, Kosuke (JPN) (1994)		Yamanaka (2019) - race analysis of men and women 400m competition																		
Heat 3 - 2019 Japanese National Championships (Fukuoka, JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
date	27-Jun-19	time	6.21	11.33	16.63	22.24	28.04	34.09	40.35	46.92	46.92	8 / 4								
reaction time	0.163	interval		5.12	5.30	5.61	5.80	6.05	6.26	6.57		# of strides	11.33	10.91	11.85	12.83	22.24	24.68	2.44	
		velocity	8.05	9.77	9.43	8.91	8.62	8.26	7.99	7.61	8.53		8.83	9.17	8.44	7.79	8.99	8.10		
Xie Yuqiang (CHN) (1997)		Shandong Athletics Sport Science (2023)																		
Heat 2 - 2023 Chinese National Grand Prix 3 (Taizhou, CHN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
date	26-May-23	time			11.18		22.00		33.88	40.21	46.92	46.92	7 / 1							
reaction time	0.163	interval					10.82		11.88	6.33	6.71		# of strides	11.18	10.82	11.88	13.04	22.00	24.92	2.92
		velocity			8.94		9.24		8.42	7.90	7.45	8.53		8.94	9.24	8.42	7.67	9.09	8.03	
Yang Wang (CHN) (1996)		Shandong Athletics Sport Science (2023)																		
FINAL - 2023 Chinese World Championship & Asian Games Trials (Shenyang, CHN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
date	28-Jun-23	time			11.43		22.00		33.77	40.06	46.92	46.92	3 / 4							
reaction time	0.210	interval					10.57		11.77	6.29	6.86		# of strides	11.43	10.57	11.77	13.15	22.00	24.92	2.92
		velocity			8.75		9.46		8.50	7.95	7.29	8.53		8.75	9.46	8.50	7.60	9.09	8.03	
Mihara, Taiki (JPN) (1995)		(2017) - tfdata-store.com/2017/07/11/post-1010/																		
FINAL - 2017 Nanbu Memorial Meeting (Sapporo, JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
date	09-Jul-17	time			11.98		23.26		34.98	46.93	46.93	3 / 3								
reaction time		interval					11.28		11.72	11.95		# of strides	11.98	11.28	11.72	11.95	23.26	23.67	0.41	
		velocity			8.35		8.87		8.53	8.37	8.52		8.35	8.87	8.53	8.37	8.60	8.45		
Yamada, Atsushi (JPN) (1991)		(2017) - tfdata-store.com/2017/10/05/post-1097/																		
FINAL - 2017 All Japan Corporate Championships (Osaka, JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
date	24-Sep-17	time			11.28		22.06		33.73	46.93	46.93	4 / 2								
reaction time	0.145	interval					10.78		11.67	13.20	=PB	# of strides	11.28	10.78	11.67	13.20	22.06	24.87	2.81	
		velocity			8.87		9.28		8.57	7.58	8.52		8.87	9.28	8.57	7.58	9.07	8.04		
Smith, Owen (GBR) (1994)		Omega Timing (2018) - diamond league race analysis																		
National FINAL - 2018 Müller Anniversary Games (London, GBR)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
date	21-Jul-18	time			11.8		22.5		34.1	46.93	46.93	4 / 4								
reaction time	0.138	interval					10.7		11.6	12.8		# of strides	11.80	10.70	11.60	12.83	22.50	24.43	1.93	
		velocity			8.47		9.35		8.62	7.79	8.52		8.47	9.35	8.62	7.79	8.89	8.19		
Devantay, Charles (SUI) (1998)		Omega Timing (2021) - diamond league race analysis																		
FINAL - 2021 Athletissima (Lausanne, SUI)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
date	26-Aug-21	time	6.3	11.4	16.7	22.3	28.0	34.0	40.2	46.93	46.93	1 / 8								
reaction time	0.132	interval		5.10	5.30	5.60	5.70	6.00	6.20	6.73		# of strides	11.40	10.90	11.70	12.93	22.30	24.63	2.33	
		velocity	7.94	9.80	9.43	8.93	8.77	8.33	8.06	7.43	8.52		8.77	9.17	8.55	7.73	8.97	8.12		
Kikuta, Kyo (JPN) (2006)		Takashima (2024) - national high school sports festival - biomechanics data																		
FINAL - 2024 Japanese National High School Championships (Fukuoka, JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
date	28-Jul-24	time			11.53		22.12		33.85	46.93	46.93	6 / 1								
reaction time	0.180	interval					10.59		11.73	13.08		# of strides	11.53	10.59	11.73	13.08	22.12	24.81	2.69	
		velocity			8.67		9.44		8.53	7.65	8.52		8.67	9.44	8.53	7.65	9.04	8.06		
LuValle, James (USA) (1912)		Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016																		
FINAL - 1936 Olympic Games (Berlin, GER)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
date	07-Aug-36	time					22.1			46.80	46.8	2 / 3								
reaction time		interval								24.7		# of strides				46.80	22.10	24.70	2.60	
		velocity					9.05			8.10	8.55					2.14	9.05	8.10		
Haas, Karl-Friedrich (FRG) (1931)		Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016																		
FINAL - 1956 Olympic Games (Melbourne, AUS)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
date	29-Nov-56	time					22.7		34.3	46.8	46.8	5 / 2								
reaction time		interval							11.6	12.5	(47.12)	# of strides		22.70	11.60	12.50	22.70	24.10	1.40	
		velocity					8.81		8.62	8.00	8.55			8.81	8.62	8.00	8.81	8.30		
Skinner, Edwin (TTO) (1940)		Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016																		
FINAL - 1964 Olympic Games (Tokyo, JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Kimura, Jun (JPN) (1991)																		
FINAL - 2018 Japanese Corporate Championships (Osaka, JPN)																		
date	23-Sep-18	time	6.28	11.55	16.92	22.48	28.25	34.10	40.16	46.97	46.97	4 / 4	<i>Yamanaka (2018) - Race analysis of men and women 400m at 2018 competition</i>					
reaction time	0.116	interval	5.27	5.37	5.56	5.77	5.85	6.06	6.81		# of strides	11.55	10.93	11.62	12.87	22.48	24.49	2.01
		velocity	7.96	9.49	9.31	8.99	8.67	8.55	8.25	7.34	8.52		8.66	9.15	8.61	7.77	8.90	8.17
Song Jiahui (CHN) (2002)																		
Heat 7 - 2023 Chinese National Grand Prix 4 (Chongqing, CHN)																		
date	02-Jun-23	time			11.63	22.37		34.05	40.21	46.97	46.97	7 / 1	<i>Shandong Athletics Sport Science (2023)</i>					
reaction time		interval			10.74		11.68	6.16	6.76		# of strides	11.63	10.74	11.68	12.92	22.37	24.60	2.23
		velocity		8.60	9.31		8.56	8.12	7.40	8.52	165.2	8.60	9.31	8.56	7.74	8.94	8.13	
Trulsson, William (SWE) (2006)																		
FINAL - 2024 Bauhaus Galan (Stockholm, SWE)																		
date	02-Jun-24	time	6.24	11.46	16.76	22.18	27.83	33.87	40.19	46.97	46.97	4 / 5	<i>Omega Timing (2024) - diamond league race analysis</i>					
reaction time	0.148	interval	5.22	5.30	5.42	5.65	6.04	6.32	6.78	PB	# of strides	11.46	10.72	11.69	13.10	22.18	24.79	2.61
		velocity	8.01	9.58	9.43	9.23	8.85	8.28	7.91	7.37	8.52	8.73	9.33	8.55	7.63	9.02	8.07	
Yang Lei (CHN) (1995)																		
FINAL - 2023 Chinese National Grand Prix 4 (Chongqing, CHN)																		
date	02-Jun-23	time		11.51	22.05		33.80	40.01	46.98	46.98	46.98	5 / 5	<i>Shandong Athletics Sport Science (2023)</i>					
reaction time	0.206	interval		10.54		11.75	6.21	6.97			# of strides	11.51	10.54	11.75	13.18	22.05	24.93	2.88
		velocity		8.69	9.49		8.51	8.05	7.17	8.51	179.0	8.69	9.49	8.51	7.59	9.07	8.02	
Tamura, Tomoya (JPN) (1992)																		
FINAL - 2017 Nanbu Memorial Meeting (Sapporo, JPN)																		
date	09-Jul-17	time		11.32	22.12		33.80	40.19	46.99	46.99	46.99	4 / 4	<i>(2017) - tfdata-store.com/2017/07/11/post-1010/</i>					
reaction time		interval		10.80		11.68	13.19				# of strides	11.32	10.80	11.68	13.19	22.12	24.87	2.75
		velocity		8.83	9.26		8.56	7.58		8.51	190.0	8.83	9.26	8.56	7.58	9.04	8.04	
Inoue, Daichi (JPN) (1999)																		
FINAL - 2016 Japanese National Youth Championships (Mizuho, JPN)																		
date	21-Oct-16	time	6.60	11.88	17.28	22.99	28.74	34.54	40.60	46.99	46.99	4 / 1	<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>					
reaction time		interval	5.28	5.40	5.71	5.75	5.80	6.06	6.39		# of strides	11.88	11.11	11.55	12.45	22.99	24.00	1.01
		velocity	7.58	9.47	9.26	8.76	8.70	8.62	8.25	7.82	8.51	8.42	9.00	8.66	8.03	8.70	8.33	
Schlegel, Marvin (GER) (1998)																		
FINAL - 2020 Bauhaus Galan (Stockholm, SWE)																		
date	23-Aug-20	time	6.3	11.5	16.9	22.2	27.8	33.7	40.1	46.99	46.99	7 / 5	<i>Omega Timing (2020) - diamond league race analysis</i>					
reaction time	0.195	interval	5.20	5.40	5.30	5.60	5.90	6.40	6.89		# of strides	11.50	10.70	11.50	13.29	22.20	24.79	2.59
		velocity	7.94	9.62	9.26	9.43	8.93	8.47	7.81	7.26	8.51	167.7	8.70	9.35	8.70	7.52	9.01	8.07
Imoto, Yoshinobu (JPN) (1999)																		
Heat 3 - 2020 Japanese National Championships (Niigata, JPN)																		
date	01-Oct-20	time	6.17	11.26	16.57	22.20	27.96	33.98	40.25	46.99	46.99	3 / 4	<i>Yamanaka (2020) - 400m race analysis of men and women during 2020 season</i>					
reaction time	0.176	interval	5.09	5.31	5.63	5.76	6.02	6.27	6.74		# of strides	11.26	10.94	11.78	13.01	22.20	24.79	2.59
		velocity	8.10	9.82	9.42	8.88	8.68	8.31	7.97	7.42	8.51	8.88	9.14	8.49	7.69	9.01	8.07	
Sato, Fuga (JPN) (1996)																		
B FINAL - 2021 Shizuoka International Athletics Meeting (Fukuroi, JPN)																		
date	03-May-21	time	6.20	11.32	16.53	21.97	27.64	33.55	39.90	46.99	46.99	6 / 5	<i>Yamanaka (2021) - race analysis of men's and women's 400m and 300m races in 2021 competition</i>					
reaction time	0.184	interval	5.12	5.21	5.44	5.67	5.91	6.35	7.09		# of strides	11.32	10.65	11.58	13.44	21.97	25.02	3.05
		velocity	8.06	9.77	9.60	9.19	8.82	8.46	7.87	7.05	8.51	8.83	9.39	8.64	7.44	9.10	7.99	
Kobayashi, Naoki (JPN) (1990)																		
FINAL - 2021 Shizuoka International Athletics Meeting (Fukuroi, JPN)																		
date	03-May-21	time	6.32	11.49	16.77	22.20	27.86	33.85	40.09	46.99	46.99	6 / 6	<i>Yamanaka (2021) - race analysis of men's and women's 400m and 300m races in 2021 competition</i>					
reaction time	0.174	interval	5.17	5.28	5.43	5.66	5.99	6.24	6.90		# of strides	11.49	10.71	11.65	13.14	22.20	24.79	2.59
		velocity	7.91	9.67	9.47	9.21	8.83	8.35	8.01	7.25	8.51	178.0	8.70	9.34	8.58	7.61	9.01	8.07
Yoshizu, Takuho (JPN) (1998)																		
Heat 3 - 2021 All Japan Corporate Championships (Osaka, JPN)																		
date	25-Sep-21	time		11.28	22.31		34.13	46.84	46.99	46.99	8 / 2	<i>@ohnishigundan (2021) - https://twitter.com/ohnishigundan/status/1441633743874117633</i>						
reaction time	0.200	interval		11.03		11.82	12.71				# of strides	11.28	11.03	11.82	12.71	22.31	24.53	2.22
		velocity		8.87	9.07		8.46	7.87	8.51		8.87	9.07	8.46	7.87	8.96	8.15		
Reid, Terrence (USA) (1986)																		
FINAL - 2005 USATF National Junior Championships (Carson, CA)																		
date	25-Jun-05	time		11.83	17.32		34.55	40.63	47.00	47.00	47.00	1 / 4	<i>USATF Women's Sprint Development (2005)</i>					
reaction time		interval		5.49		17.23	6.08	6.37			# of strides	11.83			12.45			
		velocity		8.45	9.11		8.71	8.22	7.85	8.51		8.45			8.03			
Matsubara, Shuichiro (JPN) (1997)																		
FINAL - 2015 Japanese National Junior Championships (Nagoya, JPN)																		
date	16-Oct-15	time	6.38	11.63	16.97	22.71	28.63	34.61	40.69	47.00	47.00	1 / 2	<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>					
reaction time		interval	5.25	5.34	5.74	5.92	5.98	6.08	6.31		# of strides	11.63	11.08	11.90	12.39	22.71	24.29	1.58
		velocity	7.84	9.52	9.36	8.71	8.45	8.36	8.22	7.92	8.51	8.60	9.03	8.40	8.07	8.81	8.23	
Azuma, Kaiki (JPN) (1993)																		
Race C - 2016 Shizuoka International Meeting (Fukuroi, JPN)																		
date	03-May-16	time	6.41	11.70	17.15	22.60	28.07	33.90	40.17	47.00	47.00	1 / 1	<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>					
reaction time		interval	5.29	5.45	5.45	5.47	5.83	6.27	6.83		# of strides	11.70	10.90	11.30	13.10	22.60	24.40	1.80
		velocity	7.80	9.45	9.17	9.17	9.14	8.58	7.97	7.32	8.51	8.55	9.17	8.85	7.63	8.85	8.20	
Obuchi, Mizuki (JPN) (1997)																		
Race B - 2016 Shizuoka International Meeting (Fukuroi, JPN)																		

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Sato, Hiroki (JPN) (1995)																			
FINAL - 2017 Kansai Regional University Championships (Osaka, JPN)																			
date	11-May-17	time	11.46			33.84		47.03	47.03		9 / 3								
reaction time		interval				22.38		13.19			# of strides	11.46			13.19				
		velocity	8.73			8.94		7.58	8.51		186.7	8.73			7.58				
Itahana, Kohei (JPN) (1994)																			
FINAL - 2017 All Japan Corporate Championships (Osaka, JPN)																			
date	24-Sep-17	time	11.29		22.17		33.98		47.03	47.03	8 / 3								
reaction time	0.163	interval			10.88		11.81		13.05		# of strides	11.29	10.88	11.81	13.05	22.17	24.86	2.69	
		velocity	8.86		9.19		8.47		7.66	8.51	176.5	8.86	9.19	8.47	7.66	9.02	8.05		
Misener-Daley, Myles (CAN) (2001)																			
FINAL - 2018 IAAF World Junior Championships (Tampere, FIN)																			
date	13-Jul-18	time	6.23	11.29	16.68	22.28	28.06	34.07	40.37	47.03	47.03								
reaction time	0.153	interval		5.06	5.39	5.60	5.78	6.01	6.30	6.66		# of strides	11.29	10.99	11.79	12.96	22.28	24.75	2.47
		velocity	8.03	9.88	9.28	8.93	8.65	8.32	7.94	7.51	8.51	8.86	9.10	8.48	7.72	8.98	8.08		
Balti, Rami (TUN) (2001)																			
B FINAL - 2021 Doha Diamond League (Doha, QAT)																			
date	28-May-21	time	6.4	11.5	16.9	22.5	28.4	34.4	40.6	47.03	47.03								
reaction time	0.220	interval		5.10	5.40	5.60	5.90	6.00	6.20	6.43		# of strides	11.50	11.00	11.90	12.63	22.50	24.53	2.03
		velocity	7.81	9.80	9.26	8.93	8.47	8.33	8.06	7.78	8.51	8.70	9.09	8.40	7.92	8.89	8.15		
Joseph, Michael (LCA) (2002)																			
Semi-Final 1 - 2022 Commonwealth Games (Birmingham, GBR)																			
date	05-Aug-22	time	6.1	11.1	16.3	21.8	27.6	33.7	40.0	47.03	47.03								
reaction time	0.156	interval		5.00	5.20	5.50	5.80	6.10	6.30	7.03		# of strides	11.10	10.70	11.90	13.33	21.80	25.23	3.43
		velocity	8.20	10.00	9.62	9.09	8.62	8.20	7.94	7.11	8.51	9.01	9.35	8.40	7.50	9.17	7.93		
Iwaki, Takuma (JPN) (1996)																			
FINAL - 2013 Japanese National High School Championships (Oita, JPN)																			
date	30-Jul-13	time	11.67		22.67		34.43		47.04	47.04	5 / 4								
reaction time		interval			11.00		11.76		12.61		# of strides	11.67	11.00	11.76	12.61	22.67	24.37	1.70	
		velocity	8.57		9.09		8.50		7.93	8.50	182.0	8.57	9.09	8.50	7.93	8.82	8.21		
Kobayashi, Naoki (JPN) (1990)																			
FINAL - 2017 All Japan Corporate Championships (Osaka, JPN)																			
date	24-Sep-17	time	11.42		22.29		34.10		47.04	47.04	6 / 4								
reaction time	0.161	interval			10.87		11.81		12.94		# of strides	11.42	10.87	11.81	12.94	22.29	24.75	2.46	
		velocity	8.76		9.20		8.47		7.73	8.50	183.0	8.76	9.20	8.47	7.73	8.97	8.08		
Strother, Nathan (USA) (1995)																			
FINAL - 2019 Memorial van Damme (Brussels, BEL)																			
date	06-Sep-19	time	6.4	11.4	16.5	21.8	27.3	33.1	39.4	47.04	47.04								
reaction time	0.187	interval		5.0	5.1	5.3	5.5	5.8	6.3	13.9		# of strides	11.40	10.40	11.30	13.94	21.80	25.24	3.44
		velocity	7.81	10.00	9.80	9.43	9.09	8.62	7.94	7.17	8.50	8.77	9.62	8.85	7.17	9.17	7.92		
Tkashashi, Yuma (JPN) (1995)																			
Heat 3 - 2021 All Japan Corporate Championships (Osaka, JPN)																			
date	25-Sep-21	time	11.56		22.79		34.22		46.88	47.04	7 / 3								
reaction time	0.166	interval			11.23		11.43		12.66		# of strides	11.56	11.23	11.43	12.66	22.79	24.09	1.30	
		velocity	8.65		8.90		8.75		7.90	8.50	182.0	8.65	8.90	8.75	7.90	8.78	8.30		
Goúsis, Anastásios (GRE) (1979)																			
FINAL - 2001 European Cup (Bremen, GER)																			
date	23-Jun-01	time	11.50		22.18		33.88		47.05	47.05	1 / 8								
reaction time		interval			10.68		11.70		13.17		# of strides	11.50	10.68	11.70	13.17	22.18	24.87	2.69	
		velocity	8.70		9.36		8.55		7.59	8.50	182.0	8.70	9.36	8.55	7.59	9.02	8.04		
Rachkovsky, Oleksiy (UKR) (1984)																			
FINAL - 2007 European Cup (Munich, GER)																			
date	23-Jun-07	time	11.66		22.45		34.17		47.05	47.05	1 / 8								
reaction time	0.240	interval			10.79		11.72		12.88		# of strides	11.66	10.79	11.72	12.88	22.45	24.60	2.15	
		velocity	8.58		9.27		8.53		7.76	8.50	182.0	8.58	9.27	8.53	7.76	8.91	8.13		
Watanabe, Kazuya (JPN) (1988)																			
FINAL - 2012 Japanese National Championships (Osaka, JPN)																			
date	09-Jun-12	time	6.24	11.51	16.88	22.49	28.25	34.23	40.45	47.05	47.05								
reaction time		interval		5.27	5.37	5.61	5.76	5.98	6.22	6.60		# of strides	11.51	10.98	11.74	12.82	22.49	24.56	2.07
		velocity	8.01	9.49	9.31	8.91	8.68	8.36	8.04	7.58	8.50	8.69	9.11	8.52	7.80	8.89	8.14		
Wakabayashi, Kota (JPN) (1997)																			
FINAL - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time	6.21	11.40	16.77	22.30	28.15	34.20	40.39	47.05	47.05								
reaction time	0.190	interval		5.19	5.37	5.53	5.85	6.05	6.19	6.66		# of strides	11.40	10.90	11.90	12.85	22.30	24.75	2.45
		velocity	8.05	9.63	9.31	9.04	8.55	8.26	8.08	7.51	8.50	8.77	9.17	8.40	7.78	8.97	8.08		
Tomita, Daichi (JPN) (2001)																			
FINAL - 2019 Japanese National High School Championships (Okinawa, JPN)																			
date	04-Aug-19	time	6.42	11.61	16.85	22.23	27.86	33.88	40.25	47.05	47.05								
reaction time		interval		5.19	5.24	5.38	5.63	6.02	6.37	6.80		# of strides	11.61	10.62	11.65	13.17	22.23	24.82	2.59
		velocity	7.79	9.63	9.54	9.29	8.88	8.31	7.85	7.35	8.50	8.61	9.42	8.58	7.59	9.00	8.06		
Kawauchi, Mitsuki (JPN) (1997)																			
Heat 2 - 2021 All Japan Corporate Championships (Osaka, JPN)																			
date	24-Sep-21	time	11.42		22.29		34.10		47.04	47.04	6 / 4								
reaction time	0.161	interval			10.87		11.81		12.94		# of strides	11.42	10.87	11.81	12.94	22.29	24.75	2.46	
		velocity	8.76		9.20		8.47		7.73	8.50	183.0	8.76	9.20	8.47	7.73	8.97	8.08		

date	25-Sep-21	time	1.34	21.99	33.82	47.01	47.05	8 / 2											
reaction time	0.183	interval		20.65	11.83	13.19		# of strides	1.34	20.65	11.83	13.19	21.99	25.02	3.03				
		velocity	74.63	4.84	8.45	7.58	8.50		74.63	4.84	8.45	7.58	9.10	7.99					
Tao Zhongqi (CHN) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 3 - 2023 Chinese National Grand Prix 5 (Huangshi, CHN)																			
date	09-Jun-23	time	11.41	22.26		34.17	40.39	47.05	47.05	5 / 1									
reaction time	0.225	interval		10.85	11.91	6.22	6.66		# of strides	11.41	10.85	11.91	12.88	22.26	24.79	2.53			
		velocity	8.76	9.22	8.40	8.04	7.51	8.50	177.2	8.76	9.22	8.40	7.76	8.98	8.07				
Erm, Johannes (EST) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Decathlon - Heat 3 - 2023 World Athletics Championships (Budapest, HUN)																			
date	25-Aug-23	time	11.76	22.54	34.37		47.05	47.05	47.05	5 / 3									
reaction time	0.199	interval		10.78	11.83	12.68		# of strides	11.76	10.78	11.83	12.68	22.54	24.51	1.97				
		velocity	8.50	9.28	8.45	7.89	8.50	170.0	8.50	9.28	8.45	7.89	8.87	8.16					
Coleman, Elzie (USA) (1985)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2003 USATF National Junior Championships (Palo Alto, CA)																			
date	22-Jun-03	time	22.79		34.58	40.47	47.06	47.06	47.06	7 / 3									
reaction time		interval			11.79	5.89	6.59		# of strides			11.79	12.48	22.79	24.27	1.48			
		velocity		8.78	8.48	8.49	7.59	8.50	8.50		8.48	8.01	8.78	8.24					
Funato, Daisuke (JPN) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2015 Japanese National High School Championships (Wakayama, JPN)																			
date	29-Jul-15	time	6.50	11.56	16.80	22.29	28.12	34.14	40.41	47.06	47.06								
reaction time		interval		5.06	5.24	5.49	5.83	6.02	6.27	6.65	PB	# of strides	11.56	10.73	11.85	12.92	22.29	24.77	2.48
		velocity	7.69	9.88	9.54	9.11	8.58	8.31	7.97	7.52	8.50	8.65	9.32	8.44	7.74	8.97	8.07		
Kanemaru, Yuzo (JPN) (1987)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2017 Japanese National Championships (Osaka, JPN)																			
date	24-Jun-17	time	6.20	11.26	16.53	22.04	27.81	33.87	40.29	47.06	47.06								
reaction time	0.154	interval		5.06	5.27	5.51	5.77	6.06	6.42	6.77		# of strides	11.26	10.78	11.83	13.19	22.04	25.02	2.98
		velocity	8.06	9.88	9.49	9.07	8.67	8.25	7.79	7.39	8.50	8.88	9.28	8.45	7.58	9.07	7.99		
Hosoi, Brian (JPN) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
U19 Semi-Final 2 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time	11.63		22.29		34.05		47.06	47.06	47.06								
reaction time	0.179	interval			10.66		11.76		13.01		# of strides	11.63	10.66	11.76	13.01	22.29	24.77	2.48	
		velocity	8.60		9.38		8.50		7.69	8.50	195.0	8.60	9.38	8.50	7.69	8.97	8.07		
Itahana, Kohei (JPN) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 3 - 2021 All Japan Corporate Championships (Osaka, JPN)																			
date	25-Sep-21	time	11.41		22.49		34.33		46.89	47.06	47.06								
reaction time	0.194	interval			11.08		11.84		12.56		# of strides	11.41	11.08	11.84	12.56	22.49	24.40	1.91	
		velocity	8.76		9.03		8.45		7.96	8.50	8.76	9.03	8.45	7.96	8.89	8.20			
Ngozi, Zibani (BOT) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 2 - 2022 Commonwealth Games (Birmingham, GBR)																			
date	05-Aug-22	time	6.1	11.1	16.5	22.1	28.0	34.0	40.1	47.06	47.06								
reaction time	0.194	interval		5.00	5.40	5.60	5.90	6.00	6.10	6.96		# of strides	11.10	11.00	11.90	13.06	22.10	24.96	2.86
		velocity	8.20	10.00	9.26	8.93	8.47	8.33	8.20	7.18	8.50	9.01	9.09	8.40	7.66	9.05	8.01		
Dringo, Mihai Sorin (ROU) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 3 - 2022 European Athletics Championships (Munich, GER)																			
date	16-Aug-22	time	11.70		22.27		33.84		47.06	47.06	47.06								
reaction time	0.188	interval			10.57		11.57		13.22		# of strides	11.70	10.57	11.57	13.22	22.27	24.79	2.52	
		velocity	8.55		9.46		8.64		7.56	8.50	178.5	8.55	9.46	8.64	7.56	8.98	8.07		
Qiao Zhiyang (CHN) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2023 Chinese National Championships (Quzhou, CHN)																			
date	22-Jul-23	time	11.58		22.96		34.78	40.81	47.06	47.06	47.06								
reaction time	0.209	interval			11.38		11.82	6.03	6.25		# of strides	11.58	11.38	11.82	12.28	22.96	24.10	1.14	
		velocity	8.64		8.79		8.46	8.29	8.00	8.50	175.2	8.64	8.79	8.46	8.14	8.71	8.30		
Yui, Kaisei (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2016 Shizuoka International Meeting (Fukuroi, JPN)																			
date	03-May-16	time	6.35	11.54	17.00	22.57	28.27	34.16	40.41	47.07	47.07								
reaction time		interval		5.19	5.46	5.57	5.70	5.89	6.25	6.66		# of strides	11.54	11.03	11.59	12.91	22.57	24.50	1.93
		velocity	7.87	9.63	9.16	8.98	8.77	8.49	8.00	7.51	8.50	8.67	9.07	8.63	7.75	8.86	8.16		
Park Bong-Ko (KOR) (1991)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2016 Shizuoka International Meeting (Fukuroi, JPN)																			
date	03-May-16	time	6.23	11.50	16.98	22.53	28.22	34.07	40.26	47.07	47.07								
reaction time		interval		5.27	5.48	5.55	5.69	5.85	6.19	6.81		# of strides	11.50	11.03	11.54	13.00	22.53	24.54	2.01
		velocity	8.03	9.49	9.12	9.01	8.79	8.55	8.08	7.34	8.50	8.70	9.07	8.67	7.69	8.88	8.15		
Kimura, Kazushi (JPN) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2016 Shizuoka International Meeting (Fukuroi, JPN)																			
date	03-May-16	time	6.28	11.62	17.13	22.74	28.43	34.31	40.44	47.07	47.07								
reaction time		interval		5.34	5.51	5.61	5.69	5.88	6.13	6.63		# of strides	11.62	11.12	11.57	12.76	22.74	24.33	1.59
		velocity	7.96	9.36	9.07	8.91	8.79	8.50	8.16	7.54	8.50	8.61	8.99	8.64	7.84	8.80	8.22		
Kimura, Jun (JPN) (1991)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2017 All Japan Corporate Championships (Osaka, JPN)																			
date	24-Sep-17	time	11.43		22.43		34.09		47.07	47.07	47.07								
reaction time	0.136	interval			11.00		11.66		12.98		# of strides	11.43	11.00	11.66	12.98	22.43	24.64	2.21	
		velocity	8.75		9.09		8.58		7.70	8.50	181.0	8.75	9.09	8.58	7.70	8.92	8.12		

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Kitakani, Naoki (JPN) (1998)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Heat 1 - 2020 Japanese National Championships (Niigata, JPN)		<i>Yamanaka (2020) - 400m race analysis of men and women during 2020 season</i>																	
date	01-Oct-20	time	6.24	11.34	16.55	21.97	27.68	33.72	40.06	47.07	47.07	4 / 2							
reaction time	0.167	interval		5.10	5.21	5.42	5.71	6.04	6.34	7.01		# of strides	11.34	10.63	11.75	13.35	21.97	25.10	3.13
		velocity	8.01	9.80	9.60	9.23	8.76	8.28	7.89	7.13	8.50		8.82	9.41	8.51	7.49	9.10	7.97	
Hu Hongbo (CHN) (2001)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2024 Chinese National Championships (Quzhou, CHN)		<i>Shandong Athletics Sport Science (2024)</i>																	
date	16-Sep-24	time			11.52	22.29		34.17	40.44	47.07	47.07	1 / 6							
reaction time	0.161	interval				10.77		11.88	6.27	6.63		# of strides	11.52	10.77	11.88	12.90	22.29	24.78	2.49
		velocity			8.68	9.29		8.42	7.97	7.54	8.50	183.0	8.68	9.29	8.42	7.75	8.97	8.07	
Yui, Kaisei (JPN) (1996)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2014 IAAF World Junior Championships (Eugene, OR)		<i>Maho (2014) - race analysis of men's 400m run in the 2014 season</i>																	
date	24-Jul-14	time	6.33	11.54	16.85	22.48	28.34	34.29	40.44	47.08	47.08	2 / 7							
reaction time	0.150	interval		5.21	5.31	5.63	5.86	5.95	6.15	6.64		# of strides	11.54	10.94	11.81	12.79	22.48	24.60	2.12
		velocity	7.90	9.60	9.42	8.88	8.53	8.40	8.13	7.53	8.50		8.67	9.14	8.47	7.82	8.90	8.13	
Watanabe, Kazuya (JPN) (1988)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2016 Shizuoka International Meeting (Fukuroi, JPN)		<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>																	
date	03-May-16	time	6.24	11.45	16.72	22.18	27.87	33.91	40.33	47.08	47.08	/ 6							
reaction time		interval		5.21	5.27	5.46	5.69	6.04	6.42	6.75		# of strides	11.45	10.73	11.73	13.17	22.18	24.90	2.72
		velocity	8.01	9.60	9.49	9.16	8.79	8.28	7.79	7.41	8.50		8.73	9.32	8.53	7.59	9.02	8.03	
Kanemaru, Yuzo (JPN) (1987)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2017 Shizuoka International Meeting (Fukuroi, JPN)		<i>Yamanaka (2017) - male and female 400m analysis in the 2017 season</i>																	
date	03-May-17	time	6.21	11.31	16.62	22.17	27.98	34.04	40.42	47.08	47.08	/ 3							
reaction time		interval		5.10	5.31	5.55	5.81	6.06	6.38	6.66		# of strides	11.31	10.86	11.87	13.04	22.17	24.91	2.74
		velocity	8.05	9.80	9.42	9.01	8.61	8.25	7.84	7.51	8.50		8.84	9.21	8.42	7.67	9.02	8.03	
Sato, Fuga (JPN) (1996)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Division 2 Semi-Final 1 - 2017 Kanto Collegiate Championships (Yokohama, JPN)		<i>(2017) - tfdata-store.com/2017/06/02/post-835/</i>																	
date	26-May-17	time		11.45		22.10		33.57		47.08	47.08	7 / 1							
reaction time		interval				10.65		11.47		13.51		# of strides	11.45	10.65	11.47	13.51	22.10	24.98	2.88
		velocity		8.73		9.39		8.72		7.40	8.50		179.0	8.73	9.39	8.72	7.40	9.05	8.01
Xie Yuqiang (CHN) (1997)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Heat 2 - 2023 Chinese World Championship & Asian Games Trials (Shenyang, CHN)		<i>Shandong Athletics Sport Science (2023)</i>																	
date	27-Jun-23	time		11.24		22.14		33.97	40.28	47.08	47.08	4 / 2							
reaction time	0.174	interval				10.90		11.83	6.31	6.80		# of strides	11.24	10.90	11.83	13.11	22.14	24.94	2.80
		velocity		8.90		9.17		8.45	7.92	7.35	8.50		175.5	8.90	9.17	8.45	7.63	9.03	8.02
Dair, Hamza (MAR) (2002)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2023 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR)		<i>Omega Timing (2023) - diamond league race analysis</i>																	
date	28-May-23	time	6.31	11.44	16.80	22.46	28.18	34.14	40.36	47.09	47.09	1 / 7							
reaction time	0.180	interval		5.13	5.36	5.66	5.72	5.96	6.22	6.73		# of strides	11.44	11.02	11.68	12.95	22.46	24.63	2.17
		velocity	7.92	9.75	9.33	8.83	8.74	8.39	8.04	7.43	8.49		8.74	9.07	8.56	7.72	8.90	8.12	
Isaacs, Gardeo (RSA) (1998)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
National FINAL - 2023 Bauhaus Galan (Stockholm, SWE)		<i>Omega Timing (2023) - diamond league race analysis</i>																	
date	02-Jul-23	time	6.24	11.27	16.54	22.09	27.94	33.94	40.12	47.09	47.09	6 / 2							
reaction time	0.150	interval		5.03	5.27	5.55	5.85	6.00	6.18	6.97		# of strides	11.27	10.82	11.85	13.15	22.09	25.00	2.91
		velocity	8.01	9.94	9.49	9.01	8.55	8.33	8.09	7.17	8.49		8.87	9.24	8.44	7.60	9.05	8.00	
Kimura, Jun (JPN) (1991)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2014 Shizuoka International Athletics Meeting (Fukuroi, JPN)		<i>Maho (2014) - race analysis of men's 400m run in the 2014 season</i>																	
date	03-May-14	time	6.31	11.35	16.52	22.02	27.77	33.72	40.09	47.11	47.11	/ 8							
reaction time		interval		5.04	5.17	5.50	5.75	5.95	6.37	7.02		# of strides	11.35	10.67	11.70	13.39	22.02	25.09	3.07
		velocity	7.92	9.92	9.67	9.09	8.70	8.40	7.85	7.12	8.49		8.81	9.37	8.55	7.47	9.08	7.97	
Kobayashi, Naoki (JPN) (1990)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2015 Japanese National Championships (Niigata, JPN)		<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>																	
date	28-Jun-15	time	6.31	11.33	16.52	21.95	27.59	33.58	40.14	47.11	47.11	5 / 6							
reaction time	0.169	interval		5.02	5.19	5.43	5.64	5.99	6.56	6.97		# of strides	11.33	10.62	11.63	13.53	21.95	25.16	3.21
		velocity	7.92	9.96	9.63	9.21	8.87	8.35	7.62	7.17	8.49		8.83	9.42	8.60	7.39	9.11	7.95	
Kimura, Kenta (JPN) (1993)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2015 National Sports Festival (Wakayama, JPN)		<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>																	
date	04-Oct-15	time	6.39	11.52	16.92	22.63	28.43	34.30	40.44	47.11	47.11	/ 3							
reaction time		interval		5.13	5.40	5.71	5.80	5.87	6.14	6.67		# of strides	11.52	11.11	11.67	12.81	22.63	24.48	1.85
		velocity	7.82	9.75	9.26	8.76	8.62	8.52	8.14	7.50	8.49		8.68	9.00	8.57	7.81	8.84	8.17	
Horii, Kosuke (JPN) (1994)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
A FINAL - 2019 Shizuoka International Athletics Meeting (Fukuroi, JPN)		<i>Kobayashi (2019) - research on athlete performance and technique- 2019 data book</i>																	
date	03-May-19	time	6.26	11.36	16.62	22.14	27.96	34.07	40.43	47.11	47.11	3 / 6							
reaction time		interval		5.10	5.26	5.52	5.82	6.11	6.36	6.68		# of strides	11.36	10.78	11.93	13.04	22.14	24.97	2.83
		velocity	7.99	9.80	9.51	9.06	8.59	8.18	7.86	7.49	8.49		8.80	9.28	8.38	7.67	9.03	8.01	
Smith, Owen (GBR) (1994)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2021 Müller British Grand Prix (Gateshead, GBR)		<i>Omega Timing (2021) - diamond league race analysis</i>																	
date	13-Jul-21	time	6.5	11.8	17.4	23.0	28.8	34.7	40.7	47.11	47.11	1 / 6							
reaction time	0.146	interval		5.30	5.60	5.60	5.80	5.90	6.00	6.41		# of strides	11.80	11.20	11.70	12.41	23.00	24.11	1.11
		velocity	7.69	9.43	8.93	8.93	8.62	8.47	8.33	7.80	8.49		8.47	8.93	8.55	8.06	8.70	8.30	
Xie Yuqiang (CHN) (1997)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2023 Chinese National Championships (Quzhou, CHN)		<i>Shandong Athletics Sport Science (2023)</i>																	

date	22-Jul-23	time	11.19	22.15	34.13	40.36	47.91	47.11	1 / 7										
reaction time	0.124	interval		10.96	11.98	6.23	7.55		# of strides	11.19	10.96	11.98	13.78	22.15	25.76	3.61			
		velocity	8.94	9.12	8.35	8.03	6.62	8.49		177.0	8.94	9.12	8.35	7.26	9.03	7.76			
Urano, Akihiro (JPN) (1990)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2008 Japanese National High School Championships (Kumagaya, JPN)																			
date	29-Jul-08	time	6.47	11.82	17.22	22.69	28.46	34.27	40.39	47.12	47.12	1 / 2							
reaction time		interval		5.35	5.40	5.47	5.77	5.81	6.12	6.73		# of strides	11.82	10.87	11.58	12.85	22.69	24.43	1.74
		velocity	7.73	9.35	9.26	9.14	8.67	8.61	8.17	7.43	8.49		8.46	9.20	8.64	7.78	8.81	8.19	
Suzuki, Taichi (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2019 Japanese National Championships (Fukuoka, JPN)																			
date	28-Jun-19	time	6.11	11.16	16.40	21.92	27.59	33.55	39.92	47.12	47.12	8 / 8							
reaction time	0.159	interval		5.05	5.24	5.52	5.67	5.96	6.37	7.20		# of strides	11.16	10.76	11.63	13.57	21.92	25.20	3.28
		velocity	8.18	9.90	9.54	9.06	8.82	8.39	7.85	6.94	8.49		8.96	9.29	8.60	7.37	9.12	7.94	
Tatsunami, Clay Aaron (JPN) (2002)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
U20 FINAL - 2019 Japanese National U18/U20 Championships (Hiroshima, JPN)																			
date	18-Oct-19	time	6.54	11.89	17.30	22.89	28.63	34.52	40.62	47.12	47.12	4 / 2							
reaction time	0.165	interval		5.35	5.41	5.59	5.74	5.89	6.10	6.50		# of strides	11.89	11.00	11.63	12.60	22.89	24.23	1.34
		velocity	7.65	9.35	9.24	8.94	8.71	8.49	8.20	7.69	8.49		189.7	8.41	9.09	8.60	7.94	8.74	8.25
Zheng Chiyu (CHN) (2003)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2023 Chinese National Grand Prix 1 (Rizhao, CHN)																			
date	26-Apr-23	time		11.68	22.39		34.47	40.58	47.12	47.12	5 / 1								
reaction time	0.149	interval			10.71		12.08	6.11	6.54			# of strides	11.68	10.71	12.08	12.65	22.39	24.73	2.34
		velocity		8.56	9.34		8.28	8.18	7.65	8.49			183.0	8.56	9.34	8.28	7.91	8.93	8.09
Taam, Rik (NED) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Decathlon - Heat 3 - 2023 World Athletics Championships (Budapest, HUN)																			
date	25-Aug-23	time		11.67	22.53		34.07	47.12	47.12	47.12	9 / 4								
reaction time	0.191	interval			10.86		11.54	13.05	PB			# of strides	11.67	10.86	11.54	13.05	22.53	24.59	2.06
		velocity		8.57	9.21		8.67	7.66	8.49	8.49			8.57	9.21	8.67	7.66	8.88	8.13	
Yasui, Kazuki (JPN) (1990)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2012 Japanese National Championships (Osaka, JPN)																			
date	09-Jun-12	time	6.47	11.74	17.08	22.67	28.30	34.20	40.42	47.13	47.13	3 / 7							
reaction time		interval		5.27	5.34	5.59	5.63	5.90	6.22	6.71		# of strides	11.74	10.93	11.53	12.93	22.67	24.46	1.79
		velocity	7.73	9.49	9.36	8.94	8.88	8.47	8.04	7.45	8.49		173.0	8.52	9.15	8.67	7.73	8.82	8.18
Kitagawa, Takamasa (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Division 1 Semi-Final 2 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time		11.72	22.64		34.51	47.13	47.13	47.13	6 / 1								
reaction time		interval			10.92		11.87	12.62				# of strides	11.72	10.92	11.87	12.62	22.64	24.49	1.85
		velocity		8.53	9.16		8.42	7.92	8.49	8.49			180.2	8.53	9.16	8.42	7.92	8.83	8.17
Suzuki, Mitsuhiro (JPN) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 2 - 2017 Japanese National Championships (Osaka, JPN)																			
date	23-Jun-17	time		11.47	21.93		33.40	47.13	47.13	47.13	8 / 6								
reaction time	0.158	interval			10.46		11.47	13.73				# of strides	11.47	10.46	11.47	13.73	21.93	25.20	3.27
		velocity		8.72	9.56		8.72	7.28	8.49	8.49			189.5	8.72	9.56	8.72	7.28	9.12	7.94
Wu Yuang (CHN) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2019 Shanghai (Shanghai, CHN)																			
date	18-May-19	time		11.1	21.9		34.2	47.13	47.13	47.13	2 / 6								
reaction time	0.196	interval			10.8		12.3	12.9				# of strides	11.10	10.80	12.30	12.93	21.90	25.23	3.33
		velocity		9.01	9.26		8.13	7.73	8.49	8.49			9.01	9.26	8.13	7.73	9.13	7.93	
Xie Yuqiang (CHN) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2023 Chinese World Championship & Asian Games Trials (Shenyang, CHN)																			
date	28-Jun-23	time		11.33	22.07		33.88	40.19	47.13	47.13	6 / 5								
reaction time	0.218	interval			10.74		11.81	6.31	6.94			# of strides	11.33	10.74	11.81	13.25	22.07	25.06	2.99
		velocity		8.83	9.31		8.47	7.92	7.20	8.49			177.0	8.83	9.31	8.47	7.55	9.06	7.98
Spencer, Emerson (USA) (1906)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1928 Pacific AAU Championships (Palo Alto, CA)																			
date	12-May-28	time			21.8			47.0	47.0	47.0	1 / 1								
reaction time		interval						25.2	WR			# of strides					21.80	25.20	3.40
		velocity			9.17			7.94	8.51								9.17	7.94	
Wint, Arthur (JAM) (1920)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1952 Olympic Games (Helsinki, FIN)																			
date	25-Jul-52	time			21.7			47.0	47.0	47.0	2 / 5								
reaction time		interval						25.3				# of strides		21.70		47.00	21.70	25.30	3.60
		velocity			9.22			7.91	8.51				(47.24)	4.61		2.13	9.22	7.91	
Hellstén, Voitto (FIN) (1932)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1956 Olympic Games (Melbourne, AUS)																			
date	29-Nov-56	time			22.3		33.6	47.0	47.0	47.0	3 / 3								
reaction time		interval					11.3	13.4	(47.15)			# of strides		22.30	11.30	13.40	22.30	24.70	2.40
		velocity			8.97		8.85	7.46	8.57				195.0	8.97	8.85	7.46	8.97	8.10	
Ignatyev, Ardalion (URS) (1930)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1956 Olympic Games (Melbourne, AUS)																			
date	29-Nov-56	time			22.0		33.5	47.0	47.0	47.0	2 / 3								
reaction time		interval					11.5	13.5	(47.15)			# of strides		22.00	11.50	13.50	22.00	25.00	3.00
		velocity			9.09		8.70	7.41	8.57				183.5	9.09	8.70	7.41	9.09	8.00	

Haas, Karl-Friedrich (FRG) (1931)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential									
FINAL - 1958 European Championships (Stockholm, SWE)																											
date	21-Aug-58	time	22.5			47.0			47.0	/ 3																	
reaction time		interval	8.89			8.16			8.51	# of strides																	
		velocity									22.50	24.50	2.00														
Tamura, Tomoya (JPN) (1992)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential									
FINAL - 2017 Japanese National Championships (Osaka, JPN)																											
date	24-Jun-17	time	6.05	10.94	15.94	21.17	26.72	32.69	39.32	47.14	47.14	6 / 8															
reaction time	0.168	interval	4.89	5.00	5.23	5.55	5.97	6.63	7.82	8.49	# of strides	10.94	10.23	11.52	14.45	21.17	25.97	4.80									
		velocity	8.26	10.22	10.00	9.56	9.01	8.38	7.54	6.39	191.0	9.14	9.78	8.68	6.92	9.45	7.70										
Mori, Shushi (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential									
FINAL - 2018 Japanese National High School Championships (Nagoya, JPN)																											
date	02-Aug-18	time	6.45	11.69	17.00	22.35	27.90	33.90	40.29	47.14	47.14	6 / 1															
reaction time		interval	5.24	5.31	5.35	5.55	6.00	6.39	6.85	PB	# of strides	11.69	10.66	11.55	13.24	22.35	24.79	2.44									
		velocity	7.75	9.54	9.42	9.35	9.01	8.33	7.82	7.30	8.49	8.55	9.38	8.66	7.55	8.95	8.07										
Hibio, Kikuta (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential									
FINAL - 2023 Japanese National High School Championships (Sapporo, JPN)																											
date	02-Aug-23	time	11.46		22.47		34.27		47.14		47.14	7 / 2															
reaction time	0.256	interval	11.01		11.80		12.87		8.49		# of strides	11.46	11.01	11.80	12.87	22.47	24.67	2.20									
		velocity	8.73		9.08		8.47		7.77		8.49	8.73	9.08	8.47	7.77	8.90	8.11										
Kitakani, Naoki (JPN) (1998)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential									
FINAL - 2016 IAAF World Junior Championships (Bydgoszcz, POL)																											
date	22-Jul-16	time	6.29	11.47	16.78	22.31	28.15	34.23	40.43	47.15	47.15	3 / 8															
reaction time	0.143	interval	5.18	5.31	5.53	5.84	6.08	6.20	6.72	8.48	# of strides	11.47	10.84	11.92	12.92	22.31	24.84	2.53									
		velocity	7.95	9.65	9.42	9.04	8.56	8.22	8.06	7.44	8.48	8.72	9.23	8.39	7.74	8.96	8.05										
Snaith, Ben (GBR) (1995)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential									
National FINAL - 2018 Müller Anniversary Games (London, GBR)																											
date	21-Jul-18	time	11.7		22.3		33.9		47.15		47.15	8 / 6															
reaction time	0.162	interval	10.6		11.6		13.3		8.48		# of strides	11.70	10.60	11.60	13.25	22.30	24.85	2.55									
		velocity	8.55		9.43		8.62		7.55		8.48	8.55	9.43	8.62	7.55	8.97	8.05										
Strother, Nathan (USA) (1995)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential									
FINAL - 2019 The Match - Europe v USA (Minsk, BLR)																											
date	09-Sep-19	time	11.46		22.15		33.64		47.15		47.15	7 / 8															
reaction time	0.215	interval	10.69		11.49		13.51		8.48		# of strides	11.46	10.69	11.49	13.51	22.15	25.00	2.85									
		velocity	8.73		9.35		8.70		7.40		8.48	184.0	8.73	9.35	8.70	7.40	9.03	8.00									
Kimura, Kazushi (JPN) (1993)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential									
B FINAL - 2017 Nanbu Memorial Meeting (Sapporo, JPN)																											
date	09-Jul-17	time	11.99		23.40		34.83		47.16		47.16	5 / 1															
reaction time		interval	11.41		11.43		12.33		8.48		# of strides	11.99	11.41	11.43	12.33	23.40	23.76	0.36									
		velocity	8.34		8.76		8.75		8.11		8.48	186.0	8.34	8.76	8.75	8.11	8.55	8.42									
Inagawa, Keisuke (JPN) (2002)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential									
A FINAL - 2020 Japanese High School National Championships (Hiroshima, JPN)																											
date	23-Oct-20	time	6.45	11.78	17.27	22.94	28.70	34.60	40.70	47.16	47.16	6 / 2															
reaction time	0.188	interval	5.33	5.49	5.67	5.76	5.90	6.10	6.46	8.48	# of strides	11.78	11.16	11.66	12.56	22.94	24.22	1.28									
		velocity	7.75	9.38	9.11	8.82	8.68	8.47	8.20	7.74	8.48	185.8	8.49	8.96	8.58	7.96	8.72	8.26									
Dobber, Jochem (NED) (1997)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential									
FINAL - 2022 FBK Games (Hengelo, NED)																											
date	06-Jun-22	time	6.3	11.4	16.6	22.0	27.7	33.8	40.2	47.16	47.16	8 / 7															
reaction time	0.167	interval	5.10	5.20	5.40	5.70	6.10	6.40	6.96	8.48	# of strides	11.40	10.60	11.80	13.36	22.00	25.16	3.16									
		velocity	7.94	9.80	9.62	9.26	8.77	8.20	7.81	7.18	8.48	8.77	9.43	8.47	7.49	9.09	7.95										
Feng Zhiqiang (CHN) (1998)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential									
FINAL - 2023 Chinese National Grand Prix 3 (Taizhou, CHN)																											
date	26-May-23	time	11.23		22.19		34.30		47.16		47.16	4 / 4															
reaction time	0.240	interval	10.96		12.11		6.18		6.68		# of strides	11.23	10.96	12.11	12.86	22.19	24.97	2.78									
		velocity	8.90		9.12		8.26		8.09		8.48	168.7	8.90	9.12	8.26	7.78	9.01	8.01									
Nakamura, Akihiko (JPN) (1990)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential									
Decathlon - Heat 2 - 2012 Japanese Multi-Event National Championships (Nagano, JPN)																											
date	02-Jun-12	time	6.34	11.53	16.87	22.46	28.26	34.27	40.48	47.17	47.17	4 / 1															
reaction time		interval	5.19	5.34	5.59	5.80	6.01	6.21	6.69	PB	# of strides	11.53	10.93	11.81	12.90	22.46	24.71	2.25									
		velocity	7.89	9.63	9.36	8.94	8.62	8.32	8.05	7.47	8.48	8.67	9.15	8.47	7.75	8.90	8.09										
Watanabe, Kazuya (JPN) (1988)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential									
FINAL - 2015 National Sports Festival (Wakayama, JPN)																											
date	04-Oct-15	time	6.27	11.49	17.00	22.82	28.66	34.61	40.76	47.17	47.17	/ 4															
reaction time		interval	5.22	5.51	5.82	5.84	5.95	6.15	6.41	8.48	# of strides	11.49	11.33	11.79	12.56	22.82	24.35	1.53									
		velocity	7.97	9.58	9.07	8.59	8.56	8.40	8.13	7.80	8.48	8.70	8.83	8.48	7.96	8.76	8.21										
Ooishi, Ryouta (JPN) (2006)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential									
FINAL - 2024 Japanese National High School Championships (Fukuoka, JPN)																											
date	28-Jul-24	time	11.73		22.47		34.27		47.17		47.17	5 / 2															
reaction time	0.185	interval	10.74		11.80		12.90		8.48		# of strides	11.73	10.74	11.80	12.90	22.47	24.70	2.23									
		velocity	8.53		9.31		8.47		7.75		8.48	8.53	9.31	8.47	7.75	8.90	8.10										
Yamaki, Kakeru (JPN) (1996)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential									
Division 1 Semi-Final 1 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																											

date	26-May-17	time	11.45	22.22	33.96	47.18	47.18	7 / 1											
reaction time		interval		10.77	11.74	13.22		# of strides	11.45	10.77	11.74	13.22	22.22	24.96	2.74				
		velocity	8.73	9.29	8.52	7.56	8.48	204.5	8.73	9.29	8.52	7.56	9.00	8.01					
Kitakani, Naoki (JPN) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	Heat 1 - 2019 Japanese National Championships (Fukuoka, JPN)																		
	<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>																		
date	27-Jun-19	time	6.28	11.42	16.77	22.37	28.19	34.27	40.56	47.18	47.18	4 / 4							
reaction time	0.159	interval	5.14	5.35	5.60	5.82	6.08	6.29	6.62		# of strides	11.42	10.95	11.90	12.91	22.37	24.81	2.44	
		velocity	7.96	9.73	9.35	8.93	8.59	8.22	7.95	7.55	8.48	8.76	9.13	8.40	7.75	8.94	8.06		
Song Jiahui (CHN) (2002)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	Heat 3 - 2023 Chinese National Grand Prix 3 (Taizhou, CHN)																		
	<i>Shandong Athletics Sport Science (2023)</i>																		
date	26-May-23	time		11.58	22.33		34.06	40.33	47.18	47.18	5 / 3								
reaction time	0.168	interval		10.75	11.73	6.27	6.85				# of strides	11.58	10.75	11.73	13.12	22.33	24.85	2.52	
		velocity		8.64	9.30	8.53	7.97	7.30	8.48		169.0	8.64	9.30	8.53	7.62	8.96	8.05		
Borlée, Kevin (BEL) (1988)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	Invitational - 2024 Memorial van damme (Brussels, BEL)																		
	<i>Omega Timing (2024) - diamond league race analysis</i>																		
date	13-Sep-24	time	6.40	11.67	16.98	22.41	28.09	33.98	40.19	47.18	47.18	6 / 6							
reaction time	0.138	interval	5.27	5.31	5.43	5.68	5.89	6.21	6.99		# of strides	11.67	10.74	11.57	13.20	22.41	24.77	2.36	
		velocity	7.81	9.49	9.42	9.21	8.80	8.49	8.05	7.15	8.48	8.57	9.31	8.64	7.58	8.92	8.07		
Kimura, Jun (JPN) (1991)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	FINAL - 2018 National Sports Festival (Fukui, JPN)																		
	<i>Yamanaka (2018) - Race analysis of men and women 400m at 2018 competition</i>																		
date	08-Oct-18	time	6.28	11.46	16.85	22.55	28.45	34.47	40.60	47.19	47.19	1 / 7							
reaction time	0.146	interval	5.18	5.39	5.70	5.90	6.02	6.13	6.59		# of strides	11.46	11.09	11.92	12.72	22.55	24.64	2.09	
		velocity	7.96	9.65	9.28	8.77	8.47	8.31	8.16	7.59	8.48	8.73	9.02	8.39	7.86	8.87	8.12		
Katayama, Yuto (JPN) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	Heat 1 - 2021 All Japan Corporate Championships (Osaka, JPN)																		
	<i>@ohnishigundan (2021) - https://twitter.com/ohnishigundan/status/1441633743874117633</i>																		
date	25-Sep-21	time	11.33	22.24	33.91	47.06	47.19				# of strides	11.33	10.91	11.67	13.15	22.24	24.82	2.58	
reaction time	0.172	interval	10.91	11.67	13.15	7.60	8.48				8.83	9.17	8.57	7.60	8.99	8.06			
		velocity	8.83	9.17	8.57														
Boers, Isayah (NED) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	FINAL - 2023 FBK Games (Hengelo, NED)																		
	<i>Omega Timing (2023) - continental tour race analysis</i>																		
date	04-Jun-23	time	6.05	10.94	16.03	21.40	27.08	33.14	39.84	47.19	47.19	3 / 8							
reaction time	0.161	interval	4.89	5.09	5.37	5.68	6.06	6.70	7.35		# of strides	10.94	10.46	11.74	14.05	21.40	25.79	4.39	
		velocity	8.26	10.22	9.82	9.31	8.80	8.25	7.46	6.80	8.48	174.5	9.14	9.56	8.52	7.12	9.35	7.75	
Erm, Johannes (EST) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	Decathlon - Heat 3 - 2024 Olympic Games (Paris, FRA)																		
	<i>Paris 2024 Olympic Games - Results Book (2024)</i>																		
date	02-Aug-24	time	6.37	11.56	16.95	22.52	28.29	34.40	40.71	47.19	47.19	3 / 4							
reaction time	0.212	interval	5.19	5.39	5.57	5.77	6.11	6.31	6.48		# of strides	11.56	10.96	11.88	12.79	22.52	24.67	2.15	
		velocity	7.85	9.63	9.28	8.98	8.67	8.18	7.92	7.72	8.48	167.0	8.65	9.12	8.42	7.82	8.88	8.11	
Urano, Akihiro (JPN) (1990)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	FINAL - 2012 Kokutai National Sport Festival (Gifu, JPN)																		
	<i>Maho (2013) - race analysis of the men's 400m run in competition</i>																		
date	08-Oct-12	time	6.35	11.48	16.85	22.33	27.98	33.94	40.23	47.20	47.20	1 / 7							
reaction time		interval	5.13	5.37	5.48	5.65	5.96	6.29	6.97		# of strides	11.48	10.85	11.61	13.26	22.33	24.87	2.54	
		velocity	7.87	9.75	9.31	9.12	8.85	8.39	7.95	7.17	8.47	8.71	9.22	8.61	7.54	8.96	8.04		
Yoshimura, Kento (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	FINAL - 2017 Kansai Regional University Championships (Osaka, JPN)																		
	<i>(2017) - tfdata-store.com/2017/05/13/post-441/</i>																		
date	11-May-17	time	11.49		33.73	47.20	47.20				# of strides	11.49		13.47					
reaction time		interval	22.24	13.47							189.2	8.70		7.42					
		velocity	8.70		8.99	7.42	8.47												
Tamura, Tomoya (JPN) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	Heat 1 - 2019 Japanese National Championships (Fukuoka, JPN)																		
	<i>Yamanaka (2019) - race analysis of men and women 400m competition</i>																		
date	27-Jun-19	time	6.26	11.37	16.62	22.11	27.82	33.79	40.18	47.20	47.20	2 / 5							
reaction time	0.171	interval	5.11	5.25	5.49	5.71	5.97	6.39	7.02		# of strides	11.37	10.74	11.68	13.41	22.11	25.09	2.98	
		velocity	7.99	9.78	9.52	9.11	8.76	8.38	7.82	7.12	8.47	8.80	9.31	8.56	7.46	9.05	7.97		
Mori, Zhou (JPN) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	U19 Semi-Final 1 - 2017 National Sports Festival (Matsuyama, JPN)																		
	<i>(2017) - tfdata-store.com/2017/10/12/post-1100/</i>																		
date	08-Oct-17	time	11.68	22.34	34.20	47.21	47.21				# of strides	11.68	10.66	11.86	13.01	22.34	24.87	2.53	
reaction time	0.191	interval	10.66	11.86	13.01	7.69	8.47				185.0	8.56	9.38	8.43	7.69	8.95	8.04		
		velocity	8.56	9.38	8.43														
Agard, Terrence (NED) (1990)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	FINAL - 2022 FBK Games (Hengelo, NED)																		
	<i>Omega Timing (2022) - continental tour race analysis</i>																		
date	06-Jun-22	time	6.3	11.3	16.5	21.9	27.5	33.5	40.0	47.21	47.21	3 / 8							
reaction time	0.195	interval	5.00	5.20	5.40	5.60	6.00	6.50	7.21		# of strides	11.30	10.60	11.60	13.71	21.90	25.31	3.41	
		velocity	7.94	10.00	9.62	9.26	8.93	8.33	7.69	6.93	8.47	8.85	9.43	8.62	7.29	9.13	7.90		
Lepage, Pierce (CAN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	Decathlon - Heat 2 - 2023 World Athletics Championships (Budapest, HUN)																		
	<i>Seiko Timing (2023) - world championship race analysis</i>																		
date	25-Aug-23	time	11.43	22.84	34.63	47.21	47.21				# of strides	11.43	11.41	11.79	12.58	22.84	24.37	1.53	
reaction time	0.189	interval	11.41	11.79	12.58	7.95	8.47				160.7	8.75	8.76	8.48	7.95	8.76	8.21		
		velocity	8.75	8.76	8.48														
Talbot, Ryan (USA) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
	Decathlon - Heat 3 - 2024 USA Olympic Trials (Eugene, OR)																		
	<i>USATF and Karmarush (2024) - USA Olympic trials results and race analysis</i>																		
date	21-Jun-24	time	11.76	22.42	34.30	47.21	47.21				# of strides	11.76	10.66	11.88	12.91	22.42	24.79	2.37	
reaction time		interval	10.66	11.88	12.91	7.75	8.47				11.76	10.66	11.88	12.91	22.42	24.79	2.37		
		velocity	8.50	9.38	8.42	7.75	8.47				8.50	9.38	8.42	7.75	8.92	8.07			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Kitagawa, Takamasa (JPN) (1996)																			
FINAL - 2016 National Sports Festival (Kitakami, JPN)																			
date	09-Oct-16	time	6.47	11.79	17.23	22.90	28.76	34.68	40.77	47.22	47.22								
reaction time	0.191	interval		5.32	5.44	5.67	5.86	5.92	6.09	6.45		# of strides	11.79	11.11	11.78	12.54	22.90	24.32	1.42
		velocity	7.73	9.40	9.19	8.82	8.53	8.45	8.21	7.75	8.47		8.48	9.00	8.49	7.97	8.73	8.22	
Kimura, Kazushi (JPN) (1993)																			
Heat 1 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time			11.44	22.38		34.25		47.22	47.22								
reaction time	0.191	interval				10.94		11.87		12.97		# of strides	11.44	10.94	11.87	12.97	22.38	24.84	2.46
		velocity			8.74	9.14		8.42		7.71	8.47		8.74	9.14	8.42	7.71	8.94	8.05	
Kosuke, Soji (JPN)																			
FINAL - 2018 Japanese National High School Championships (Nagoya, JPN)																			
date	02-Aug-18	time	6.49	11.68	16.98	22.46	28.27	34.38	40.62	47.22	47.22								
reaction time		interval		5.19	5.30	5.48	5.81	6.11	6.24	6.60	PB	# of strides	11.68	10.78	11.92	12.84	22.46	24.76	2.30
		velocity	7.70	9.63	9.43	9.12	8.61	8.18	8.01	7.58	8.47		8.56	9.28	8.39	7.79	8.90	8.08	
Katayama, Yuto (JPN) (1997)																			
FINAL - 2021 All Japan Corporate Championships (Osaka, JPN)																			
date	25-Sep-21	time		11.64		22.67		34.30		47.01	47.22								
reaction time	0.191	interval			11.03		11.63		12.71			# of strides	11.64	11.03	11.63	12.71	22.67	24.34	1.67
		velocity		8.59		9.07		8.60		7.87	8.47		8.59	9.07	8.60	7.87	8.82	8.22	
Luchembe, Kennedy (ZAM) (2001)																			
Semi-Final 3 - 2022 Commonwealth Games (Birmingham, GBR)																			
date	05-Aug-22	time	6.1	11.1	16.4	22.0	27.9	34.0	40.3	47.22	47.22								
reaction time	0.147	interval		5.00	5.30	5.60	5.90	6.10	6.30	6.92		# of strides	11.10	10.90	12.00	13.22	22.00	25.22	3.22
		velocity	8.20	10.00	9.43	8.93	8.47	8.20	7.94	7.23	8.47		176.2	9.01	9.17	8.33	7.56	9.09	7.93
Urano, Akihiro (JPN) (1990)																			
FINAL - 2009 Japanese National High School Championships (Nara, JPN)																			
date	29-Jul-09	time		11.61		22.80		34.52		47.23	47.23								
reaction time		interval			11.19		11.72		12.71			# of strides	11.61	11.19	11.72	12.71	22.80	24.43	1.63
		velocity		8.61		8.94		8.53		7.87	8.47		8.61	8.94	8.53	7.87	8.77	8.19	
Kato, Nobuya (JPN) (1995)																			
FINAL - 2017 Shizuoka International Meeting (Fukuroi, JPN)																			
date	03-May-17	time	6.47	11.69	17.08	22.64	28.32	34.20	40.42	47.23	47.23								
reaction time		interval		5.22	5.39	5.56	5.68	5.88	6.22	6.81		# of strides	11.69	10.95	11.56	13.03	22.64	24.59	1.95
		velocity	7.73	9.58	9.28	8.99	8.80	8.50	8.04	7.34	8.47		8.55	9.13	8.65	7.67	8.83	8.13	
Mori, Zhou (JPN) (2000)																			
U19 FINAL - 2017 National Sports Festival (Matsuyama, JPN)																			
date	09-Oct-17	time		11.68		22.62		34.33		47.23	47.23								
reaction time	0.171	interval			10.94		11.71		12.90			# of strides	11.68	10.94	11.71	12.90	22.62	24.61	1.99
		velocity		8.56		9.14		8.54		7.75	8.47		187.0	8.56	9.14	8.54	7.75	8.84	8.13
Mhamdi, Rachid (MAR) (2001)																			
National FINAL - 2022 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR)																			
date	05-Jun-22	time	6.57	12.01	17.68	22.41	29.25	35.05	40.93	47.23	47.23								
reaction time	0.179	interval		5.44	5.67	4.73	6.84	5.80	5.88	6.30	PB	# of strides	12.01	10.40	12.64	12.18	22.41	24.82	2.41
		velocity	7.61	9.19	8.82	10.57	7.31	8.62	8.50	7.94	8.47		8.33	9.62	7.91	8.21	8.92	8.06	
Hayashi, Shinya (JPN) (2004)																			
FINAL - 2022 Japanese National High School Championships (Naruto, JPN)																			
date	03-Aug-22	time		11.78		22.73		34.55		47.23	47.23								
reaction time	0.187	interval			10.95		11.82		12.68		PB	# of strides	11.78	10.95	11.82	12.68	22.73	24.50	1.77
		velocity		8.49		9.13		8.46		7.89	8.47		182.5	8.49	9.13	8.46	7.89	8.80	8.16
Kouma, Masano (JPN)																			
FINAL - 2023 Japanese National High School Championships (Sapporo, JPN)																			
date	02-Aug-23	time		11.61		22.52		34.58		47.23	47.23								
reaction time	0.244	interval			10.91		12.06		12.65			# of strides	11.61	10.91	12.06	12.65	22.52	24.71	2.19
		velocity		8.61		9.17		8.29		7.91	8.47		8.61	9.17	8.29	7.91	8.88	8.09	
Kishimoto, Kyota (JPN) (2006)																			
FINAL - 2024 Japanese National High School Championships (Fukuoka, JPN)																			
date	28-Jul-24	time		11.41		22.52		34.58		47.23	47.23								
reaction time	0.202	interval			11.11		12.06		12.65			# of strides	11.41	11.11	12.06	12.65	22.52	24.71	2.19
		velocity		8.76		9.00		8.29		7.91	8.47		8.76	9.00	8.29	7.91	8.88	8.09	
Downs, William (USA) ???																			
FINAL - 1890 ??? Beacon Park (Boston, MA) (440y Straightaway)																			
date	09-Jul-90	time				23.1				47.1	47.1								
reaction time		interval								24.0		# of strides					23.10	24.00	
		velocity				8.66				8.33	8.49		(47 2/5 /440y)				8.66	8.33	
Eastman, Benjamin (USA) (1911)																			
FINAL - 1932 USA Olympic Trials (Palo Alto, CA)																			
date	16-Jul-32	time				22.2				47.1	47.1								
reaction time		interval								24.9		# of strides					22.20	24.90	2.70
		velocity				9.01				8.03	8.49						9.01	8.03	
Matsuo, Shuhei (JPN) (1999)																			
U19 Semi-Final 2 - 2017 National Sports Festival (Matsuyama, JPN)																			

date	08-Oct-17	time	11.55	22.43	34.37	47.24	47.24	4 / 2												
reaction time	0.156	interval		10.88	11.94	12.87		# of strides	11.55	10.88	11.94	12.87	22.43	24.81	2.38					
		velocity	8.66	9.19	8.38	7.77	8.47	180.5	8.66	9.19	8.38	7.77	8.92	8.06						
Kinoshita, Yuichi (JPN) (2002)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
A FINAL - 2020 Japanese High School National Championships (Hiroshima, JPN)																				
<i>Kobayashi (2020) - national high school and U20 national championships</i>																				
date	23-Oct-20	time	6.33	11.54	16.92	22.46	28.24	34.27	40.55	47.24	47.24	5 / 3								
reaction time	0.179	interval		5.21	5.38	5.54	5.78	6.03	6.28	6.69		# of strides	11.54	10.92	11.81	12.97	22.46	24.78	2.32	
		velocity	7.90	9.60	9.29	9.03	8.65	8.29	7.96	7.47	8.47	188.1	8.67	9.16	8.47	7.71	8.90	8.07		
Kobayashi, Naoki (JPN) (1990)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2018 Seiko Golden Grand Prix (Osaka, JPN)																				
<i>Yamanaka (2018) - Race analysis of men and women 400m at 2018 competition</i>																				
date	20-May-18	time	6.32	11.49	16.72	22.12	27.73	33.76	40.23	47.25	47.25	3 / 8								
reaction time	0.181	interval		5.17	5.23	5.40	5.61	6.03	6.47	7.02		# of strides	11.49	10.63	11.64	13.49	22.12	25.13	3.01	
		velocity	7.91	9.67	9.56	9.26	8.91	8.29	7.73	7.12	8.47	179.7	8.70	9.41	8.59	7.41	9.04	7.96		
Wakabayashi, Kota (JPN) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
A FINAL - 2019 Shizuoka International Athletics Meeting (Fukuroi, JPN)																				
<i>Kobayashi (2019) - research on athlete performance and technique- 2019 data book</i>																				
date	03-May-19	time	6.18	11.15	16.27	21.68	27.40	33.52	40.00	47.25	47.25	7 / 7								
reaction time		interval		4.97	5.12	5.41	5.72	6.12	6.48	7.25		# of strides	11.15	10.53	11.84	13.73	21.68	25.57	3.89	
		velocity	8.09	10.06	9.77	9.24	8.74	8.17	7.72	6.90	8.47	175.5	8.97	9.50	8.45	7.28	9.23	7.82		
Kobayashi, Masahito (JPN)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2009 Japanese National High School Championships (Nara, JPN)																				
<i>Matsuo (2009) - 62nd high school championships: JAF scientific committee - biomechanics data</i>																				
date	29-Jul-09	time	11.48						34.28	47.26	47.26	3 / 3								
reaction time		interval							11.90	12.98		# of strides	11.48	10.90	11.90	12.98	22.38	24.88	2.50	
		velocity							8.40	7.70	8.46		8.71	9.17	8.40	7.70	8.94	8.04		
Fujiwara, Takeshi (JPN) (1985)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2017 Shizuoka International Meeting (Fukuroi, JPN)																				
<i>Yamanaka (2017) - male and female 400m analysis in the 2017 season</i>																				
date	03-May-17	time	6.36	11.68	17.25	23.00	28.60	34.35	40.52	47.26	47.26	1 / 5								
reaction time		interval		5.32	5.57	5.75	5.60	5.75	6.17	6.74		# of strides	11.68	11.32	11.35	12.91	23.00	24.26	1.26	
		velocity	7.86	9.40	8.98	8.70	8.93	8.70	8.10	7.42	8.46		8.56	8.83	8.81	7.75	8.70	8.24		
Suzuki, Daisuke (JPN)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
A FINAL - 2020 Japanese High School National Championships (Hiroshima, JPN)																				
<i>Kobayashi (2020) - national high school and U20 national championships</i>																				
date	23-Oct-20	time	6.24	11.44	16.80	22.48	28.40	34.55	40.85	47.26	47.26	4 / 4								
reaction time	0.174	interval		5.20	5.36	5.68	5.92	6.15	6.30	6.41		# of strides	11.44	11.04	12.07	12.71	22.48	24.78	2.30	
		velocity	8.01	9.62	9.33	8.80	8.45	8.13	7.94	7.80	8.46	187.2	8.74	9.06	8.29	7.87	8.90	8.07		
Kitakani, Naoki (JPN) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2020 Japanese National Championships (Niigata, JPN)																				
<i>Yamanaka (2020) - 400m race analysis of men and women during 2020 season</i>																				
date	02-Oct-20	time	6.19	11.23	16.50	22.00	27.78	33.83	40.17	47.26	47.26	8 / 8								
reaction time	0.139	interval		5.04	5.27	5.50	5.78	6.05	6.34	7.09		# of strides	11.23	10.77	11.83	13.43	22.00	25.26	3.26	
		velocity	8.08	9.92	9.49	9.09	8.65	8.26	7.89	7.05	8.46	179.2	8.90	9.29	8.45	7.45	9.09	7.92		
Meldrum, Alan (JPN) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
U19 Semi-Final 1 - 2017 National Sports Festival (Matsuyama, JPN)																				
<i>(2017) - tfdata-store.com/2017/10/12/post-1100/</i>																				
date	08-Oct-17	time	11.76						22.66	34.55	47.27	47.27	4 / 3							
reaction time	0.178	interval							10.90	11.89	12.72		# of strides	11.76	10.90	11.89	12.72	22.66	24.61	1.95
		velocity							8.50	9.17	8.41	7.86	8.83	8.13						
Inagawa, Keisuke (JPN) (2002)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 4 - 2020 Japanese High School National Championships (Hiroshima, JPN)																				
<i>Kobayashi (2020) - national high school and U20 national championships</i>																				
date	23-Oct-20	time	6.32	11.66	17.16	22.84	28.65	34.52	40.62	47.27	47.27	6 / 1								
reaction time	0.170	interval		5.34	5.50	5.68	5.81	5.87	6.10	6.65		# of strides	11.66	11.18	11.68	12.75	22.84	24.43	1.59	
		velocity	7.91	9.36	9.09	8.80	8.61	8.52	8.20	7.52	8.46	185.3	8.58	8.94	8.56	7.84	8.76	8.19		
Kato, Nobuya (JPN) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2015 National Sports Festival (Wakayama, JPN)																				
<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>																				
date	04-Oct-15	time	6.63	12.10	17.73	23.64	29.57	35.38	41.21	47.28	47.28	1 / 5								
reaction time		interval		5.47	5.63	5.91	5.93	5.81	5.83	6.07		# of strides	12.10	11.54	11.74	11.90	23.64	23.64	0.00	
		velocity	7.54	9.14	8.88	8.46	8.43	8.61	8.58	8.24	8.46		8.26	8.67	8.52	8.40	8.46	8.46		
Imoto, Yoshinobu (JPN) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
U19 Heat 1 - 2017 National Sports Festival (Matsuyama, JPN)																				
<i>(2017) - tfdata-store.com/2017/10/12/post-1100/</i>																				
date	08-Oct-17	time	11.09						21.96	33.73	47.28	47.28	6 / 1							
reaction time	0.158	interval							10.87	11.77	13.55		# of strides	11.09	10.87	11.77	13.55	21.96	25.32	3.36
		velocity							9.20	8.50	7.38	8.46		9.02	9.20	8.50	7.38	9.11	7.90	
Asano, Kurodo (JPN) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
U19 Semi-Final 1 - 2017 National Sports Festival (Matsuyama, JPN)																				
<i>(2017) - tfdata-store.com/2017/10/12/post-1100/</i>																				
date	08-Oct-17	time	11.63						22.59	34.36	47.28	47.28	9 / 4							
reaction time	0.169	interval							10.96	11.77	12.92		# of strides	11.63	10.96	11.77	12.92	22.59	24.69	2.10
		velocity							8.60	9.12	8.50	7.74	8.85	8.10						
Horii, Kosuke (JPN) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 2 - 2018 Japanese National Championships (Yamaguchi, JPN)																				
<i>Yamanaka (2018) - Race analysis of men and women 400m at 2018 competition</i>																				
date	22-Jun-18	time	6.61	11.82	17.35	23.10	29.00	34.94	40.95	47.28	47.28	4 / 5								
reaction time	0.150	interval		5.21	5.53	5.75	5.90	5.94	6.01	6.33		# of strides	11.82	11.28	11.84	12.34	23.10	24.18	1.08	
		velocity	7.56	9.60	9.04	8.70	8.47	8.42	8.32	7.90	8.46		8.46	8.87	8.45	8.10	8.66	8.27		
Kimura, Kazushi (JPN) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2020 Seiko Golden Grand Prix (Tokyo, JPN)																				
<i>Yamanaka (2020) - 400m race analysis of men and women during 2020 season</i>																				
date	23-Aug-20	time	6.19	11.24	16.37	21.76	27.42	33.46	39.93	47.28	47.28	3 / 5								
reaction time	0.176	interval		5.05	5.13	5.39	5.66	6.04	6.47	7.35		# of strides	11.24	10.52	11.70	13.82	21.76	25.52	3.76	
		velocity	8.08	9.90	9.75	9.28	8.83	8.28	7.73	6.80	8.46		8.90	9.51	8.55	7.24	9.19	7.84		

Runner	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Rhoden-Stevens, Jamal (GBR) (1994)																			
B FINAL - 2022 Müller Birmingham Diamond League (Birmingham, GBR)																			
date	21-May-22	time	6.1	11.1	16.5	22.0	27.8	33.9	40.1	47.28	47.28								
reaction time	0.152	interval		5.04	5.40	5.50	5.80	6.10	6.20	7.18	DQ	# of strides	11.10	10.90	11.90	13.38	22.00		
		velocity	8.25	9.92	9.26	9.09	8.62	8.20	8.06	6.96	8.46	186.7	9.01	9.17	8.40	7.47	9.09	7.91	
<i>Omega Timing (2022) - diamond league race analysis</i>																			
Sun Jiahao (CHN) (2002)																			
FINAL - 2023 Chinese National Championships (Quzhou, CHN)																			
date	22-Jul-23	time		11.83				23.31		35.02	40.94	47.28	47.28						
reaction time	0.206	interval						11.48		11.71	5.92	6.34		# of strides	11.83	11.48	11.71	12.26	
		velocity		8.45				8.71		8.54	8.45	7.89	8.46	177.2	8.45	8.71	8.54	8.16	8.58
<i>Shandong Athletics Sport Science (2023)</i>																			
Lowe, Sean (USA) (1986)																			
FINAL - 2005 USATF National Junior Championships (Carson, CA)																			
date	25-Jun-05	time		11.95	17.43	23.14	28.97	34.54	40.73	47.29	47.29								
reaction time		interval			5.48	5.71	5.83	5.57	6.19	6.56		# of strides	11.95	11.19	11.40	12.75	23.14		
		velocity		8.37	9.12	8.76	8.58	8.98	8.08	7.62	8.46	8.37	8.94	8.77	7.84	8.64	8.28		
<i>USATF Women's Sprint Development (2005)</i>																			
Naoki, Masafumi (JPN) (1993)																			
Heat 2 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time		11.46				22.16		33.73	47.29	47.29		# of strides	2 / 4				
reaction time	0.164	interval						10.70		11.57	13.56		# of strides	11.46	10.70	11.57	13.56		
		velocity		8.73				9.35		8.64	7.37	8.46	181.0	8.73	9.35	8.64	7.37	9.03	
<i>(2017) - tfdata-store.com/2017/10/12/post-1100/</i>																			
Noda, Taiga (JPN) (1999)																			
U19 Semi-Final 2 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time		11.57				22.39		34.35	47.29	47.29		# of strides	7 / 3				
reaction time	0.171	interval						10.82		11.96	12.94		# of strides	11.57	10.82	11.96	12.94		
		velocity		8.64				9.24		8.36	7.73	8.46	178.0	8.64	9.24	8.36	7.73	8.93	
<i>(2017) - tfdata-store.com/2017/10/12/post-1100/</i>																			
Kawauchi, Mitsuki (JPN) (1997)																			
FINAL - 2020 Seiko Golden Grand Prix (Tokyo, JPN)																			
date	23-Aug-20	time		6.34	11.59	16.97	22.51	28.32	34.35	40.63	47.29	47.29		# of strides	8 / 6				
reaction time	0.135	interval			5.25	5.38	5.54	5.81	6.03	6.28	6.66		# of strides	11.59	10.92	11.84	12.94		
		velocity		7.89	9.52	9.29	9.03	8.61	8.29	7.96	7.51	8.46	8.63	9.16	8.45	7.73	8.88	8.07	
<i>Yamanaka (2020) - 400m race analysis of men and women during 2020 season</i>																			
Kneppers, Daan (NED) (2003)																			
National FINAL - 2024 FBK Games (Hengelo, NED)																			
date	07-Jul-24	time		6.52	11.60	16.86	22.33	28.12	34.16	40.48	47.29	47.29		# of strides	2 / 6				
reaction time	0.172	interval			5.08	5.26	5.47	5.79	6.04	6.32	6.81	PB	# of strides	11.60	10.73	11.83	13.13		
		velocity		7.67	9.84	9.51	9.14	8.64	8.28	7.91	7.34	8.46	8.62	9.32	8.45	7.62	8.96	8.01	
<i>Omega Timing (2024) - continental tour gold race analysis</i>																			
Ishitsuka, Yusuke (JPN) (1987)																			
FINAL - 2016 Shizuoka International Meeting (Fukuroi, JPN)																			
date	03-May-16	time		6.17	11.40	16.77	22.32	28.05	34.08	40.45	47.30	47.30		# of strides	17				
reaction time		interval			5.23	5.37	5.55	5.73	6.03	6.37	6.85		# of strides	11.40	10.92	11.76	13.22		
		velocity		8.10	9.56	9.31	9.01	8.73	8.29	7.85	7.30	8.46	8.77	9.16	8.50	7.56	8.96	8.01	
<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>																			
Kato, Nobuya (JPN) (1995)																			
FINAL - 2016 National Sports Festival (Kitakami, JPN)																			
date	09-Oct-16	time		6.63	12.01	17.43	23.18	29.16	35.08	41.03	47.30	47.30		# of strides	9 / 2				
reaction time	0.189	interval			5.38	5.42	5.75	5.98	5.92	5.95	6.27		# of strides	12.01	11.17	11.90	12.22		
		velocity		7.54	9.29	9.23	8.70	8.36	8.45	8.40	7.97	8.46	8.33	8.95	8.40	8.18	8.63	8.29	
<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>																			
Salem, Abdulaziz (QAT)																			
National FINAL - 2019 Doha (Doha, QAT)																			
date	03-May-19	time		11.4				22.0		33.7	47.30	47.30		# of strides	3 / 3				
reaction time	0.176	interval						10.6		11.7	13.6	PB	# of strides	11.40	10.60	11.70	13.60		
		velocity		8.77				9.43		8.55	7.35	8.46	8.77	9.43	8.55	7.35	9.09	7.91	
<i>Omega Timing (2019) - diamond league race analysis</i>																			
Osman, Ashraf (QAT) (2001)																			
FINAL - 2023 Doha Diamond League (Doha, QAT)																			
date	05-May-23	time		6.39	11.53	16.92	22.59	28.42	34.43	40.56	47.30	47.30		# of strides	4 / 1				
reaction time	0.213	interval			5.14	5.39	5.67	5.83	6.01	6.13	6.74		# of strides	11.53	11.06	11.84	12.87		
		velocity		7.82	9.73	9.28	8.82	8.58	8.32	8.16	7.42	8.46	8.67	9.04	8.45	7.77	8.85	8.09	
<i>Omega Timing (2023) - diamond league race analysis</i>																			
Hirose, Hideyuki (JPN) (1989)																			
FINAL - 2014 Shizuoka International Athletics Meeting (Fukuori, JPN)																			
date	03-May-14	time		6.32	11.47	16.60	22.05	27.71	33.69	40.15	47.31	47.31		# of strides	/ 9				
reaction time		interval			5.15	5.13	5.45	5.66	5.98	6.46	7.16		# of strides	11.47	10.58	11.64	13.62		
		velocity		7.91	9.71	9.75	9.17	8.83	8.36	7.74	6.98	8.45	8.72	9.45	8.59	7.34	9.07	7.92	
<i>Maho (2014) - race analysis of men's 400m run in the 2014 season</i>																			
Kotake, Rion (JPN) (1999)																			
U19 Semi-Final 2 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time		11.71				22.66		34.44	47.31	47.31		# of strides	5 / 4				
reaction time	0.163	interval						10.95		11.78	12.87		# of strides	11.71	10.95	11.78	12.87		
		velocity		8.54				9.13		8.49	7.77	8.45	184.0	8.54	9.13	8.49	7.77	8.83	
<i>(2017) - tfdata-store.com/2017/10/12/post-1100/</i>																			
Westman, Ryan (USA) (1984)																			
FINAL - 2003 USATF National Junior Championships (Palo Alto, CA)																			
date	22-Jun-03	time						22.97		34.89	40.87	47.32	47.32		# of strides	3 / 4			
reaction time		interval								11.92	5.98	6.45	PB	# of strides			11.92		
		velocity						8.71		8.39	8.36	7.75	8.45				8.39	8.05	
<i>USATF Women's Sprint Development (2003)</i>																			
Nakamura, Akihiko (JPN) (1990)																			
Decathlon - Heat 3 - 2013 Japanese Multi-Event National Championship (Nagano, JPN)																			
<i>Takeo (2014) - decathletes sprint ability & relationship of individual event performance</i>																			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Xie Yuqiang (CHN) (1997)																			
FINAL - 2023 Chinese National Grand Prix 1 (Rizhao, CHN)																			
date	26-Apr-23	time	11.43		22.62		34.47	40.76	47.34	47.34	6 / 2								
reaction time	0.168	interval			11.19		11.85	6.29	6.58		# of strides	11.43	11.19	11.85	12.87	22.62	24.72	2.10	
		velocity	8.75		8.94		8.44	7.95	7.60	8.45	176.2	8.75	8.94	8.44	7.77	8.84	8.09		
Kimura, Kazushi (JPN) (1993)																			
FINAL - 2015 Japanese National Championships (Niigata, JPN)																			
date	28-Jun-15	time	6.44	11.73	17.05	22.55	28.05	33.81	40.17	47.35	47.35	8 / 7							
reaction time	0.190	interval		5.29	5.32	5.50	5.50	5.76	6.36	7.18		# of strides	11.73	10.82	11.26	13.54	22.55	24.80	2.25
		velocity	7.76	9.45	9.40	9.09	9.09	8.68	7.86	6.96	8.45	189.0	8.53	9.24	8.88	7.39	8.87	8.06	
Claridge, Ben (GBR) (1997)																			
National FINAL - 2018 Müller Anniversary Games (London, GBR)																			
date	21-Jul-18	time	11.6		22.4		34.1		47.35	47.35	1 / 7								
reaction time	0.138	interval			10.8		11.7		13.3		# of strides	11.60	10.80	11.70	13.25	22.40	24.95	2.55	
		velocity	8.62		9.26		8.55		7.55	8.45	8.62	8.62	9.26	8.55	7.55	8.93	8.02		
Mhamdi, Rachid (MAR) (2001)																			
National FINAL - 2023 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR)																			
date	28-May-23	time	6.40	11.57	16.95	22.55	28.17	33.98	40.12	47.35	47.35	4 / 1							
reaction time	0.190	interval		5.17	5.38	5.60	5.62	5.81	6.14	7.23		# of strides	11.57	10.98	11.43	13.37	22.55	24.80	2.25
		velocity	7.81	9.67	9.29	8.93	8.90	8.61	8.14	6.92	8.45	8.64	9.11	8.75	7.48	8.87	8.06		
Deng Hantao (CHN) (2000)																			
Heat 1 - 2023 Chinese National Championships (Quzhou, CHN)																			
date	21-Jul-23	time	11.49		22.36		34.20	40.56	47.35	47.35	2 / 7								
reaction time	0.204	interval			10.87		11.84	6.36	6.79		# of strides	11.49	10.87	11.84	13.15	22.36	24.99	2.63	
		velocity	8.70		9.20		8.45	7.86	7.36	8.45	171.2	8.70	9.20	8.45	7.60	8.94	8.00		
Plass, Jonas (GER) (1986)																			
B FINAL - 2009 ISTAF (Berlin, GER)																			
date	14-Jun-09	time	11.63		22.74		34.66		47.36	47.36	1 / 4								
reaction time	0.210	interval			11.11		11.92		12.70		# of strides	11.63	11.11	11.92	12.70	22.74	24.62	1.88	
		velocity	8.60		9.00		8.39		7.87	8.45	8.60	9.00	8.39	7.87	8.80	8.12			
Obuchi, Mizuki (JPN) (1997)																			
FINAL - 2015 Japanese National Junior Championships (Nagoya, JPN)																			
date	16-Oct-15	time	6.52	11.85	17.33	23.00	28.78	34.72	40.78	47.36	47.36	1 / 3							
reaction time		interval		5.33	5.48	5.67	5.78	5.94	6.06	6.58		# of strides	11.85	11.15	11.72	12.64	23.00	24.36	1.36
		velocity	7.67	9.38	9.12	8.82	8.65	8.42	8.25	7.60	8.45	8.44	8.97	8.53	7.91	8.70	8.21		
Johansson, Emil (SWE) (2002)																			
FINAL - 2021 Bauhaus Galan (Stockholm, SWE)																			
date	04-Jul-21	time	6.5	11.7	17.0	22.4	28.2	34.4	40.7	47.36	47.36	1 / 8							
reaction time	0.157	interval		5.20	5.30	5.40	5.80	6.20	6.30	6.66		# of strides	11.70	10.70	12.00	12.96	22.40	24.96	2.56
		velocity	7.69	9.62	9.43	9.26	8.62	8.06	7.94	7.51	8.45	8.55	9.35	8.33	7.72	8.93	8.01		
Pesela, Anthony (BOT) (2002)																			
Heat 3 - 2022 World Athletics Championships (Eugene, OR)																			
date	17-Jul-22	time	11.49		22.86		34.51		47.36	47.36	2 / 6								
reaction time	0.135	interval			11.37		11.65		12.85		# of strides	11.49	11.37	11.65	12.85	22.86	24.50	1.64	
		velocity	8.70		8.80		8.58		7.78	8.45	187.0	8.70	8.80	8.58	7.78	8.75	8.16		
Sasaki, Manato (JPN) (1998)																			
FINAL - 2014 Japanese National High School Championships (Kofu, JPN)																			
date	30-Jul-14	time	6.30	11.59	16.88	22.35	27.99	34.10	40.54	47.37	47.37	1 / 3							
reaction time		interval		5.29	5.29	5.47	5.64	6.11	6.44	6.83		# of strides	11.59	10.76	11.75	13.27	22.35	25.02	2.67
		velocity	7.94	9.45	9.45	9.14	8.87	8.18	7.76	7.32	8.44	8.63	9.29	8.51	7.54	8.95	7.99		
Sato, Fuga (JPN) (1996)																			
FINAL - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time	11.55		22.69		34.59		47.37	47.37	2 / 5								
reaction time	0.215	interval			11.14		11.90		12.78		# of strides	11.55	11.14	11.90	12.78	22.69	24.68	1.99	
		velocity	8.66		8.98		8.40		7.82	8.44	179.2	8.66	8.98	8.40	7.82	8.81	8.10		
Hazel, Sam (GBR) (1996)																			
National FINAL - 2018 Müller Anniversary Games (London, GBR)																			
date	21-Jul-18	time	11.8		22.6		34.4		47.37	47.37	9 / 8								
reaction time	0.170	interval			10.8		11.8		13.0		# of strides	11.80	10.80	11.80	12.97	22.60	24.77	2.17	
		velocity	8.47		9.26		8.47		7.71	8.44	8.47	9.26	8.47	7.71	8.85	8.07			
Conradie, Pieter (RSA) (1994)																			
FINAL - 2018 Weltklasse (Zürich, SUI)																			
date	30-Aug-18	time	11.3		21.9		33.6		47.37	47.37	1 / 7								
reaction time	0.137	interval			10.6		11.7		13.8		# of strides	11.30	10.60	11.70	13.77	21.90	25.47	3.57	
		velocity	8.85		9.43		8.55		7.26	8.44	8.85	9.43	8.55	7.26	9.13	7.85			
Wakabayashi, Kota (JPN) (1997)																			
FINAL - 2019 Seiko Golden Grand Prix (Osaka, JPN)																			
date	19-May-19	time	6.31	11.39	16.60	22.00	27.75	34.02	40.49	47.37	47.37	1 / 8							
reaction time	0.169	interval		5.08	5.21	5.40	5.75	6.27	6.47	6.88		# of strides	11.39	10.61	12.02	13.35	22.00	25.37	3.37
		velocity	7.92	9.84	9.60	9.26	8.70	7.97	7.73	7.27	8.44	173.5	8.78	9.43	8.32	7.49	9.09	7.88	
Wang Lei (CHN) (2001)																			
Heat 3 - 2023 Chinese National Grand Prix 5 (Huangshi, CHN)																			

date	09-Jun-23	time	11.63	22.69	34.40	40.64	47.37	47.37	6 / 2										
reaction time	0.232	interval		11.06	11.71	6.24	6.73		# of strides	11.63	11.06	11.71	12.97	22.69	24.68	1.99			
		velocity	8.60	9.04	8.54	8.01	7.43	8.44	187.0	8.60	9.04	8.54	7.71	8.81	8.10				
Gendre, Vincent (SUI) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
										<i>Omega Timing (2024) - diamond league race analysis</i>									
FINAL - 2024 Weltklasse (Zürich, SUI)																			
date	05-Sep-24	time	6.37	11.51	16.84	22.41	28.25	34.30	40.63	47.37	47.37	8 / 8							
reaction time	0.164	interval		5.14	5.33	5.57	5.84	6.05	6.33	6.74		# of strides	11.51	10.90	11.89	13.07	22.41	24.96	2.55
		velocity	7.85	9.73	9.38	8.98	8.56	8.26	7.90	7.42	8.44	8.69	9.17	8.41	7.65	8.92	8.01		
Kimura, Kazushi (JPN) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
										<i>Maho (2013) - race analysis of the men's 400m run in competition</i>									
FINAL - 2012 Kokutai National Sport Festival (Gifu, JPN)																			
date	08-Oct-12	time	6.57	11.89	17.38	22.93	28.62	34.50	40.72	47.38	47.38	1 / 8							
reaction time		interval		5.32	5.49	5.55	5.69	5.88	6.22	6.66		# of strides	11.89	11.04	11.57	12.88	22.93	24.45	1.52
		velocity	7.61	9.40	9.11	9.01	8.79	8.50	8.04	7.51	8.44	8.41	9.06	8.64	7.76	8.72	8.18		
Watanabe, Kazuya (JPN) (1988)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
										<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>									
Heat 2 - 2016 Japanese National Championships (Nagoya, JPN)																			
date	24-Jun-16	time	6.24	11.44	16.65	22.13	27.83	33.87	40.34	47.38	47.38	3 / 4							
reaction time	0.170	interval		5.20	5.21	5.48	5.70	6.04	6.47	7.04		# of strides	11.44	10.69	11.74	13.51	22.13	25.25	3.12
		velocity	8.01	9.62	9.60	9.12	8.77	8.28	7.73	7.10	8.44	8.74	9.35	8.52	7.40	9.04	7.92		
Horii, Kosuke (JPN) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
										<i>Yamanaka (2018) - Race analysis of men and women 400m at 2018 competition</i>									
A FINAL - 2018 Shizuoka International Meeting (Fukurui, JPN)																			
date	03-May-18	time	6.29	11.50	16.77	22.23	27.98	34.02	40.42	47.38	47.38	3 / 4							
reaction time	0.186	interval		5.21	5.27	5.46	5.75	6.04	6.40	6.96		# of strides	11.50	10.73	11.79	13.36	22.23	25.15	2.92
		velocity	7.95	9.60	9.49	9.16	8.70	8.28	7.81	7.18	8.44	189.7	8.70	9.32	8.48	7.49	9.00	7.95	
Omalla, Jaimie (NED) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
										<i>Omega Timing (2024) - continental tour gold race analysis</i>									
National FINAL - 2024 FBK Games (Hengelo, NED)																			
date	07-Jul-24	time	6.32	11.24	16.33	21.64	27.38	33.59	40.17	47.38	47.38	3 / 7							
reaction time	0.168	interval		4.92	5.09	5.31	5.74	6.21	6.58	7.21		# of strides	11.24	10.40	11.95	13.79	21.64	25.74	4.10
		velocity	7.91	10.16	9.82	9.42	8.71	8.05	7.60	6.93	8.44	8.90	9.62	8.37	7.25	9.24	7.77		
Iakovákis, Periklís (GRE) (1979)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
										<i>Jung (2003) - http://www.fgs.uni-halle.de</i>									
FINAL - 1997 European Cup (Munich, GER)																			
date	21-Jun-97	time	11.65		22.70		34.27		47.39	47.39	1 / 8								
reaction time		interval			11.05		11.57		13.12			# of strides	11.65	11.05	11.57	13.12	22.70	24.69	1.99
		velocity			8.58		8.64		7.62		8.44	8.58	9.05	8.64	7.62	8.81	8.10		
Caesar, Lester (USA)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
										<i>USATF Women's Sprint Development (2003)</i>									
FINAL - 2003 USATF National Junior Championships (Palo Alto, CA)																			
date	22-Jun-03	time			22.67		34.72		47.39	47.39	9 / 6								
reaction time		interval			12.05		12.67		12.67			# of strides		12.05	12.67	22.67	24.72	2.05	
		velocity			8.82		8.30		7.89		8.44		8.30	7.89	8.82	8.09			
Kimura, Kazushi (JPN) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
										<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>									
FINAL - 2016 Seiko Golden Grand Prix (Kawasaki, JPN)																			
date	08-May-16	time	6.32	11.50	16.83	22.47	28.28	34.21	40.52	47.39	47.39	8 / 8							
reaction time	0.185	interval		5.18	5.33	5.64	5.81	5.93	6.31	6.87		# of strides	11.50	10.97	11.74	13.18	22.47	24.92	2.45
		velocity	7.91	9.65	9.38	8.87	8.61	8.43	7.92	7.28	8.44	187.5	8.70	9.12	8.52	7.59	8.90	8.03	
Tomoda, Masataka (JPN) (2003)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
										<i>Kobayashi (2020) - national high school and U20 national championships</i>									
Heat 3 - 2020 Japanese High School National Championships (Hiroshima, JPN)																			
date	23-Oct-20	time	6.24	11.29	16.58	22.20	28.05	34.11	40.59	47.39	47.39	6 / 1							
reaction time	0.155	interval		5.05	5.29	5.62	5.85	6.06	6.48	6.80		# of strides	11.29	10.91	11.91	13.28	22.20	25.19	2.99
		velocity	8.01	9.90	9.45	8.90	8.55	8.25	7.72	7.35	8.44	173.5	8.86	9.17	8.40	7.53	9.01	7.94	
Fujiyoshi, Shunta (JPN) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
										<i>Kobayashi (2020) - national high school and U20 national championships</i>									
FINAL - 2020 Japanese U20 National Championships (Hiroshima, JPN)																			
date	23-Oct-20	time	6.69	12.00	17.42	23.06	28.94	34.98	41.10	47.39	47.39	2 / 1							
reaction time	0.224	interval		5.31	5.42	5.64	5.88	6.04	6.12	6.29		# of strides	12.00	11.06	11.92	12.41	23.06	24.33	1.27
		velocity	7.47	9.42	9.23	8.87	8.50	8.28	8.17	7.95	8.44	180.6	8.33	9.04	8.39	8.06	8.67	8.22	
Xie Yuqiang (CHN) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
										<i>Shandong Athletics Sport Science (2023)</i>									
Heat 4 - 2023 Chinese National Grand Prix 1 (Rizhao, CHN)																			
date	26-Apr-23	time	11.13		22.51		34.55		40.76	47.39	47.39	6 / 1							
reaction time	0.216	interval			11.38		12.04		6.21	6.63		# of strides	11.13	11.38	12.04	12.84	22.51	24.88	2.37
		velocity			8.98		8.79		8.31	8.05	7.54	8.44	176.0	8.98	8.79	8.31	7.79	8.88	8.04
Osakada, Jun (JPN) (1974)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
										<i>Masaaki (2006) - time analysis in the 400m at the Seiko Super Grand Prix</i>									
FINAL - 2005 Seiko Super Grand Prix (Yokohama, JPN)																			
date	19-Sep-05	time		11.26		22.17		33.92	40.28	47.40	47.40	1 / 8							
reaction time		interval		10.91		11.75		6.36	7.12			# of strides	11.26	10.91	11.75	13.48	22.17	25.23	3.06
		velocity		8.88		9.17		8.51	7.86	7.02	8.44	8.88	9.17	8.51	7.42	9.02	7.93		
Yukihiko, Koki (JPN)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
										<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>									
FINAL - 2016 Japanese National Youth Championships (Mizuho, JPN)																			
date	21-Oct-16	time	6.46	11.84	17.35	22.90	28.62	34.50	40.73	47.40	47.40	5 / 2							
reaction time		interval		5.38	5.51	5.55	5.72	5.88	6.23	6.67		# of strides	11.84	11.06	11.60	12.90	22.90	24.50	1.60
		velocity	7.74	9.29	9.07	9.01	8.74	8.50	8.03	7.50	8.44	8.45	9.04	8.62	7.75	8.73	8.16		
Obuchi, Mizuki (JPN) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
										<i>(2017) - tdata-store.com/2017/10/12/post-1100/</i>									
Heat 1 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time		11.49		22.64		34.47		47.40	47.40	6 / 2							
reaction time	0.176	interval		11.15		11.83		12.93				# of strides	11.49	11.15	11.83	12.93	22.64	24.76	2.12
		velocity		8.70		8.97		8.45	7.73		8.44	192.0	8.70	8.97	8.45	7.73	8.83	8.08	

Wakabayashi, Kota (JPN) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2020 World Athletics Trials (Fuji, JPN)																			
date	06-Sep-20	time	6.30	11.47	16.73	22.29	28.14	34.17	40.47	47.40	47.40	5 / 3							
reaction time		interval		5.17	5.26	5.56	5.85	6.03	6.30	6.93		# of strides	11.47	10.82	11.88	13.23	22.29	25.11	2.82
		velocity	7.94	9.67	9.51	8.99	8.55	8.29	7.94	7.22	8.44	172.7	8.72	9.24	8.42	7.56	8.97	7.96	
Adeyemi, Sikiru (NGR) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 2 - 2022 Commonwealth Games (Birmingham, GBR)																			
date	05-Aug-22	time	6.2	11.2	16.4	22.0	27.7	33.8	40.2	47.40	47.40	2 / 6							
reaction time	0.217	interval		5.00	5.20	5.60	5.70	6.10	6.40	7.20		# of strides	11.20	10.80	11.80	13.60	22.00	25.40	3.40
		velocity	8.06	10.00	9.62	8.93	8.77	8.20	7.81	6.94	8.44	177.0	8.93	9.26	8.47	7.35	9.09	7.87	
Kitakani, Naoki (JPN) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2016 Japanese National High School Championships (Okayama, JPN)																			
date	29-Jul-16	time	6.45	11.64	17.00	22.62	28.50	34.63	40.86	47.41	47.41	3 / 4							
reaction time	0.166	interval		5.19	5.36	5.62	5.88	6.13	6.23	6.55		# of strides	11.64	10.98	12.01	12.78	22.62	24.79	2.17
		velocity	7.75	9.63	9.33	8.90	8.50	8.16	8.03	7.63	8.44	177.0	8.59	9.11	8.33	7.82	8.84	8.07	
Matsubara, Shuichiro (JPN) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2016 Japanese National Junior Championships (Mizuho, JPN)																			
date	21-Oct-16	time	6.62	12.12	17.58	23.14	28.84	34.77	40.90	47.41	47.41	2 / 2							
reaction time		interval		5.50	5.46	5.56	5.70	5.93	6.13	6.51		# of strides	12.12	11.02	11.63	12.64	23.14	24.27	1.13
		velocity	7.55	9.09	9.16	8.99	8.77	8.43	8.16	7.68	8.44	177.0	8.25	9.07	8.60	7.91	8.64	8.24	
Abbas, Abdulrahman Khamis (BRN)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 5 - 2018 Asian Games (Jakarta, INA)																			
date	25-Aug-18	time	6.15	11.26	16.55	22.20	28.19	34.30	40.56	47.41	47.41	6 / 2							
reaction time	0.169	interval		5.11	5.29	5.65	5.99	6.11	6.26	6.85		# of strides	11.26	10.94	12.10	13.11	22.20	25.21	3.01
		velocity	8.13	9.78	9.45	8.85	8.35	8.18	7.99	7.30	8.44	177.0	8.88	9.14	8.26	7.63	9.01	7.93	
Mukushita, Genya (JPN)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2017 Kansai Regional University Championships (Osaka, JPN)																			
date	11-May-17	time		11.81		22.64		34.12		47.42	47.42	2 / 5							
reaction time		interval				10.83		11.48		13.30	PB	# of strides	11.81	10.83	11.48	13.30	22.64	24.78	2.14
		velocity		8.47		9.23		8.71		7.52	8.44	177.0	8.47	9.23	8.71	7.52	8.83	8.07	
Ekelund-Arenander, Nick (SWE) (1988)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2020 Bauhaus Galan (Stockholm, SWE)																			
date	23-Aug-20	time	6.4	11.6	17.1	22.6	28.4	34.4	40.7	47.42	47.42	3 / 7							
reaction time	0.159	interval		5.20	5.50	5.50	5.80	6.00	6.30	6.72		# of strides	11.60	11.00	11.80	13.02	22.60	24.82	2.22
		velocity	7.81	9.62	9.09	9.09	8.62	8.33	7.94	7.44	8.44	177.0	8.62	9.09	8.47	7.68	8.85	8.06	
Yang Wang (CHN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 5 - 2023 Chinese National Grand Prix 4 (Chongqing, CHN)																			
date	02-Jun-23	time		11.40		22.17		34.07	40.44	47.42	47.42	4 / 1							
reaction time		interval				10.77		11.90	6.37	6.98		# of strides	11.40	10.77	11.90	13.35	22.17	25.25	3.08
		velocity		8.77		9.29		8.40	7.85	7.16	8.44	177.0	8.77	9.29	8.40	7.49	9.02	7.92	
Ruch, Tilo (GER) (1983)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
B FINAL - 2009 ISTAF (Berlin, GER)																			
date	14-Jun-09	time		11.40		22.43		34.21		47.43	47.43	1 / 5							
reaction time	0.297	interval				11.03		11.78		13.22		# of strides	11.40	11.03	11.78	13.22	22.43	25.00	2.57
		velocity		8.77		9.07		8.49		7.56	8.43	177.0	8.77	9.07	8.49	7.56	8.92	8.00	
Hirose, Hideyuki (JPN) (1989)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2016 Shizuoka International Meeting (Fukuroi, JPN)																			
date	03-May-16	time	6.31	11.55	16.87	22.44	28.25	34.29	40.62	47.43	47.43	1 / 8							
reaction time		interval		5.24	5.32	5.57	5.81	6.04	6.33	6.81		# of strides	11.55	10.89	11.85	13.14	22.44	24.99	2.55
		velocity	7.92	9.54	9.40	8.98	8.61	8.28	7.90	7.34	8.43	177.0	8.66	9.18	8.44	7.61	8.91	8.00	
Noguchi, Kohei (JPN) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2018 Japanese National High School Championships (Nagoya, JPN)																			
date	02-Aug-18	time	6.41	11.64	16.98	22.57	28.39	34.44	40.75	47.43	47.43	4 / 3							
reaction time		interval		5.23	5.34	5.59	5.82	6.05	6.31	6.68	PB	# of strides	11.64	10.93	11.87	12.99	22.57	24.86	2.29
		velocity	7.80	9.56	9.36	8.94	8.59	8.26	7.92	7.49	8.43	177.0	8.59	9.15	8.42	7.70	8.86	8.05	
Ryota, Seto (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2017 Osaka University Athletics Championships (Osaka, JPN)																			
date	06-Apr-17	time		11.75		22.79		34.60		47.44	47.44	4 / 1							
reaction time		interval				11.04		11.81		12.84	PB	# of strides	11.75	11.04	11.81	12.84	22.79	24.65	1.86
		velocity		8.51		9.06		8.47		7.79	8.43	177.0	8.51	9.06	8.47	7.79	8.78	8.11	
Kawakami, Sota (JPN) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m </				

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Fujiyoshi, Shunta (JPN) (2001)																			
U20 FINAL - 2018 National Sports Festival (Fukui, JPN)																			
date	08-Oct-18	time	6.47	11.57	16.93	22.73	28.77	34.92	41.10	47.48	3 / 1								
reaction time	0.178	interval		5.10	5.36	5.80	6.04	6.15	6.18	6.38	# of strides	11.57	11.16	12.19	12.56	22.73	24.75	2.02	
		velocity	7.73	9.80	9.33	8.62	8.28	8.13	8.09	7.84	8.42	8.64	8.96	8.20	7.96	8.80	8.08		
Deng Hantao (CHN) (2000)																			
FINAL - 2023 Chinese National Grand Prix 3 (Taizhou, CHN)																			
date	26-May-23	time			11.44	22.26		34.26	40.58	47.48	1 / 5								
reaction time	0.222	interval				10.82		12.00	6.32	6.90	# of strides	11.44	10.82	12.00	13.22	22.26	25.22	2.96	
		velocity			8.74	9.24		8.33	7.91	7.25	8.42	8.74	9.24	8.33	7.56	8.98	7.93		
Mouttakil, Kamal (MAR) (2000)																			
National FINAL - 2023 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR)																			
date	28-May-23	time	6.53	11.91	17.52	23.44	29.27	35.19	41.10	47.48	5 / 2								
reaction time	0.281	interval		5.38	5.61	5.92	5.83	5.92	5.91	6.38	# of strides	11.91	11.53	11.75	12.29	23.44	24.04	0.60	
		velocity	7.66	9.29	8.91	8.45	8.58	8.45	8.46	7.84	8.42	8.40	8.67	8.51	8.14	8.53	8.32		
Rogers, Denim (USA) (1998)																			
Decathlon - Heat 3 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time		11.52	22.90		34.95		47.48	47.48	6 / 5								
reaction time		interval			11.38		12.05		12.53	PB	# of strides	11.52	11.38	12.05	12.53	22.90	24.58	1.68	
		velocity		8.68	8.79		8.30		7.98	8.42	8.42	8.68	8.79	8.30	7.98	8.73	8.14		
Gletty, Makenson (FRA) (1999)																			
Decathlon - Heat 2 - 2024 Olympic Games (Paris, FRA)																			
date	02-Aug-24	time	6.45	11.69	17.20	22.89	28.68	34.70	40.86	47.78	7 / 2								
reaction time	0.191	interval		5.24	5.51	5.69	5.79	6.02	6.16	6.92	PB	# of strides	11.69	11.20	11.81	13.08	22.89	24.89	2.00
		velocity	7.75	9.54	9.07	8.79	8.64	8.31	8.12	7.23	8.42	167.5	8.55	8.93	8.47	7.65	8.74	8.04	
Hirose, Hideyuki (JPN) (1989)																			
FINAL - 2015 Japanese National Championships (Niigata, JPN)																			
date	28-Jun-15	time	6.24	11.28	16.43	21.93	27.62	33.66	40.16	47.49	4 / 8								
reaction time	0.174	interval		5.04	5.15	5.50	5.69	6.04	6.50	7.33	# of strides	11.28	10.65	11.73	13.83	21.93	25.56	3.63	
		velocity	8.01	9.92	9.71	9.09	8.79	8.28	7.69	6.82	8.42	184.5	8.87	9.39	8.53	7.23	9.12	7.82	
Kinoshita, Yuichi (JPN) (2002)																			
Heat 1 - 2020 Japanese High School National Championships (Hiroshima, JPN)																			
date	23-Oct-20	time	6.31	11.52	16.82	22.35	28.03	34.05	40.62	47.49	3 / 1								
reaction time	0.192	interval		5.21	5.30	5.53	5.68	6.02	6.57	6.87	# of strides	11.52	10.83	11.70	13.44	22.35	25.14	2.79	
		velocity	7.92	9.60	9.43	9.04	8.80	8.31	7.61	7.28	8.42	189.1	8.68	9.23	8.55	7.44	8.95	7.96	
Itahana, Kohei (JPN) (1994)																			
FINAL - 2021 Ready Steady Tokyo (Tokyo, JPN)																			
date	09-May-21	time	6.17	11.23	16.42	21.98	27.75	33.82	40.37	47.49	8 / 9								
reaction time	0.160	interval		5.06	5.19	5.56	5.77	6.07	6.55	7.12	# of strides	11.23	10.75	11.84	13.67	21.98	25.51	3.53	
		velocity	8.10	9.88	9.63	8.99	8.67	8.24	7.63	7.02	8.42	8.90	9.30	8.45	7.32	9.10	7.84		
Volmar, Maurice (FRA) (1951)																			
Semi-Final 1 - 1978 European Championships (Prague, TCH)																			
date	31-Aug-78	time			23.10		34.74		47.50	47.50	1 / 8								
reaction time		interval					11.64		12.76		# of strides			11.64	12.76	23.10	24.40	1.30	
		velocity			8.66		8.59		7.84	8.42	8.42			8.59	7.84	8.66	8.20		
Nakagawa, Shigeki (JPN) (1995)																			
Division 2 FINAL - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time		11.48	22.10		33.99		47.50	47.50	6 / 3								
reaction time		interval			10.62		11.89		13.51		# of strides	11.48	10.62	11.89	13.51	22.10	25.40	3.30	
		velocity		8.71	9.42		8.41		7.40	8.42	186.5	8.71	9.42	8.41	7.40	9.05	7.87		
Mori, Zhou (JPN) (2000)																			
FINAL - 2017 Japanese National High School Championships (Yamagata, JPN)																			
date	29-Jul-17	time	6.54	11.79	17.15	22.79	28.61	34.71	41.06	47.50	5 / 1								
reaction time	0.174	interval		5.25	5.36	5.64	5.82	6.10	6.35	6.44	# of strides	11.79	11.00	11.92	12.79	22.79	24.71	1.92	
		velocity	7.65	9.52	9.33	8.87	8.59	8.20	7.87	7.76	8.42	8.48	9.09	8.39	7.82	8.78	8.09		
Umetani, Hoshia (JPN) (1999)																			
FINAL - 2018 Japanese National Junior (U20) Championships (Nagano, JPN)																			
date	19-Oct-18	time	6.61	11.70	16.97	22.52	28.38	34.51	40.85	47.50	3 / 2								
reaction time	0.185	interval		5.09	5.27	5.55	5.86	6.13	6.34	6.65	# of strides	11.70	10.82	11.99	12.99	22.52	24.98	2.46	
		velocity	7.56	9.82	9.49	9.01	8.53	8.16	7.89	7.52	8.42	184.7	8.55	9.24	8.34	7.70	8.88	8.01	
Nose, Hiroki (JPN) (2001)																			
FINAL - 2020 Japanese U20 National Championships (Hiroshima, JPN)																			
date	23-Oct-20	time	6.42	11.80	17.28	22.92	28.79	34.78	40.94	47.50	8 / 3								
reaction time	0.176	interval		5.38	5.48	5.64	5.87	5.99	6.16	6.56	# of strides	11.80	11.12	11.86	12.72	22.92	24.58	1.66	
		velocity	7.79	9.29	9.12	8.87	8.52	8.35	8.12	7.62	8.42	184.8	8.47	8.99	8.43	7.86	8.73	8.14	
Brier, Joseph (GBR) (1999)																			
Semi-Final 2 - 2022 Commonwealth Games (Birmingham, GBR)																			
date	05-Aug-22	time	6.1	11.1	16.4	22.0	27.7	33.9	40.2	47.50	3 / 8								
reaction time	0.180	interval		5.00	5.30	5.60	5.70	6.20	6.30	7.30	# of strides	11.10	10.90	11.90	13.60	22.00	25.50	3.50	
		velocity	8.20	10.00	9.43	8.93	8.77	8.06	7.94	6.85	8.42	185.0	9.01	9.17	8.40	7.35	9.09	7.84	
Kobayashi, Hidekazu (JPN) (1995)																			
FINAL - 2013 Japanese National High School Championships (Oita, JPN)																			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Jordier, Thomas (FRA) (1994)																			
FINAL - 2022 Memorial van Damme (Brussels, BEL)																			
date	02-Sep-22	time	6.49	11.83	17.15	22.65	28.41	34.44	40.71	47.55	47.55								
reaction time	0.163	interval		5.34	5.32	5.50	5.76	6.03	6.27	6.84		# of strides	11.83	10.82	11.79	13.11	22.65	24.90	2.25
		velocity	7.70	9.36	9.40	9.09	8.68	8.29	7.97	7.31	8.41			8.45	9.24	8.48	7.63	8.83	8.03
Kawauchi, Mitsuki (JPN) (1997)																			
FINAL - 2017 Osaka University Athletics Championships (Osaka, JPN)																			
date	06-Apr-17	time		11.68		22.36		34.35		47.56	47.56								
reaction time		interval				10.68		11.99		13.21		# of strides	11.68	10.68	11.99	13.21	22.36	25.20	2.84
		velocity		8.56		9.36		8.34		7.57	8.41		188.0	8.56	9.36	8.34	7.57	8.94	7.94
Shoji, Kosuke (JPN) (2001)																			
U20 FINAL - 2018 National Sports Festival (Fukui, JPN)																			
date	08-Oct-18	time	6.38	11.47	16.83	22.47	28.46	34.57	40.83	47.56	47.56								
reaction time	0.187	interval		5.09	5.36	5.64	5.99	6.11	6.26	6.73	PB	# of strides	11.47	11.00	12.10	12.99	22.47	25.09	2.62
		velocity	7.84	9.82	9.33	8.87	8.35	8.18	7.99	7.43	8.41		8.72	9.09	8.26	7.70	8.90	7.97	
Kishimoto, Kodai (JPN) (1995)																			
Division 1 Semi-Final 1 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time		11.57		22.54		34.91		47.57	47.57								
reaction time		interval				10.97		12.37		12.66	DQ	# of strides	11.57	10.97	12.37	12.66	22.54	25.03	2.49
		velocity		8.64		9.12		8.08		7.90	8.41		189.7	8.64	9.12	8.08	7.90	8.87	7.99
Yoshikawa, Ryo (JPN) (2001)																			
FINAL - 2018 Japanese National Youth (U18) Championships (Nagano, JPN)																			
date	19-Oct-18	time	6.66	12.01	17.48	23.19	29.08	35.06	41.16	47.59	47.59								
reaction time	0.187	interval		5.35	5.47	5.71	5.89	5.98	6.10	6.43		# of strides	12.01	11.18	11.87	12.53	23.19	24.40	1.21
		velocity	7.51	9.35	9.14	8.76	8.49	8.36	8.20	7.78	8.41		8.33	8.94	8.42	7.98	8.62	8.20	
El Guebbaz, Said (MAR) (1998)																			
National FINAL - 2023 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR)																			
date	28-May-23	time	6.38	11.88	17.49	23.29	28.99	34.86	40.90	47.59	47.59								
reaction time	0.188	interval		5.50	5.61	5.80	5.70	5.87	6.04	6.69		# of strides	11.88	11.41	11.57	12.73	23.29	24.30	1.01
		velocity	7.84	9.09	8.91	8.62	8.77	8.52	8.28	7.47	8.41		8.42	8.76	8.64	7.86	8.59	8.23	
Kubo, Takumi (JPN) (2007)																			
FINAL - 2024 Japanese National High School Championships (Fukuoka, JPN)																			
date	28-Jul-24	time		11.63		22.74		34.38		47.59	47.59								
reaction time	0.179	interval				11.11		11.64		13.21		# of strides	11.63	11.11	11.64	13.21	22.74	24.85	2.11
		velocity		8.60		9.00		8.59		7.57	8.41		8.60	9.00	8.59	7.57	8.80	8.05	
Meisolle, Alexander (GER) (1988)																			
B FINAL - 2009 ISTAF (Berlin, GER)																			
date	14-Jun-09	time		11.48		22.75		34.83		47.60	47.60								
reaction time	0.227	interval				11.27		12.08		12.77		# of strides	11.48	11.27	12.08	12.77	22.75	24.85	2.10
		velocity		8.71		8.87		8.28		7.83	8.40		8.71	8.87	8.28	7.83	8.79	8.05	
Yamazaki, Kengo (JPN) (1992)																			
FINAL - 2017 All Japan Corporate Championships (Osaka, JPN)																			
date	24-Sep-17	time		11.78		22.71		34.60		47.60	47.60								
reaction time	0.153	interval				10.93		11.89		13.00		# of strides	11.78	10.93	11.89	13.00	22.71	24.89	2.18
		velocity		8.49		9.15		8.41		7.69	8.40		189.0	8.49	9.15	8.41	7.69	8.81	8.04
Shibasaki, Yuto (JPN) (1999)																			
FINAL - 2018 Japanese National Junior (U20) Championships (Nagano, JPN)																			
date	19-Oct-18	time	6.52	12.00	17.55	23.19	28.91	34.78	40.98	47.60	47.60								
reaction time	0.147	interval		5.48	5.55	5.64	5.72	5.87	6.20	6.62		# of strides	12.00	11.19	11.59	12.82	23.19	24.41	1.22
		velocity	7.67	9.12	9.01	8.87	8.74	8.52	8.06	7.55	8.40		181.0	8.33	8.94	8.63	7.80	8.62	8.19
Imazumi, Kenki (JPN) (2001)																			
FINAL - 2018 Japanese National Youth (U18) Championships (Nagano, JPN)																			
date	19-Oct-18	time	6.51	11.88	17.32	22.95	28.66	34.58	40.85	47.60	47.60								
reaction time	0.176	interval		5.37	5.44	5.63	5.71	5.92	6.27	6.75		# of strides	11.88	11.07	11.63	13.02	22.95	24.65	1.70
		velocity	7.68	9.31	9.19	8.88	8.76	8.45	7.97	7.41	8.40		8.42	9.03	8.60	7.68	8.71	8.11	
Deng Hantao (CHN) (2000)																			
FINAL - 2023 Chinese National Grand Prix 1 (Rizhao, CHN)																			
date	26-Apr-23	time		11.48		22.34		34.52		40.88	47.60								
reaction time	0.172	interval				10.86		12.18		6.36	6.72	# of strides	11.48	10.86	12.18	13.08	22.34	25.26	2.92
		velocity		8.71		9.21		8.21		7.86	7.44		172.0	8.71	9.21	8.21	7.65	8.95	7.92
McDonald, Rusheen (JAM) (1992)																			
FINAL - 2024 Bislett Games (Oslo, NOR)																			
date	30-May-24	time	6.33	11.35	16.56	22.09	27.93	34.03	40.39	47.60	47.60								
reaction time	0.178	interval		5.02	5.21	5.53	5.84	6.10	6.36	7.21		# of strides	11.35	10.74	11.94	13.57	22.09	25.51	3.42
		velocity	7.90	9.96	9.60	9.04	8.56	8.20	7.86	6.93	8.40		8.81	9.31	8.38	7.37	9.05	7.84	
Omolo, Amos (UGA) (1937)																			
FINAL - 1968 Olympic Games (Mexico City, MEX) (Altitude)																			
date	18-Oct-68	time				21.5		33.3		47.6	47.61								
reaction time		interval						11.80		14.30		# of strides		21.50	11.80	14.30	21.50	26.10	4.60
		velocity				9.30		8.47		6.99	8.40			9.30	8.47	6.99	9.30	7.66	
Kitakani, Naoki (JPN) (1998)																			
U19 FINAL - 2016 National Sports Festival (Kitakani, JPN)																			

Someya, Sho (JPN) (1997)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Division 1 Semi-Final 1 - 2017 Kanto Collegiate Championships (Yokohama, JPN)		<i>(2017) - tfdata-store.com/2017/06/02/post-835/</i>																	
date	26-May-17	time	11.98		23.07		34.79		47.65	47.65	5 / 4-3								
reaction time		interval			11.09		11.72		12.86		# of strides	11.98	11.09	11.72	12.86	23.07	24.58	1.51	
		velocity	8.35		9.02		8.53		7.78	8.39	193.0	8.35	9.02	8.53	7.78	8.67	8.14		
Kidachi, Muto (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
U20 FINAL - 2018 National Sports Festival (Fukui, JPN)		<i>Joshi (2018) - research on athlete performance and technique- 2018 data book</i>																	
date	08-Oct-18	time	6.34	11.90	17.52	23.42	29.41	35.42	41.47	47.65	47.65	6 / 3							
reaction time	0.153	interval		5.56	5.62	5.90	5.99	6.01	6.05	6.18		# of strides	11.90	11.52	12.00	12.23	23.42	24.23	0.81
		velocity	7.89	8.99	8.90	8.47	8.35	8.32	8.26	8.09	8.39	8.40	8.68	8.33	8.18	8.54	8.25		
Thompson, Lee (GBR) (1997)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
B FINAL - 2022 Müller Birmingham Diamond League (Birmingham, GBR)		<i>Omega Timing (2022) - diamond league race analysis</i>																	
date	21-May-22	time	6.3	11.3	16.5	22.0	27.8	34.0	40.5	47.65	47.65	8 / 8							
reaction time	0.207	interval		5.00	5.20	5.50	5.80	6.20	6.50	7.15		# of strides	11.30	10.70	12.00	13.65	22.00	25.65	3.65
		velocity	7.94	10.00	9.62	9.09	8.62	8.06	7.69	6.99	8.39	175.0	8.85	9.35	8.33	7.33	9.09	7.80	
Hirose, Hideyuki (JPN) (1989)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2012 Japanese National Championships (Osaka, JPN)		<i>Maho (2013) - race analysis of the men's 400m run in competition</i>																	
date	09-Jun-12	time	6.22	11.39	16.68	22.25	27.98	34.04	40.49	47.66	47.66	8 / 8							
reaction time		interval		5.17	5.29	5.57	5.73	6.06	6.45	7.17		# of strides	11.39	10.86	11.79	13.62	22.25	25.41	3.16
		velocity	8.04	9.67	9.45	8.98	8.73	8.25	7.75	6.97	8.39	186.0	8.78	9.21	8.48	7.34	8.99	7.87	
Someya, Sho (JPN) (1997)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Division 1 FINAL - 2017 Kanto Collegiate Championships (Yokohama, JPN)		<i>(2017) - tfdata-store.com/2017/06/01/post-786/</i>																	
date	26-May-17	time	11.95		23.18		34.76		47.66	47.66	8 / 6								
reaction time		interval			11.23		11.58		12.90		# of strides	11.95	11.23	11.58	12.90	23.18	24.48	1.30	
		velocity			8.90		8.64		7.75	8.39	187.2	8.37	8.90	8.64	7.75	8.63	8.17		
Nakamura, Akihiko (JPN) (1990)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Decathlon - Heat ?? - 2012 Tokyo Athletics Championships (Chofu, JPN)		<i>Takeo (2014) - decathletes sprint ability & relationship of individual event performance</i>																	
date	21-Apr-12	time	6.26	11.53	16.88	22.48	28.34	34.48	40.84	47.67	47.67	???							
reaction time		interval		5.27	5.35	5.60	5.86	6.14	6.36	6.83	PB	# of strides	11.53	10.95	12.00	13.19	22.48	25.19	2.71
		velocity	7.99	9.49	9.35	8.93	8.53	8.14	7.86	7.32	8.39	8.67	9.13	8.33	7.58	8.90	7.94		
Scheurman, Jacob (USA) (1988)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2005 USATF National Junior Championships (Carson, CA)		<i>USATF Women's Sprint Development (2005)</i>																	
date	25-Jun-05	time	16.95	22.51	28.32	34.22	40.68	47.68	47.68	47.68	8 / 7								
reaction time		interval		5.56	5.81	5.90	6.46	7.00			# of strides			11.71	13.46	22.51	25.17	2.66	
		velocity		8.85	8.99	8.61	8.47	7.74	7.14	8.39				8.54	7.43	8.88	7.95		
Almgren, Daniel (SWE) (1979)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Decathlon - Heat 2 - 2009 IAAF World Championships (Berlin, GER)		<i>Graubner (2009) - biomechanical analyses at the 12th IAAF world championships</i>																	
date	19-Aug-09	time	11.80		22.80		34.78		47.68	47.68	3 / 2								
reaction time	0.167	interval			11.00		11.98		12.90	PB	# of strides	11.80	11.00	11.98	12.90	22.80	24.88	2.08	
		velocity			9.09		8.35		7.75	8.39	8.47	9.09	8.35	7.75	8.77	8.04			
Yano, Takuto (JPN) (1994)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2015 National Sports Festival (Wakayama, JPN)		<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>																	
date	04-Oct-15	time	6.44	11.65	17.15	22.95	28.87	34.92	41.14	47.68	47.68	/ 6							
reaction time		interval		5.21	5.50	5.80	5.92	6.05	6.22	6.54		# of strides	11.65	11.30	11.97	12.76	22.95	24.73	1.78
		velocity	7.76	9.60	9.09	8.62	8.45	8.26	8.04	7.65	8.39	8.58	8.85	8.35	7.84	8.71	8.09		
Ibuka, Aisei (JPN) (1998)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
U19 FINAL - 2015 National Sports Festival (Wakayama, JPN)		<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>																	
date	05-Oct-15	time	6.53	12.01	17.63	23.51	29.52	35.55	41.53	47.68	47.68	/ 2							
reaction time		interval		5.48	5.62	5.88	6.01	6.03	5.98	6.15		# of strides	12.01	11.50	12.04	12.13	23.51	24.17	0.66
		velocity	7.66	9.12	8.90	8.50	8.32	8.29	8.36	8.13	8.39	8.33	8.70	8.31	8.24	8.51	8.27		
Yamazaki, Norihiro (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2018 Japanese National High School Championships (Nagoya, JPN)		<i>Kota (2018) - 71st high school championships: JAF scientific committee - biomechanics data collection</i>																	
date	02-Aug-18	time	6.36	11.57	16.98	22.57	28.43	34.75	41.17	47.68	47.68	5 / 4							
reaction time		interval		5.21	5.41	5.59	5.86	6.32	6.42	6.51	PB	# of strides	11.57	11.00	12.18	12.93	22.57	25.11	2.54
		velocity	7.86	9.60	9.24	8.94	8.53	7.91	7.79	7.68	8.39	8.64	9.09	8.21	7.73	8.86	7.96		
Suzuki, Aoto (JPN) (2001)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
U20 FINAL - 2019 Japanese National U18/U20 Championships (Hiroshima, JPN)		<i>Kijima (2019) - research on athlete performance and technique- 2019 data book</i>																	
date	18-Oct-19	time	6.43	11.80	17.28	23.06	29.06	35.13	41.27	47.69	47.69	3 / 3							
reaction time	0.211	interval		5.37	5.48	5.78	6.00	6.07	6.14	6.42		# of strides	11.80	11.26	12.07	12.56	23.06	24.63	1.57
		velocity	7.78	9.31	9.12	8.65	8.33	8.24	8.14	7.79	8.39	178.0	8.47	8.88	8.29	7.96	8.67	8.12	
Mamada, Kodai (JPN) (2002)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Heat 2 - 2020 Japanese High School National Championships (Hiroshima, JPN)		<i>Kobayashi (2020) - national high school and U20 national championships</i>																	
date	23-Oct-20	time	6.47	11.71	16.98	22.56	28.47	34.59	40.92	47.69	47.69	4 / 1							
reaction time	0.157	interval		5.24	5.27	5.58	5.91	6.12	6.33	6.77		# of strides	11.71	10.85	12.03	13.10	22.56	25.13	2.57
		velocity	7.73	9.54	9.49	8.96	8.46	8.17	7.90	7.39	8.39	198.9	8.54	9.22	8.31	7.63	8.87	7.96	
Rooth, Markus (NOR) (2001)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Decathlon - Heat 2 - 2024 Olympic Games (Paris, FRA)		<i>Paris 2024 Olympic Games - Results Book (2024)</i>																	
date	02-Aug-24	time	6.52	11.95	17.47	23.16	28.94	34.93	41.11	47.69	47.69	8 / 3							
reaction time	0.163	interval		5.43	5.52	5.69	5.78	5.99	6.18	6.58	PB	# of strides	11.95	11.21	11.77	12.76	23.16	24.53	1.37
		velocity	7.67	9.21	9.06	8.79	8.65	8.35	8.09	7.60	8.39	178.0	8.37	8.92	8.50	7.84	8.64	8.15	
Otsuki, Ohori (JPN) (2002)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2019 Japanese National High School Championships (Okinawa, JPN)		<i>Kota (2019) - 72nd high school championships: JAF scientific committee - biomechanics data collection</i>																	

Athlete		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Taam, Rik (NED) (1997)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Decathlon - Heat 3 - 2024 Olympic Games (Paris, FRA)		<i>Paris 2024 Olympic Games - Results Book (2024)</i>																	
date	02-Aug-24	time	6.46	11.60	16.87	22.38	28.16	34.31	40.78	47.73	47.73	5 / 6							
reaction time	0.196	interval		5.14	5.27	5.51	5.78	6.15	6.47	6.95		# of strides	11.60	10.78	11.93	13.42	22.38	25.35	2.97
		velocity	7.74	9.73	9.49	9.07	8.65	8.13	7.73	7.19	8.38	182.0	8.62	9.28	8.38	7.45	8.94	7.89	
Liddell, Eric (GBR) (1902)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 1924 Olympic Games (Paris, FRA) (500m Track)		<i>Parienté (1978) - la fabuleuse histoire de l'athlétisme</i>																	
date	11-Jul-24	time				22.2				47.6	47.6	6 / 1							
reaction time		interval								25.4	WR	# of strides				22.20	25.40	3.20	
		velocity				9.01				7.87	8.40				9.01	7.87			
Matsukiyo, Kazuki (JPN) (1997)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
U19 FINAL - 2015 National Sports Festival (Wakayama, JPN)		<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>																	
date	05-Oct-15	time	6.57	11.99	17.63	23.48	29.42	35.31	41.32	47.74	47.74	/ 3							
reaction time		interval		5.42	5.64	5.85	5.94	5.89	6.01	6.42		# of strides	11.99	11.49	11.83	12.43	23.48	24.26	0.78
		velocity	7.61	9.23	8.87	8.55	8.42	8.49	8.32	7.79	8.38	8.34	8.70	8.45	8.05	8.52	8.24		
Natkatsukue, Haruhiko (JPN)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2015 Japanese National Youth Championships (Nagoya, JPN)		<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>																	
date	16-Oct-15	time	6.63	11.90	17.27	22.96	28.91	34.98	41.15	47.74	47.74	4 / 2							
reaction time		interval		5.27	5.37	5.69	5.95	6.07	6.17	6.59		# of strides	11.90	11.06	12.02	12.76	22.96	24.78	1.82
		velocity	7.54	9.49	9.31	8.79	8.40	8.24	8.10	7.59	8.38	8.40	9.04	8.32	7.84	8.71	8.07		
Mashiko, Yuta (JPN) (1998)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Division 1 FINAL - 2017 Kanto Collegiate Championships (Yokohama, JPN)		<i>(2017) - tfdata-store.com/2017/06/01/post-786/</i>																	
date	26-May-17	time		11.60		22.84		34.82		47.74	47.74	9 / 7							
reaction time		interval				11.24		11.98		12.92		# of strides	11.60	11.24	11.98	12.92	22.84	24.90	2.06
		velocity		8.62		8.90		8.35		7.74	8.38	8.62	8.90	8.35	7.74	8.76	8.03		
Naoki, Masafumi (JPN) (1993)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2017 National Sports Festival (Matsuyama, JPN)		<i>(2017) - tfdata-store.com/2017/10/12/post-1100/</i>																	
date	08-Oct-17	time		11.36		22.64		34.59		47.74	47.74	3 / 6							
reaction time	0.170	interval				11.28		11.95		13.15		# of strides	11.36	11.28	11.95	13.15	22.64	25.10	2.46
		velocity		8.80		8.87		8.37		7.60	8.38	178.2	8.80	8.87	8.37	7.60	8.83	7.97	
Matsuoka, Tomonori (JPN) (2000)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2018 Japanese National High School Championships (Nagoya, JPN)		<i>Kota (2018) - 71st high school championships: JAF scientific committee - biomechanics data collection</i>																	
date	02-Aug-18	time	6.28	11.27	16.53	22.16	28.12	34.32	40.82	47.74	47.74	8 / 5							
reaction time		interval		4.99	5.26	5.63	5.96	6.20	6.50	6.92	PB	# of strides	11.27	10.89	12.16	13.42	22.16	25.58	3.42
		velocity	7.96	10.02	9.51	8.88	8.39	8.06	7.69	7.23	8.38	8.87	9.18	8.22	7.45	9.03	7.82		
Rooney, Martyn (GBR) (1987)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2021 Müller British Grand Prix (Gateshead, GBR)		<i>Omega Timing (2021) - diamond league race analysis</i>																	
date	13-Jul-21	time	6.4	11.6	17.0	22.6	28.3	34.3	40.7	47.74	47.74	3 / 7							
reaction time	0.146	interval		5.20	5.40	5.60	5.70	6.00	6.40	7.04		# of strides	11.60	11.00	11.70	13.44	22.60	25.14	2.54
		velocity	7.81	9.62	9.26	8.93	8.77	8.33	7.81	7.10	8.38	8.62	9.09	8.55	7.44	8.85	7.96		
Kayata, Takashi (JPN) (1992)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2009 Japanese National High School Championships (Nara, JPN)		<i>Matsuo (2009) - 62nd high school championships: JAF scientific committee - biomechanics data</i>																	
date	29-Jul-09	time		11.98		23.12		34.96		47.75	47.75	1 / 4							
reaction time		interval				11.14		11.84		12.79		# of strides	11.98	11.14	11.84	12.79	23.12	24.63	1.51
		velocity		8.35		8.98		8.45		7.82	8.38	8.35	8.98	8.45	7.82	8.65	8.12		
Eaton, Ashton (USA) (1988)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Decathlon - Heat 2 - 2009 IAAF World Championships (Berlin, GER)		<i>Graubner (2009) - biomechanical analyses at the 12th IAAF world championships</i>																	
date	19-Aug-09	time		11.39		22.70		34.94		47.75	47.75	6 / 3							
reaction time	0.171	interval				11.31		12.24		12.81		# of strides	11.39	11.31	12.24	12.81	22.70	25.05	2.35
		velocity		8.78		8.84		8.17		7.81	8.38	8.78	8.84	8.17	7.81	8.81	7.98		
Ito, Rikiya (JPN) (1998)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2016 Japanese National High School Championships (Okayama, JPN)		<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>																	
date	29-Jul-16	time	6.42	11.78	17.25	22.98	29.01	35.20	41.41	47.75	47.75	8 / 6							
reaction time	0.144	interval		5.36	5.47	5.73	6.03	6.19	6.21	6.34		# of strides	11.78	11.20	12.22	12.55	22.98	24.77	1.79
		velocity	7.79	9.33	9.14	8.73	8.29	8.08	8.05	7.89	8.38	8.49	8.93	8.18	7.97	8.70	8.07		
Hanada, Shion (JPN) (1999)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
U19 Semi-Final 1 - 2017 National Sports Festival (Matsuyama, JPN)		<i>(2017) - tfdata-store.com/2017/10/12/post-1100/</i>																	
date	08-Oct-17	time		11.54		22.59		34.70		47.75	47.75	7 / 6							
reaction time	0.156	interval				11.05		12.11		13.05		# of strides	11.54	11.05	12.11	13.05	22.59	25.16	2.57
		velocity		8.67		9.05		8.26		7.66	8.38	8.67	9.05	8.26	7.66	8.85	7.95		
Thid, David (SWE) (2003)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
National FINAL - 2023 Bauhaus Galan (Stockholm, SWE)		<i>Omega Timing (2023) - diamond league race analysis</i>																	
date	02-Jul-23	time	6.27	11.53	16.96	22.60	28.42	34.55	40.92	47.75	47.75	8 / 3							
reaction time	0.153	interval		5.26	5.43	5.64	5.82	6.13	6.37	6.83		# of strides	11.53	11.07	11.95	13.20	22.60	25.15	2.55
		velocity	7.97	9.51	9.21	8.87	8.59	8.16	7.85	7.32	8.38	8.67	9.03	8.37	7.58	8.85	7.95		
Yamano, Haruki (JPN)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
FINAL - 2023 Japanese National High School Championships (Sapporo, JPN)		<i>Takashima (2023) - national high school sports festival - biomechanics data</i>																	
date	02-Aug-23	time		11.63		22.81		34.85		47.75	47.75	2 / 5							
reaction time	0.246	interval				11.18		12.04		12.90		# of strides	11.63	11.18	12.04	12.90	22.81	24.94	2.13
		velocity		8.60		8.94		8.31		7.75	8.38	8.60	8.94	8.31	7.75	8.77	8.02		
Nakamura, Akihiko (JPN) (1990)		50m 100m 150m 200m 250m 300m 350m 400m Official Time Lane / Place 0-100m 100-200m 200-300m 300-400m 0-200m 200m-400m Differential																	
Decathlon - Heat ?? - 2011 Japanese Multi-Event National Championships (Kawasaki, JPN)		<i>Takeo (2014) - decathletes sprint ability & relationship of individual event performance</i>																	

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Horii, Kosuke (JPN) (1994)																			
FINAL - 2015 National Sports Festival (Wakayama, JPN)												Kohei (2015) - 400m race analysis of male & female at major 2015 competitions							
date	04-Oct-15	time	6.30	11.64	17.30	23.28	29.31	35.34	41.42	47.80	47.80								
reaction time		interval		5.34	5.66	5.98	6.03	6.03	6.08	6.38		# of strides	11.64	11.64	12.06	12.46	23.28	24.52	1.24
		velocity	7.94	9.36	8.83	8.36	8.29	8.29	8.22	7.84	8.37		8.59	8.59	8.29	8.03	8.59	8.16	
Aikyo, Shotaro (JPN) (1994)																			
Race C - 2016 Shizuoka International Meeting (Fukuroi, JPN)												Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016							
date	03-May-16	time	6.24	11.36	16.72	22.27	28.05	34.16	40.71	47.80	47.80								
reaction time		interval		5.12	5.36	5.55	5.78	6.11	6.55	7.09		# of strides	11.36	10.91	11.89	13.64	22.27	25.53	3.26
		velocity	8.01	9.77	9.33	9.01	8.65	8.18	7.63	7.05	8.37		8.80	9.17	8.41	7.33	8.98	7.83	
Yamaki, Kakeru (JPN) (1996)																			
FINAL - 2016 National Sports Festival (Kitakami, JPN)												Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016							
date	09-Oct-16	time	6.52	11.76	17.30	23.08	29.06	35.10	41.27	47.80	47.80								
reaction time	0.173	interval		5.24	5.54	5.78	5.98	6.04	6.17	6.53		# of strides	11.76	11.32	12.02	12.70	23.08	24.72	1.64
		velocity	7.67	9.54	9.03	8.65	8.36	8.28	8.10	7.66	8.37		8.50	8.83	8.32	7.87	8.67	8.09	
Ibuka, Aisei (JPN) (1998)																			
FINAL - 2016 Japanese National High School Championships (Okayama, JPN)												Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016							
date	29-Jul-16	time	6.32	11.62	17.07	22.81	28.83	35.12	41.40	47.80	47.80								
reaction time	0.173	interval		5.30	5.45	5.74	6.02	6.29	6.28	6.40		# of strides	11.62	11.19	12.31	12.68	22.81	24.99	2.18
		velocity	7.91	9.43	9.17	8.71	8.31	7.95	7.96	7.81	8.37		8.61	8.94	8.12	7.89	8.77	8.00	
Larregina, Elián (ARG) (2000)																			
Heat 4 - 2024 Olympic Games (Paris, FRA)												Paris 2024 Olympic Games - Results Book (2024)							
date	04-Aug-24	time	6.26	11.34	16.51	21.83	27.41	33.28	39.44	47.80	47.80								
reaction time	0.155	interval		5.08	5.17	5.32	5.58	5.87	6.16	6.36		# of strides	11.34	10.49	11.45	14.52	21.83	25.97	4.14
		velocity	7.99	9.84	9.67	9.40	8.96	8.52	8.12	5.98	8.37		8.82	9.53	8.73	6.89	9.16	7.70	
Mamada, Kodai (JPN) (2002)																			
A FINAL - 2020 Japanese High School National Championships (Hiroshima, JPN)												Kobayashi (2020) - national high school and U20 national championships							
date	23-Oct-20	time	6.53	11.87	17.35	23.03	28.91	34.91	41.13	47.81	47.81								
reaction time	0.150	interval		5.34	5.48	5.68	5.88	6.00	6.22	6.68		# of strides	11.87	11.16	11.88	12.90	23.03	24.78	1.75
		velocity	7.66	9.36	9.12	8.80	8.50	8.33	8.04	7.49	8.37		197.5	8.42	8.96	8.42	7.75	8.68	8.07
Kawakami, Daichi (JPN) (2006)																			
FINAL - 2024 Japanese National High School Championships (Fukuoka, JPN)												Takashima (2024) - national high school sports festival - biomechanics data							
date	28-Jul-24	time		11.96		22.81		34.85		47.81	47.81								
reaction time	0.235	interval				10.85		12.04		12.96		# of strides	11.96	10.85	12.04	12.96	22.81	25.00	2.19
		velocity		8.36		9.22		8.31		7.72	8.37		8.36	9.22	8.31	7.72	8.77	8.00	
Sato, Hiroki (JPN)																			
FINAL - 2017 Osaka University Athletics Championships (Osaka, JPN)												(2017) - tfdata-store.com/2017/04/07/post-249/							
date	06-Apr-17	time		11.71		22.67		34.55		47.82	47.82								
reaction time		interval				10.96		11.88		13.27		# of strides	11.71	10.96	11.88	13.27	22.67	25.15	2.48
		velocity		8.54		9.12		8.42		7.54	8.36		188.2	8.54	9.12	8.42	7.54	8.82	7.95
Suzaki, Mitsuhiro (JPN) (1995)																			
Division 1 Semi-Final 2 - 2017 Kanto Collegiate Championships (Yokohama, JPN)												(2017) - tfdata-store.com/2017/06/02/post-835/							
date	26-May-17	time		11.75		22.68		34.59		47.83	47.83								
reaction time		interval				10.93		11.91		13.24		# of strides	11.75	10.93	11.91	13.24	22.68	25.15	2.47
		velocity		8.51		9.15		8.40		7.55	8.36		189.0	8.51	9.15	8.40	7.55	8.82	7.95
Kimura, Kazushi (JPN) (1993)																			
FINAL - 2017 All Japan Corporate Championships (Osaka, JPN)												(2017) - tfdata-store.com/2017/10/05/post-1097/							
date	24-Sep-17	time		11.44		22.47		34.30		47.83	47.83								
reaction time	0.178	interval				11.03		11.83		13.53		# of strides	11.44	11.03	11.83	13.53	22.47	25.36	2.89
		velocity		8.74		9.07		8.45		7.39	8.36		187.2	8.74	9.07	8.45	7.39	8.90	7.89
Aikyo, Shotaro (JPN) (1994)																			
FINAL - 2012 Japanese National High School Championships (Niigata, JPN)												Yasunori (2012) - 65th high school championships: JAF scientific committee - biomechanics data							
date	29-Jul-12	time		11.86		23.19		34.95		47.84	47.84								
reaction time		interval				11.33		11.76		12.89		# of strides	11.86	11.33	11.76	12.89	23.19	24.65	1.46
		velocity		8.43		8.83		8.50		7.76	8.36		8.43	8.83	8.50	7.76	8.62	8.11	
Johansson, Emil (SWE) (2002)																			
FINAL - 2020 Bauhaus Galan (Stockholm, SWE)												Omega Timing (2020) - diamond league race analysis							
date	23-Aug-20	time		6.4		11.6		17.1		22.9									
reaction time	0.161	interval				5.20		5.50		5.80		# of strides	11.60	11.30	12.30	12.64	22.90	24.94	2.04
		velocity		7.81		9.62		9.09		8.62	8.36		8.62	8.85	8.13	7.91	8.73	8.02	
Kawauchi, Mitsuki (JPN) (1997)																			
Heat 3 - 2020 Japanese National Championships (Niigata, JPN)												Yamanaka (2020) - 400m race analysis of men and women during 2020 season							
date	01-Oct-20	time		6.41		11.69		17.07		22.67									
reaction time	0.159	interval				5.28		5.38		5.60		# of strides	11.69	10.98	11.87	13.30	22.67	25.17	2.50
		velocity		7.80		9.47		9.29		8.93	8.36		8.55	9.11	8.42	7.52	8.82	7.95	
Victor, Linton (GRN) (1993)																			
Decathlon - Heat 2 - 2024 Olympic Games (Paris, FRA)												Paris 2024 Olympic Games - Results Book (2024)							
date	02-Aug-24	time		6.26		11.41		16.72		22.25									
reaction time	0.153	interval				5.15		5.31		5.53		# of strides	11.41	10.84	12.05	13.54	22.25	25.59	3.34
		velocity		7.99		9.71		9.42		9.04	8.36		176.0	8.76	9.23	8.30	7.39	8.99	7.82
Kasyanov, Oleksiy (UKR) (1985)																			
Decathlon - Heat 2 - 2009 IAAF World Championships (Berlin, GER)												Graubner (2009) - biomechanical analyses at the 12th IAAF world championships							

date	19-Aug-09	time	11.78	23.00	35.36	47.85	47.85	5 / 4											
reaction time	0.163	interval		11.22	12.36	12.49		# of strides	11.78	11.22	12.36	12.49	23.00	24.85	1.85				
		velocity	8.49	8.91	8.09	8.01	8.36		8.49	8.91	8.09	8.01	8.70	8.05					
Aikyo, Shotaro (JPN) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 2 - 2016 Japanese National Championships (Nagoya, JPN)										<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>									
date	24-Jun-16	time	6.27	11.37	16.70	22.25	28.02	34.13	40.71	47.85	47.85	8 / 5							
reaction time	0.196	interval		5.10	5.33	5.55	5.77	6.11	6.58	7.14		# of strides	11.37	10.88	11.88	13.72	22.25	25.60	3.35
		velocity	7.97	9.80	9.38	9.01	8.67	8.18	7.60	7.00	8.36		8.80	9.19	8.42	7.29	8.99	7.81	
Yoshida, Tatsuya (JPN) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2018 Japanese National Junior (U20) Championships (Nagano, JPN)										<i>Ryutaro (2018) - research on athlete performance and technique- 2018 data book</i>									
date	19-Oct-18	time	6.45	11.58	16.88	22.35	28.12	34.17	40.60	47.85	47.85	7 / 4							
reaction time	0.190	interval		5.13	5.30	5.47	5.77	6.05	6.43	7.25		# of strides	11.58	10.77	11.82	13.68	22.35	25.50	3.15
		velocity	7.75	9.75	9.43	9.14	8.67	8.26	7.78	6.90	8.36		181.2	8.64	9.29	8.46	7.31	8.95	7.84
Matsuoka, Tomoki (JPN) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2018 Japanese National Junior (U20) Championships (Nagano, JPN)										<i>Ryutaro (2018) - research on athlete performance and technique- 2018 data book</i>									
date	19-Oct-18	time	6.37	11.43	16.72	22.48	28.55	34.81	41.12	47.85	47.85	4 / 5							
reaction time	0.183	interval		5.06	5.29	5.76	6.07	6.26	6.31	6.73		# of strides	11.43	11.05	12.33	13.04	22.48	25.37	2.89
		velocity	7.85	9.88	9.45	8.68	8.24	7.99	7.92	7.43	8.36		185.0	8.75	9.05	8.11	7.67	8.90	7.88
Meldrum, Alan (JPN) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2017 Japanese National High School Championships (Yamagata, JPN)										<i>Kota (2017) - 70th high school championships: JAF scientific committee - biomechanics data</i>									
date	29-Jul-17	time	6.67	11.97	17.40	23.03	28.88	34.98	41.31	47.86	47.86	2 / 2							
reaction time	0.193	interval		5.30	5.43	5.63	5.85	6.10	6.33	6.55		# of strides	11.97	11.06	11.95	12.88	23.03	24.83	1.80
		velocity	7.50	9.43	9.21	8.88	8.55	8.20	7.90	7.63	8.36		8.35	9.04	8.37	7.76	8.68	8.05	
Kimura, Jun (JPN) (1991)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 1 - 2017 National Sports Festival (Matsuyama, JPN)										<i>(2017) - #data-store.com/2017/10/12/post-1100/</i>									
date	08-Oct-17	time			22.80		34.71		47.86	47.86	9 / 3								
reaction time	0.212	interval					11.91		13.15			# of strides			11.91	13.15	22.80	25.06	2.26
		velocity			8.77		8.40		7.60		8.36			8.40	7.60	8.77	7.98		
Meldrum, Alan (JPN) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2018 Japanese National High School Championships (Nagoya, JPN)										<i>Kota (2018) - 71st high school championships: JAF scientific committee - biomechanics data collection</i>									
date	02-Aug-18	time	6.55	12.00	17.32	22.72	28.50	34.58	40.99	47.86	47.86	2 / 6							
reaction time		interval		5.45	5.32	5.40	5.78	6.08	6.41	6.87		# of strides	12.00	10.72	11.86	13.28	22.72	25.14	2.42
		velocity	7.63	9.17	9.40	9.26	8.65	8.22	7.80	7.28	8.36		8.33	9.33	8.43	7.53	8.80	7.96	
Nose, Hiroki (JPN) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 1 - 2020 Japanese U20 National Championships (Hiroshima, JPN)										<i>Kobayashi (2020) - national high school and U20 national championships</i>									
date	23-Oct-20	time	6.28	11.47	16.82	22.40	28.34	34.46	40.85	47.86	47.86	4 / 2							
reaction time	0.152	interval		5.19	5.35	5.58	5.94	6.12	6.39	7.01		# of strides	11.47	10.93	12.06	13.40	22.40	25.46	3.06
		velocity	7.96	9.63	9.35	8.96	8.42	8.17	7.82	7.13	8.36		188.6	8.72	9.15	8.29	7.46	8.93	7.86
Kiyota, Yuki (JPN) (2002)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2021 Japanese U20 National Championships (Osaka, JPN)										<i>Yamanaka (2021) - race analysis of men's and women's 400m and 300m races in 2021 competition</i>									
date	25-Jun-21	time	6.69	12.19	17.83	23.61	29.42	35.32	41.42	47.86	47.86	8 / 4							
reaction time	0.185	interval		5.50	5.64	5.78	5.81	5.90	6.10	6.44		# of strides	12.19	11.42	11.71	12.54	23.61	24.25	0.64
		velocity	7.47	9.09	8.87	8.65	8.61	8.47	8.20	7.76	8.36		8.20	8.76	8.54	7.97	8.47	8.25	
Warner, Damian (CAN) (1989)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Decathlon - Heat 3 - 2023 World Athletics Championships (Budapest, HUN)										<i>Seiko Timing (2023) - world championship race analysis</i>									
date	25-Aug-23	time	11.35		22.26		34.25		47.86	47.86	3 / 5								
reaction time	0.153	interval			10.91		11.99		13.61			# of strides	11.35	10.91	11.99	13.61	22.26	25.60	3.34
		velocity	8.81		9.17		8.34		7.35		8.36		175.0	8.81	9.17	8.34	7.35	8.98	7.81
Iwamoto, Taishi (JPN) (1991)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2009 Japanese National High School Championships (Nara, JPN)										<i>Matsuo (2009) - 62nd high school championships: JAF scientific committee - biomechanics data</i>									
date	29-Jul-09	time	11.85		23.35		35.48		47.87	47.87	6 / 5								
reaction time		interval			11.50		12.13		12.39			# of strides	11.85	11.50	12.13	12.39	23.35	24.52	1.17
		velocity	8.44		8.70		8.24		8.07		8.36		8.44	8.70	8.24	8.07	8.57	8.16	
Matsuo, Shuhei (JPN) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2017 Japanese National High School Championships (Yamagata, JPN)										<i>Kota (2017) - 70th high school championships: JAF scientific committee - biomechanics data</i>									
date	29-Jul-17	time	6.52	12.05	17.83	23.80	29.87	35.93	41.93	47.87	47.87	7 / 3							
reaction time	0.182	interval		5.53	5.78	5.97	6.07	6.06	6.00	5.94		# of strides	12.05	11.75	12.13	11.94	23.80	24.07	0.27
		velocity	7.67	9.04	8.65	8.38	8.24	8.25	8.33	8.42	8.36		8.30	8.51	8.24	8.38	8.40	8.31	
Johnston, Rashad (USA) (1986)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2005 USATF National Junior Championships (Carson, CA)										<i>USATF Women's Sprint Development (2005)</i>									
date	25-Jun-05	time		17.28	22.76	28.65	34.39	40.73	47.88	47.88	9 / 8								
reaction time		interval			5.48	5.89	5.74	6.34	7.15			# of strides			11.63	13.49	22.76	25.12	2.36
		velocity		8.68	9.12	8.49	8.71	7.89	6.99		8.35			8.60	7.41	8.79	7.96		
Sun Jiahao (CHN) (2002)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2023 Chinese National Grand Prix 1 (Rizhao, CHN)										<i>Shandong Athletics Sport Science (2023)</i>									
date	26-Apr-23	time	11.83		22.96		35.05	41.24	47.88	47.88	7 / 4								
reaction time	0.176	interval			11.13		12.09	6.19	6.64			# of strides	11.83	11.13	12.09	12.83	22.96	24.92	1.96
		velocity	8.45		8.98		8.27	8.08	7.53		8.35		181.0	8.45	8.98	8.27	7.79	8.71	8.03
Kitagawa, Takamasa (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2013 Japanese National High School Championships (Oita, JPN)										<i>Matsuo (2013) - 66th high school championships: JAF scientific committee - biomechanics data</i>									
date	30-Jul-13	time	11.75		23.00		35.12		47.89	47.89	2 / 7								
reaction time		interval			11.25		12.12		12.77			# of strides	11.75	11.25	12.12	12.77	23.00	24.89	1.89
		velocity	8.51		8.89		8.25		7.83		8.35		8.51	8.89	8.25	7.83	8.70	8.04	

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Asanobu, Hiroto (JPN)																		
FINAL - 2017 Japanese National High School Championships (Yamagata, JPN)																		
date	29-Jul-17	time	6.52	11.87	17.33	23.07	28.97	35.15	41.52	47.89	47.89	9 / 4						
reaction time	0.182	interval		5.35	5.46	5.74	5.90	6.18	6.37	6.37	# of strides	11.87	11.20	12.08	12.74	23.07	24.82	1.75
		velocity	7.67	9.35	9.16	8.71	8.47	8.09	7.85	7.85	8.35	8.42	8.93	8.28	7.85	8.67	8.06	
Kotake, Rion (JPN) (1999)																		
FINAL - 2018 Japanese National Junior (U20) Championships (Nagano, JPN)																		
date	19-Oct-18	time	6.52	11.88	17.35	22.95	28.80	34.91	41.17	47.89	47.89	2 / 6						
reaction time	0.170	interval		5.36	5.47	5.60	5.85	6.11	6.26	6.72	# of strides	11.88	11.07	11.96	12.98	22.95	24.94	1.99
		velocity	7.67	9.33	9.14	8.93	8.55	8.18	7.99	7.44	8.35	185.0	8.42	9.03	8.36	7.70	8.71	8.02
Katayama, Yuto (JPN) (1997)																		
Heat 2 - 2017 Japanese National Championships (Osaka, JPN)																		
date	23-Jun-17	time				21.91		33.93		47.90	47.90	7 / 7						
reaction time	0.152	interval				10.64		12.02		13.97	# of strides	11.27	10.64	12.02	13.97	21.91	25.99	4.08
		velocity				8.87		9.40		8.32	8.35	192.2	8.87	9.40	8.32	9.13	7.70	
Kimura, Jun (JPN) (1991)																		
B FINAL - 2019 Shizuoka International Athletics Meeting (Fukuroi, JPN)																		
date	03-May-19	time	6.24	11.44	16.84	22.57	28.47	34.65	41.04	47.90	47.90	4 / 3						
reaction time		interval		5.20	5.40	5.73	5.90	6.18	6.39	6.86	# of strides	11.44	11.13	12.08	13.25	22.57	25.33	2.76
		velocity	8.01	9.62	9.26	8.73	8.47	8.09	7.82	7.29	8.35	183.0	8.74	8.98	8.28	7.55	8.86	7.90
Keito, Sato (JPN) (2001)																		
Heat 2 - 2020 Japanese U20 National Championships (Hiroshima, JPN)																		
date	23-Oct-20	time	6.50	11.96	17.57	23.34	29.25	35.30	41.40	47.90	47.90	3 / 3						
reaction time	0.165	interval		5.46	5.61	5.77	5.91	6.05	6.10	6.50	# of strides	11.96	11.38	11.96	12.60	23.34	24.56	1.22
		velocity	7.69	9.16	8.91	8.67	8.46	8.26	8.20	7.69	8.35	186.8	8.36	8.79	8.36	7.94	8.57	8.14
Gombault, Cornélien (FRA) (1953)																		
Heat 1 - 1978 European Championships (Prague, TCH)																		
date	30-Aug-78	time				23.14				47.91	47.91	/ 5						
reaction time		interval								24.77	# of strides					23.14	24.77	1.63
		velocity				8.64				8.07	8.35					8.64	8.07	
Kokubo, Tomohiro (JPN) (1998)																		
U19 FINAL - 2016 National Sports Festival (Kitakami, JPN)																		
date	10-Oct-16	time	6.58	12.00	17.63	23.35	29.21	35.13	41.25	47.91	47.91	5 / 4						
reaction time	0.194	interval		5.42	5.63	5.72	5.86	5.92	6.12	6.66	# of strides	12.00	11.35	11.78	12.78	23.35	24.56	1.21
		velocity	7.60	9.23	8.88	8.74	8.53	8.45	8.17	7.51	8.35	8.33	8.81	8.49	7.82	8.57	8.14	
Sun Jiahao (CHN) (2002)																		
FINAL - 2023 Chinese World Championship & Asian Games Trials (Shenyang, CHN)																		
date	28-Jun-23	time				22.94		34.75		47.91	47.91	8 / 7						
reaction time	0.231	interval				11.01		11.81		7.00	# of strides	11.93	11.01	11.81	13.16	22.94	24.97	2.03
		velocity				9.08		8.47		8.12	8.35	181.5	8.38	9.08	8.47	7.60	8.72	8.01
Choshi, Mori (JPN)																		
FINAL - 2017 Nanbu Memorial Meeting (Sapporo, JPN)																		
date	09-Jul-17	time				22.74		34.86		47.92	47.92	8 / 6						
reaction time		interval				10.97		12.12		13.06	# of strides	11.77	10.97	12.12	13.06	22.74	25.18	2.44
		velocity				9.12		8.25		7.66	8.35	186.0	8.50	9.12	8.25	7.66	8.80	7.94
Terai, Shota (JPN) (1997)																		
FINAL - 2014 Japanese National High School Championships (Kofu, JPN)																		
date	30-Jul-14	time	6.68	12.14	17.58	23.23	29.11	35.21	41.31	47.93	47.93	/ 6						
reaction time		interval		5.46	5.44	5.65	5.88	6.10	6.10	6.62	# of strides	12.14	11.09	11.98	12.72	23.23	24.70	1.47
		velocity	7.49	9.16	9.19	8.85	8.50	8.20	8.20	7.55	8.35	8.24	9.02	8.35	7.86	8.61	8.10	
Nakatsukue, Haruhiko (JPN) (1998)																		
U19 FINAL - 2015 National Sports Festival (Wakayama, JPN)																		
date	05-Oct-15	time	6.61	12.02	17.55	23.39	29.38	35.50	41.58	47.93	47.93	/ 4						
reaction time		interval		5.41	5.53	5.84	5.99	6.12	6.08	6.35	# of strides	12.02	11.37	12.11	12.43	23.39	24.54	1.15
		velocity	7.56	9.24	9.04	8.56	8.35	8.17	8.22	7.87	8.35	8.32	8.80	8.26	8.05	8.55	8.15	
Kokubo, Tomohiro (JPN) (1998)																		
FINAL - 2016 Japanese National Junior Championships (Mizuho, JPN)																		
date	21-Oct-16	time	6.62	12.13	17.75	23.63	29.72	35.75	41.79	47.93	47.93	6 / 5						
reaction time		interval		5.51	5.62	5.88	6.09	6.03	6.04	6.14	# of strides	12.13	11.50	12.12	12.18	23.63	24.30	0.67
		velocity	7.55	9.07	8.90	8.50	8.21	8.29	8.28	8.14	8.35	8.24	8.70	8.25	8.21	8.46	8.23	
Kaneda, Riki (JPN) (2000)																		
FINAL - 2018 Japanese National High School Championships (Nagoya, JPN)																		
date	02-Aug-18	time	6.32	11.59	16.93	22.57	28.49	34.60	41.00	47.93	47.93	3 / 7						
reaction time		interval		5.27	5.34	5.64	5.92	6.11	6.40	6.93	# of strides	11.59	10.98	12.03	13.33	22.57	25.36	2.79
		velocity	7.91	9.49	9.36	8.87	8.45	8.18	7.81	7.22	8.35	8.63	9.11	8.31	7.50	8.86	7.89	
Chen Feifeng (CHN) (2002)																		
Heat 6 - 2023 Chinese National Grand Prix 3 (Taizhou, CHN)																		
date	26-May-23	time				22.36		34.59		47.93	47.93	6 / 1						
reaction time	0.228	interval				11.10		12.23		7.00	# of strides	11.26	11.10	12.23	13.34	22.36	25.57	3.21
		velocity				9.01		8.18		7.89	8.35	8.88	9.01	8.18	7.50	8.94	7.82	
Swatowski, Stanislaw (POL) (1934)																		
FINAL - 1958 European Championships (Stockholm, SWE)																		

date	21-Aug-58	time						21.8	47.8	47.8	/ 6								
reaction time		interval							26.0		# of strides					21.80	26.00	4.20	
		velocity						9.17	7.69	8.37					9.17	7.69			
Yoshiki, Tsubasa (JPN) (2003)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 5 - 2020 Japanese High School National Championships (Hiroshima, JPN)																			
date	23-Oct-20	time	6.48	11.72	17.07	22.58	28.28	34.34	40.91	47.94	47.94	3 / 2							
reaction time	0.174	interval	5.24	5.35	5.51	5.70	6.06	6.57	7.03		# of strides	11.72	10.86	11.76	13.60	22.58	25.36	2.78	
		velocity	7.72	9.54	9.35	9.07	8.77	8.25	7.61	7.11	8.34	209.5	8.53	9.21	8.50	7.35	8.86	7.89	
Sawada, Natsuki (JPN) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2016 Japanese National Youth Championships (Mizuho, JPN)																			
date	21-Oct-16	time	6.79	12.47	18.25	24.14	29.83	35.61	41.61	47.95	47.95	1 / 5							
reaction time		interval	5.68	5.78	5.89	5.69	5.78	6.00	6.34		# of strides	12.47	11.67	11.47	12.34	24.14	23.81	-0.33	
		velocity	7.36	8.80	8.65	8.49	8.79	8.65	8.33	7.89	8.34	8.02	8.57	8.72	8.10	8.29	8.40		
Bastien, Steven (USA) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Decathlon - Heat 3 - 2022 World Athletics Championships (Eugene, OR)																			
date	23-Jul-22	time	11.60		22.94		35.42		47.95	47.95	2 / 6								
reaction time	0.148	interval			11.34		12.48		12.53		# of strides	11.60	11.34	12.48	12.53	22.94	25.01	2.07	
		velocity			8.62		8.82		8.01	7.98	8.34	8.62	8.82	8.01	7.98	8.72	8.00		
Ito, Rikiya (JPN) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2015 Japanese National Youth Championships (Nagoya, JPN)																			
date	16-Oct-15	time	6.54	11.79	17.17	22.89	28.86	35.02	41.25	47.96	47.96	5 / 3							
reaction time		interval	5.25	5.38	5.72	5.97	6.16	6.23	6.71		# of strides	11.79	11.10	12.13	12.94	22.89	25.07	2.18	
		velocity	7.65	9.52	9.29	8.74	8.38	8.12	8.03	7.45	8.34	8.48	9.01	8.24	7.73	8.74	7.98		
Yamazaki, Hiroki (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Division 2 Semi-Final 2 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time	12.12		23.47		35.14		47.96	47.96	2 / 3								
reaction time		interval			11.35		11.67		12.82		# of strides	12.12	11.35	11.67	12.82	23.47	24.49	1.02	
		velocity			8.25		8.81		8.57	7.80	8.34	8.25	8.81	8.57	7.80	8.52	8.17		
Horii, Kosuke (JPN) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2018 Japanese Corporate Championships (Osaka, JPN)																			
date	23-Sep-18	time	6.46	11.84	17.30	23.09	29.07	35.14	41.33	47.96	47.96	9 / 6							
reaction time	0.177	interval	5.38	5.46	5.79	5.98	6.07	6.19	6.63		# of strides	11.84	11.25	12.05	12.82	23.09	24.87	1.78	
		velocity	7.74	9.29	9.16	8.64	8.36	8.24	8.08	7.54	8.34	8.45	8.89	8.30	7.80	8.66	8.04		
Hirakawa, Kira (JPN) (2005)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2021 Japanese High School National Championships (Fukui, JPN)																			
date	28-Jul-21	time	6.44	11.67	17.10	22.73	28.47	34.42	40.82	47.96	47.96	2 / 3							
reaction time	0.189	interval	5.23	5.43	5.63	5.74	5.95	6.40	7.14		# of strides	11.67	11.06	11.69	13.54	22.73	25.23	2.50	
		velocity	7.76	9.56	9.21	8.88	8.71	8.40	7.81	7.00	8.34	8.57	9.04	8.55	7.39	8.80	7.93		
Steinforth, Till (GER) (2002)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Decathlon - Heat 3 - 2024 Olympic Games (Paris, FRA)																			
date	02-Aug-24	time	6.42	11.69	16.98	22.48	28.24	34.39	40.89	47.96	47.96	7 / 7							
reaction time	0.156	interval	5.27	5.29	5.50	5.76	6.15	6.50	7.07		# of strides	11.69	10.79	11.91	13.57	22.48	25.48	3.00	
		velocity	7.79	9.49	9.45	9.09	8.68	8.13	7.69	7.07	8.34	178.0	8.55	9.27	8.40	7.37	8.90	7.85	
Thompson, Luca (NOR) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
National FINAL - 2019 Bislett Games (Oslo, NOR)																			
date	13-Jun-19	time	12.2		23.3		35.2		47.97	47.97	3 / 1								
reaction time	0.143	interval			11.1		11.9		12.8	PB	# of strides	12.20	11.10	11.90	12.77	23.30	24.67	1.37	
		velocity			8.20		9.01		8.40	7.83	8.34	8.20	9.01	8.40	7.83	8.58	8.11		
Tominaga, Yuhei (JPN) (2004)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2021 Japanese High School National Championships (Fukui, JPN)																			
date	28-Jul-21	time	6.42	11.78	17.40	23.25	29.11	35.17	41.42	47.97	47.97	4 / 4							
reaction time	0.164	interval	5.36	5.62	5.85	5.86	6.06	6.25	6.55		# of strides	11.78	11.47	11.92	12.80	23.25	24.72	1.47	
		velocity	7.79	9.33	8.90	8.55	8.53	8.25	8.00	7.63	8.34	8.49	8.72	8.39	7.81	8.60	8.09		
Harada, Masato (JPN) (2004)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2022 Japanese National High School Championships (Naruto, JPN)																			
date	03-Aug-22	time	11.72		22.60		34.62		47.97	47.97	8 / 3								
reaction time	0.175	interval			10.88		12.02		13.35		# of strides	11.72	10.88	12.02	13.35	22.60	25.37	2.77	
		velocity			8.53		9.19		8.32	7.49	8.34	8.53	9.19	8.32	7.49	8.85	7.88		
Tanino, Yusei (JPN)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2023 Japanese National High School Championships (Sapporo, JPN)																			
date	02-Aug-23	time	11.71		22.79		34.80		47.97	47.97	3 / 6								
reaction time	0.203	interval			11.08		12.01		13.17		# of strides	11.71	11.08	12.01	13.17	22.79	25.18	2.39	
		velocity			8.54		9.03		8.33	7.59	8.34	8.54	9.03	8.33	7.59	8.78	7.94		
Koshimizu, Yusuke (JPN) (2000)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
U20 FINAL - 2019 Japanese National U18/U20 Championships (Hiroshima, JPN)																			
date	18-Oct-19	time	6.28	11.39	16.65	22.35	28.28	34.49	41.04	47.98	47.98	6 / 4							
reaction time	0.225	interval	5.11	5.26	5.70	5.93	6.21	6.55	6.94		# of strides	11.39	10.96	12.14	13.49	22.35	25.63	3.28	
		velocity	7.96	9.78	9.51	8.77	8.43	8.05	7.63	7.20	8.34	179.7	8.78	9.12	8.24	7.41	8.95	7.80	
Kitakani, Naoki (JPN) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Division 1 Semi-Final 2 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time	11.52		22.46		34.86		47.99	47.99	8 / 5								
reaction time		interval			10.94		12.40		13.13		# of strides	11.52	10.94	12.40	13.13	22.46	25.53	3.07	
		velocity			8.68		9.14		8.06	7.62	8.34	179.2	8.68	9.14	8.06	7.62	8.90	7.83	

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Neugebauer, Leo (GER) (2000)																			
Decathlon - Heat 3 - 2023 World Athletics Championships (Budapest, HUN)																			
date	25-Aug-23	time	11.56		22.51		34.50		47.99	47.99	4 / 6								
reaction time	0.204	interval			10.95		11.99		13.49		# of strides	11.56	10.95	11.99	13.49	22.51	25.48	2.97	
		velocity	8.65		9.13		8.34		7.41	8.34	168.5	8.65	9.13	8.34	7.41	8.88	7.85		
Maslák, Pavel (CZE) (1991)																			
Heat 3 - 2024 European Athletics Championships (Roma, ITA)																			
date	08-Jun-24	time	11.93		23.23		35.18		47.99	47.99	8 / 7								
reaction time	0.239	interval			11.30		11.95		12.81		# of strides	11.93	11.30	11.95	12.81	23.23	24.76	1.53	
		velocity	8.38		8.85		8.37		7.81	8.34	190.0	8.38	8.85	8.37	7.81	8.61	8.08		
Suárez, Leonel (CUB) (1987)																			
Decathlon - Heat 2 - 2009 IAAF World Championships (Berlin, GER)																			
date	19-Aug-09	time	11.41		22.66		34.74		48.00	48.00	4 / 5								
reaction time	0.137	interval			11.25		12.08		13.26		# of strides	11.41	11.25	12.08	13.26	22.66	25.34	2.68	
		velocity	8.76		8.89		8.28		7.54	8.33	190.0	8.76	8.89	8.28	7.54	8.83	7.89		
Hosoi, Brian (JPN) (1999)																			
FINAL - 2017 Japanese National High School Championships (Yamagata, JPN)																			
date	29-Jul-17	time	6.52	11.99	17.60	23.32	29.22	35.36	41.63	48.00	48.00	8 / 5							
reaction time	0.176	interval			5.47	5.61	5.72	5.90	6.14	6.27	6.37	# of strides	11.99	11.33	12.04	12.64	23.32	24.68	1.36
		velocity	7.67	9.14	8.91	8.74	8.47	8.14	7.97	7.85	8.33	8.34	8.83	8.31	7.91	8.58	8.10		
Yamasaki, Nenji (JPN) (2000)																			
FINAL - 2018 Japanese National Junior (U20) Championships (Nagano, JPN)																			
date	19-Oct-18	time	6.35	11.51	16.93	22.70	28.70	34.96	41.35	48.00	48.00	8 / 7							
reaction time	0.180	interval			5.16	5.42	5.77	6.00	6.26	6.39	6.65	# of strides	11.51	11.19	12.26	13.04	22.70	25.30	2.60
		velocity	7.87	9.69	9.23	8.67	8.33	7.99	7.82	7.52	8.33	8.69	8.94	8.16	7.67	8.81	7.91		
Badji, Asamti (BEL) (1995)																			
National FINAL - 2019 Memorial van Damme (Brussels, BEL)																			
date	06-Sep-19	time	6.4	11.5	16.8	22.3	28.1	34.3	40.8	48.00	48.00	9 / 7							
reaction time		interval			5.1	5.3	5.5	5.8	6.2	6.5	13.7	# of strides	11.50	10.80	12.00	13.70	22.30	25.70	3.40
		velocity	7.81	9.80	9.43	9.09	8.62	8.06	7.69	7.30	8.33	8.70	9.26	8.33	7.30	8.97	7.78		
Fujiyoshi, Shunta (JPN) (2001)																			
U20 FINAL - 2019 Japanese National U18/U20 Championships (Hiroshima, JPN)																			
date	18-Oct-19	time	6.54	11.77	17.08	22.69	28.64	34.81	41.18	48.00	48.00	2 / 5							
reaction time	0.178	interval			5.23	5.31	5.61	5.95	6.17	6.37	6.82	# of strides	11.77	10.92	12.12	13.19	22.69	25.31	2.62
		velocity	7.65	9.56	9.42	8.91	8.40	8.10	7.85	7.33	8.33	8.50	9.16	8.25	7.58	8.81	7.90		
Allen, Nathon (JAM) (1995)																			
FINAL - 2022 Commonwealth Games (Birmingham, GBR)																			
date	07-Aug-22	time	6.5	11.8	17.0	22.6	28.3	34.3	40.6	48.00	48.00	9 / 8							
reaction time	0.165	interval			5.30	5.20	5.60	5.70	6.00	6.30	7.40	# of strides	11.80	10.80	11.70	13.70	22.60	25.40	2.80
		velocity	7.69	9.43	9.62	8.93	8.77	8.33	7.94	6.76	8.33	8.47	9.26	8.55	7.30	8.85	7.87		
Sato, Takuya (JPN) (1993)																			
FINAL - 2011 Japanese National High School Championships (Kitamaki, JPN)																			
date	04-Aug-11	time	11.58		22.63		34.78		48.01	48.01	3 / 4								
reaction time		interval			11.05		12.15		13.23		# of strides	11.58	11.05	12.15	13.23	22.63	25.38	2.75	
		velocity	8.64		9.05		8.23		7.56	8.33	180.0	8.64	9.05	8.23	7.56	8.84	7.88		
Jones, Jonathan (BAR) (1999)																			
FINAL - 2018 IAAF World Junior Championships (Tampere, FIN)																			
date	13-Jul-18	time	6.34	11.37	16.43	21.89	27.61	33.72	40.40	48.01	48.01	8 / 8							
reaction time	0.185	interval			5.03	5.06	5.46	5.72	6.11	6.68	7.61	# of strides	11.37	10.52	11.83	14.29	21.89	26.12	4.23
		velocity	7.89	9.94	9.88	9.16	8.74	8.18	7.49	6.57	8.33	8.80	9.51	8.45	7.00	9.14	7.66		
Nakamichi, Daiki (JPN) (2004)																			
FINAL - 2022 Japanese National High School Championships (Naruto, JPN)																			
date	03-Aug-22	time	11.92		23.19		35.51		48.01	48.01	7 / 4								
reaction time	0.164	interval			11.27		12.32		12.50		# of strides	11.92	11.27	12.32	12.50	23.19	24.82	1.63	
		velocity	8.39		8.87		8.12		8.00	8.33	180.0	8.39	8.87	8.12	8.00	8.62	8.06		
Ikeda, Kosuke (JPN) (1995)																			
FINAL - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time	11.69		22.75		34.92		48.02	48.02	6 / 7								
reaction time	0.172	interval			11.06		12.17		13.10		# of strides	11.69	11.06	12.17	13.10	22.75	25.27	2.52	
		velocity	8.55		9.04		8.22		7.63	8.33	183.0	8.55	9.04	8.22	7.63	8.79	7.91		
Noguchi, Kohei (JPN) (2000)																			
FINAL - 2018 Japanese National Junior (U20) Championships (Nagano, JPN)																			
date	19-Oct-18	time	6.37	11.53	16.88	22.52	28.44	34.65	41.17	48.02	48.02	1 / 8							
reaction time	0.149	interval			5.16	5.35	5.64	5.92	6.21	6.52	6.85	# of strides	11.53	10.99	12.13	13.37	22.52	25.50	2.98
		velocity	7.85	9.69	9.35	8.87	8.45	8.05	7.67	7.30	8.33	187.0	8.67	9.10	8.24	7.48	8.88	7.84	
Öiglane, Janek (EST) (1994)																			
Decathlon - Heat 1 - 2024 Olympic Games (Paris, FRA)																			
date	02-Aug-24	time	6.34	11.59	17.13	22.84	28.71	34.79	41.20	48.02	48.02	4 / 1							
reaction time	0.160	interval			5.25	5.54	5.71	5.87	6.08	6.41	6.82	# of strides	11.59	11.25	11.95	13.23	22.84	25.18	2.34
		velocity	7.89	9.52	9.03	8.76	8.52	8.22	7.80	7.33	8.33	181.7	8.63	8.89	8.37	7.56	8.76	7.94	
Sugue, Kohei (JPN) (1997)																			
Division 1 Semi-Final 1 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			

date	26-May-17	time	12.08	23.48	35.24	48.03	48.03	3 / 5-4											
reaction time		interval		11.40	11.76	12.79		# of strides	12.08	11.40	11.76	12.79	23.48	24.55	1.07				
		velocity	8.28	8.77	8.50	7.82	8.33	187.7	8.28	8.77	8.50	7.82	8.52	8.15					
Fujimoto, Masaru (JPN)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2016 China Perfure High School Championships (Okayama, JPN)																			
date	17-Jun-16	time	12.16		23.20	34.95		48.04	48.04	9 / 1									
reaction time		interval		11.04	11.75	13.09				# of strides	12.16	11.04	11.75	13.09	23.20	24.84	1.64		
		velocity	8.22	9.06	8.51	7.64	8.33			8.22	9.06	8.51	7.64	8.62	8.05				
Ito, Rikiya (JPN) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Division 1 Semi-Final 2 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time	11.82		22.76	34.87		48.04	48.04	9 / 6									
reaction time		interval		10.94	12.11	13.17				# of strides	11.82	10.94	12.11	13.17	22.76	25.28	2.52		
		velocity	8.46	9.14	8.26	7.59	8.33			198.7	8.46	9.14	8.26	7.59	8.79	7.91			
Okoro, Efekemo (GBR) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
B FINAL - 2022 Müller Birmingham Diamond League (Birmingham, GBR)																			
<i>Omega Timing (2022) - diamond league race analysis</i>																			
date	21-May-22	time	6.3	11.4	16.7	22.1	27.9	34.2	40.8	48.04									
reaction time	0.146	interval		5.30	5.40	6.30	6.60	7.24			# of strides	11.40	10.70	12.10	13.84	22.10	25.94	3.84	
		velocity	7.94	9.80	9.43	9.26	8.62	7.94	7.58	6.91	8.33	8.77	9.35	8.26	7.23	9.05	7.71		
Merhe Mortada, Mohamad (LBN) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat B - West Asian Championships - 2024 Seashore Doha Meeting (Doha, QAT)																			
<i>Omega Timing (2024) - diamond league race analysis</i>																			
date	10-May-24	time	6.31	11.67	17.29	23.13	29.13	35.29	41.57	48.04									
reaction time	0.152	interval		5.36	5.62	5.84	6.00	6.16	6.28	6.47									
		velocity	7.92	9.33	8.90	8.56	8.33	8.12	7.96	7.73	8.33	8.57	8.73	8.22	7.84	8.65	8.03		
Tomioka, Yuya (JPN) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Division 2 Semi-Final 1 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time	11.40		22.32	34.44		48.05	48.05	4 / 3									
reaction time		interval		10.92	12.12	13.61				# of strides	11.40	10.92	12.12	13.61	22.32	25.73	3.41		
		velocity	8.77	9.16	8.25	7.35	8.32			182.0	8.77	9.16	8.25	7.35	8.96	7.77			
Dunn, Jarryd (GBR) (1992)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
National FINAL - 2018 Müller Anniversary Games (London, GBR)																			
<i>Omega Timing (2018) - diamond league race analysis</i>																			
date	21-Jul-18	time	11.8		22.7	34.7		48.05	48.05	2 / 9									
reaction time	0.157	interval		10.9	12.0	13.4				# of strides	11.80	10.90	12.00	13.35	22.70	25.35	2.65		
		velocity	8.47	9.17	8.33	7.49	8.32			8.47	9.17	8.33	7.49	8.81	7.89				
Keito, Sato (JPN) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2020 Japanese U20 National Championships (Hiroshima, JPN)																			
<i>Kobayashi (2020) - national high school and U20 national championships</i>																			
date	23-Oct-20	time	6.56	11.99	17.52	23.27	29.29	35.41	41.61	48.05									
reaction time	0.148	interval		5.43	5.53	5.75	6.02	6.12	6.20	6.44									
		velocity	7.62	9.21	9.04	8.70	8.31	8.17	8.06	7.76	8.32	186.9	8.34	8.87	8.24	7.91	8.59	8.07	
Victor, Lindon (GRN) (1993)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Decathlon - Heat 2 - 2023 World Athletics Championships (Budapest, HUN)																			
<i>Seiko Timing (2023) - world championship race analysis</i>																			
date	25-Aug-23	time	11.46		22.52	34.69		48.05	48.05	2 / 2									
reaction time	0.160	interval		11.06	12.17	13.36				# of strides	11.46	11.06	12.17	13.36	22.52	25.53	3.01		
		velocity	8.73	9.04	8.22	7.49	8.32			177.0	8.73	9.04	8.22	7.49	8.88	7.83			
Eto, Takuto (JPN) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
U19 FINAL - 2015 National Sports Festival (Wakayama, JPN)																			
<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>																			
date	05-Oct-15	time	6.65	12.16	17.77	23.51	29.45	35.37	41.54	48.06									
reaction time		interval		5.51	5.61	5.74	5.94	5.92	6.17	6.52									
		velocity	7.52	9.07	8.91	8.71	8.42	8.45	8.10	7.67	8.32	12.16	11.35	11.86	12.69	23.51	24.55	1.04	
Yamazaki, Hiroki (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Division 2 FINAL - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
<i>(2017) - tfdata-store.com/2017/06/01/post-786/</i>																			
date	26-May-17	time	11.98		23.03	34.73		48.06	48.06	9 / 4									
reaction time		interval		11.05	11.70	13.33				# of strides	11.98	11.05	11.70	13.33	23.03	25.03	2.00		
		velocity	8.35	9.05	8.55	7.50	8.32			182.0	8.35	9.05	8.55	7.50	8.68	7.99			
Kawai, Toshito (JPN)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2023 Japanese National High School Championships (Sapporo, JPN)																			
<i>Takashima (2023) - national high school sports festival - biomechanics data</i>																			
date	02-Aug-23	time	11.68		22.96	35.19		48.06	48.06	8 / 7									
reaction time	0.231	interval		11.28	12.23	12.87				# of strides	11.68	11.28	12.23	12.87	22.96	25.10	2.14		
		velocity	8.56	8.87	8.18	7.77	8.32			8.56	8.87	8.18	7.77	8.71	7.97				
Yanagisawa, Junki (JPN) (1991)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2008 Japanese National High School Championships (Kumagaya, JPN)																			
<i>Abe (2008) - 61st high school championships: JAF scientific committee - biomechanics data</i>																			
date	29-Jul-08	time	6.76	12.30	18.00	23.67	29.51	35.53	41.67	48.07									
reaction time		interval		5.54	5.70	5.67	5.84	6.02	6.14	6.40									
		velocity	7.40	9.03	8.77	8.82	8.56	8.31	8.14	7.81	8.32	12.30	11.37	11.86	12.54	23.67	24.40	0.73	
Wakabayashi, Kota (JPN) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2016 Japanese National Junior Championships (Mizuho, JPN)																			
<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>																			
date	21-Oct-16	time	6.50	11.96	17.50	23.27	29.20	35.24	41.50	48.07									
reaction time		interval		5.46	5.54	5.77	5.93	6.04	6.26	6.57									
		velocity	7.69	9.16	9.03	8.67	8.43	8.28	7.99	7.61	8.32	11.96	11.31	11.97	12.83	23.27	24.80	1.53	
Inoguchi, Yuta (JPN) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2011 Japanese National High School Championships (Kitamaki, JPN)																			
<i>Abe (2011) - 64th high school championships: JAF scientific committee - biomechanics data</i>																			
date	04-Aug-11	time	12.32		23.52	35.31		48.08	48.08	9 / 5									
reaction time		interval		11.20	11.79	12.77				# of strides	12.32	11.20	11.79	12.77	23.52	24.56	1.04		
		velocity	8.12	8.93	8.48	7.83	8.32			8.12	8.93	8.48	7.83	8.50	8.14				

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Ito, Rikiya (JPN) (1998)																			
U19 FINAL - 2016 National Sports Festival (Kitakami, JPN)																			
date	10-Oct-16	time	6.71	12.15	17.67	23.42	29.35	35.36	41.51	48.08	48.08								
reaction time	0.191	interval		5.44	5.52	5.75	5.93	6.01	6.15	6.57		# of strides	12.15	11.27	11.94	12.72	23.42	24.66	1.24
		velocity	7.45	9.19	9.06	8.70	8.43	8.32	8.13	7.61	8.32		8.23	8.87	8.38	7.86	8.54	8.11	
Obuchi, Mizuki (JPN) (1997)																			
B FINAL - 2021 Shizuoka International Athletics Meeting (Fukurou, JPN)																			
date	03-May-21	time	6.24	11.49	16.85	22.40	28.14	34.18	40.54	48.08	48.08								
reaction time	0.191	interval		5.25	5.36	5.55	5.74	6.04	6.36	7.54		# of strides	11.49	10.91	11.78	13.90	22.40	25.68	3.28
		velocity	8.01	9.52	9.33	9.01	8.71	8.28	7.86	6.63	8.32		8.70	9.17	8.49	7.19	8.93	7.79	
Ureña, Jorge (ESP) (1993)																			
Decathlon - Heat 2 - 2024 Olympic Games (Paris, FRA)																			
date	02-Aug-24	time	6.61	11.98	17.40	23.08	28.91	34.89	41.19	48.08	48.08								
reaction time	0.141	interval		5.37	5.42	5.68	5.83	5.98	6.30	6.89		# of strides	11.98	11.10	11.81	13.19	23.08	25.00	1.92
		velocity	7.56	9.31	9.23	8.80	8.58	8.36	7.94	7.26	8.32		174.0	8.35	9.01	8.47	7.58	8.67	8.00
Nakamura, Akihiko (JPN) (1990)																			
Decathlon - Heat 2 - 2013 Wakayama Athletics Meeting (Wakayama, JPN)																			
date	27-Apr-13	time	6.33	11.56	16.95	22.85	29.04	35.19	41.38	48.09	48.09								
reaction time		interval		5.23	5.39	5.90	6.19	6.15	6.19	6.71		# of strides	11.56	11.29	12.34	12.90	22.85	25.24	2.39
		velocity	7.90	9.56	9.28	8.47	8.08	8.13	8.08	7.45	8.32		8.65	8.86	8.10	7.75	8.75	7.92	
Nomura, Yuki (JPN) (1998)																			
FINAL - 2015 Japanese National Youth Championships (Nagoya, JPN)																			
date	16-Oct-15	time	6.46	11.75	17.28	23.11	29.25	35.48	41.74	48.09	48.09								
reaction time		interval		5.29	5.53	5.83	6.14	6.23	6.26	6.35		# of strides	11.75	11.36	12.37	12.61	23.11	24.98	1.87
		velocity	7.74	9.45	9.04	8.58	8.14	8.03	7.99	7.87	8.32		8.51	8.80	8.08	7.93	8.65	8.01	
Imoto, Yoshinobu (JPN) (1999)																			
B FINAL - 2021 Shizuoka International Athletics Meeting (Fukurou, JPN)																			
date	03-May-21	time	6.00	11.01	16.23	21.85	27.68	33.79	40.41	48.09	48.09								
reaction time	0.151	interval		5.01	5.22	5.62	5.83	6.11	6.62	7.68		# of strides	11.01	10.84	11.94	14.30	21.85	26.24	4.39
		velocity	8.33	9.98	9.58	8.90	8.58	8.18	7.55	6.51	8.32		9.08	9.23	8.38	6.99	9.15	7.62	
Ibrahim Issaka, Hussein (QAT) (2003)																			
B FINAL - 2021 Doha Diamond League (Doha, QAT)																			
date	28-May-21	time	6.4	11.5	17.0	22.8	28.9	35.1	41.5	48.10	48.10								
reaction time	0.173	interval		5.10	5.50	5.80	6.10	6.20	6.40	6.60	PB	# of strides	11.50	11.30	12.30	13.00	22.80	25.30	2.50
		velocity	7.81	9.80	9.09	8.62	8.20	8.06	7.81	7.58	8.32		8.70	8.85	8.13	7.69	8.77	7.91	
Miura, Ayumu (JPN) (1997)																			
FINAL - 2015 Japanese National Junior Championships (Nagoya, JPN)																			
date	16-Oct-15	time	6.43	11.65	17.18	22.93	28.83	35.08	41.51	48.11	48.11								
reaction time		interval		5.22	5.53	5.75	5.90	6.25	6.43	6.60		# of strides	11.65	11.28	12.15	13.03	22.93	25.18	2.25
		velocity	7.78	9.58	9.04	8.70	8.47	8.00	7.78	7.58	8.31		8.58	8.87	8.23	7.67	8.72	7.94	
Hoshino, Sota (JPN) (1998)																			
Division 2 Semi-Final 1 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time		12.20		23.36		35.26		48.11	48.11								
reaction time		interval				11.16		11.90		12.85		# of strides	12.20	11.16	11.90	12.85	23.36	24.75	1.39
		velocity		8.20		8.96		8.40		7.78	8.31		172.0	8.20	8.96	8.40	7.78	8.56	8.08
Sigurdson, Simen (NOR) (1993)																			
National FINAL - 2019 Bislett Games (Oslo, NOR)																			
date	13-Jun-19	time		11.5		22.6		34.7		48.11	48.11								
reaction time	0.144	interval				11.1		12.1		13.4		# of strides	11.50	11.10	12.10	13.41	22.60	25.51	2.91
		velocity		8.70		9.01		8.26		7.46	8.31		8.70	9.01	8.26	7.46	8.85	7.84	
Asakawa, Hiroki (JPN) (1995)																			
Heat 2 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time		11.66		22.53		34.43		48.12	48.12								
reaction time	0.215	interval				10.87		11.90		13.69	PB	# of strides	11.66	10.87	11.90	13.69	22.53	25.59	3.06
		velocity		8.58		9.20		8.40		7.30	8.31		8.58	9.20	8.40	7.30	8.88	7.82	
Matsukiyo, Kazuki (JPN) (1997)																			
Heat 2 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time		11.88		22.86		34.62		48.12	48.12								
reaction time	0.214	interval				10.98		11.76		13.50		# of strides	11.88	10.98	11.76	13.50	22.86	25.26	2.40
		velocity		8.42		9.11		8.50		7.41	8.31		8.42	9.11	8.50	7.41	8.75	7.92	
Mori, Syuji (JPN) (2000)																			
Heat 4 - 2018 IAAF World Junior Championships (Tampere, FIN)																			
date	11-Jul-18	time	6.28	11.36	16.57	22.20	28.13	34.39	40.99	48.12	48.12								
reaction time	0.159	interval		5.08	5.21	5.63	5.93	6.26	6.60	7.13		# of strides	11.36	10.84	12.19	13.73	22.20	25.92	3.72
		velocity	7.96	9.84	9.60	8.88	8.43	7.99	7.58	7.01	8.31		8.80	9.23	8.20	7.28	9.01	7.72	
Nakajima, Yuki Joseph (JPN) (2002)																			
FINAL - 2020 Japanese U20 National Championships (Hiroshima, JPN)																			
date	23-Oct-20	time	6.46	11.85	17.40	23.15	29.08	35.17	41.43	48.12	48.12								
reaction time	0.188	interval		5.39	5.55	5.75	5.93	6.09	6.26	6.69		# of strides	11.85	11.30	12.02	12.95	23.15	24.97	1.82
		velocity	7.74	9.28	9.01	8.70	8.43	8.21	7.99	7.47	8.31		173.7	8.44	8.85	8.32	7.72	8.64	8.01
Gahne, Gustav (SWE) (2001)																			
National FINAL - 2023 Bauhaus Galan (Stockholm, SWE)																			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Ibrahim Issaka, Hussein (QAT) (2003)																		
FINAL - 2023 Doha Diamond League (Doha, QAT)																		
date	05-May-23	time	6.49	11.79	17.40	23.15	29.22	35.35	41.65	48.17	48.17							
reaction time	0.305	interval		5.30	5.61	5.75	6.07	6.13	6.30	6.52								
		velocity	7.70	9.43	8.91	8.70	8.24	8.16	7.94	7.67	8.30							
											# of strides	11.79	11.36	12.20	12.82	23.15	25.02	1.87
												8.48	8.80	8.20	7.80	8.64	7.99	
Wakabayashi, Kota (JPN) (1997)																		
FINAL - 2020 All Japan Corporate Championships (Kumagaya, JPN)																		
date	19-Sep-20	time	6.36	11.45	16.75	22.47	28.40	34.51	40.96	48.18	48.18							
reaction time	0.204	interval		5.09	5.30	5.72	5.93	6.11	6.45	7.22								
		velocity	7.86	9.82	9.43	8.74	8.43	8.18	7.75	6.93	8.30							
											# of strides	11.45	11.02	12.04	13.67	22.47	25.71	3.24
												8.73	9.07	8.31	7.32	8.90	7.78	
Pitre, Marcus (USA) (1984)																		
FINAL - 2003 USATF National Junior Championships (Palo Alto, CA)																		
date	22-Jun-03	time				23.66		35.37	41.51	48.19	48.19							
reaction time		interval						11.71	6.14	6.68								
		velocity				8.45		8.54	8.14	7.49	8.30							
											# of strides			11.71	12.82	23.66	24.53	0.87
														8.54	7.80	8.45	8.15	
Nakamura, Akihiko (JPN) (1990)																		
Decathlon - Heat 2 - 2014 Asian Games (Incheon, KOR)																		
date	30-Sep-14	time	6.33	11.62	17.22	23.02	29.04	35.19	41.47	48.19	48.19							
reaction time		interval		5.29	5.60	5.80	6.02	6.15	6.28	6.72								
		velocity	7.90	9.45	8.93	8.62	8.31	8.13	7.96	7.44	8.30							
											# of strides	11.62	11.40	12.17	13.00	23.02	25.17	2.15
												8.61	8.77	8.22	7.69	8.69	7.95	
Meng Xinpeng (CHN) (2001)																		
FINAL - 2023 Chinese World Championship & Asian Games Trials (Shenyang, CHN)																		
date	28-Jun-23	time		11.64		22.37		34.23	40.68	48.19	48.19							
reaction time	0.215	interval				10.73		11.86	6.45	7.51								
		velocity		8.59		9.32		8.43	7.75	6.66	8.30							
											# of strides	11.64	10.73	11.86	13.96	22.37	25.82	3.45
												8.59	9.32	8.43	7.16	8.94	7.75	
Müller, Norman (GER) (1985)																		
Decathlon - Heat 3 - 2009 IAAF World Championships (Berlin, GER)																		
date	19-Aug-09	time		11.65		22.58		34.55		48.20	48.20							
reaction time	0.184	interval				10.93		11.97		13.65								
		velocity		8.58		9.15		8.35		7.33	8.30							
											# of strides	11.65	10.93	11.97	13.65	22.58	25.62	3.04
												8.58	9.15	8.35	7.33	8.86	7.81	
Wumaier Ailixier (CHN) (2006)																		
FINAL - 2023 Chinese National Grand Prix 1 (Rizhao, CHN)																		
date	26-Apr-23	time		11.53		22.63		35.10	41.49	48.20	48.20							
reaction time	0.183	interval				11.10		12.47	6.39	6.71								
		velocity		8.67		9.01		8.02	7.82	7.45	8.30							
											# of strides	11.53	11.10	12.47	13.10	22.63	25.57	2.94
												8.67	9.01	8.02	7.63	8.84	7.82	
Qiao Zhen (CHN) (2001)																		
Heat 3 - 2023 Chinese National Grand Prix 3 (Taizhou, CHN)																		
date	26-May-23	time		11.21		22.13		34.35	40.92	48.20	48.20							
reaction time	0.197	interval				10.92		12.22	6.57	7.28								
		velocity		8.92		9.16		8.18	7.61	6.87	8.30							
											# of strides	11.21	10.92	12.22	13.85	22.13	26.07	3.94
												8.92	9.16	8.18	7.22	9.04	7.67	
Kitahara, Ryota (JPN) (1998)																		
FINAL - 2015 Japanese National Youth Championships (Nagoya, JPN)																		
date	16-Oct-15	time	6.55	11.70	17.07	22.76	28.69	34.81	41.18	48.22	48.22							
reaction time		interval		5.15	5.37	5.69	5.93	6.12	6.37	7.04								
		velocity	7.63	9.71	9.31	8.79	8.43	8.17	7.85	7.10	8.30							
											# of strides	11.70	11.06	12.05	13.41	22.76	25.46	2.70
												8.55	9.04	8.30	7.46	8.79	7.86	
Hammi, Oussama (MAR) (2000)																		
National FINAL - 2022 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR)																		
date	05-Jun-22	time	6.52	11.80	17.30	22.92	28.96	35.41	41.74	48.22	48.22							
reaction time	0.242	interval		5.28	5.50	5.62	6.04	6.45	6.33	6.48	PB							
		velocity	7.67	9.47	9.09	8.90	8.28	7.75	7.90	7.72	8.30							
											# of strides	11.80	11.12	12.49	12.81	22.92	25.30	2.38
												8.47	8.99	8.01	7.81	8.73	7.91	
Kitakani, Naoki (JPN) (1998)																		
FINAL - 2015 Japanese National Youth Championships (Nagoya, JPN)																		
date	16-Oct-15	time	6.43	11.68	17.00	22.70	28.78	35.03	41.43	48.23	48.23							
reaction time		interval		5.25	5.32	5.70	6.08	6.25	6.40	6.80								
		velocity	7.78	9.52	9.40	8.77	8.22	8.00	7.81	7.35	8.29							
											# of strides	11.68	11.02	12.33	13.20	22.70	25.53	2.83
												8.56	9.07	8.11	7.58	8.81	7.83	
Kanemaru, Yuzo (JPN) (1987)																		
FINAL - 2018 Japanese National Championships (Yamaguchi, JPN)																		
date	23-Jun-18	time	6.20	11.31	16.57	22.12	28.01	34.37	41.07	48.23	48.23							
reaction time	0.170	interval		5.11	5.26	5.55	5.89	6.36	6.70	7.16								
		velocity	8.06	9.78	9.51	9.01	8.49	7.86	7.46	6.98	8.29							
											# of strides	11.31	10.81	12.25	13.86	22.12	26.11	3.99
												8.84	9.25	8.16	7.22	9.04	7.66	
Kasai, Kuraki (JPN) (2002)																		
FINAL - 2021 Japanese U20 National Championships (Osaka, JPN)																		
date	25-Jun-21	time	6.48	11.88	17.42	23.19	29.07	35.14	41.44	48.23	48.23							
reaction time	0.182	interval		5.40	5.54	5.77	5.88	6.07	6.30	6.79								
		velocity	7.72	9.26	9.03	8.67	8.50	8.24</										

	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Matsumoto, Akira (JPN) (1999)																		
U19 Semi-Final 2 - 2017 National Sports Festival (Matsuyama, JPN)																		
date	09-Oct-17	time	11.66	22.27	34.25	48.28	48.28	48.28	48.28	9 / 6								
reaction time	0.182	interval		10.61	11.98	14.03				# of strides	11.66	10.61	11.98	14.03	22.27	26.01	3.74	
		velocity	8.58	9.43	8.35	7.13	8.29	8.29	8.29	184.2	8.58	9.43	8.35	7.13	8.98	7.69		
Noda, Taiga (JPN) (1999)																		
U19 FINAL - 2017 National Sports Festival (Matsuyama, JPN)																		
date	08-Oct-17	time	11.96	23.46	35.75	48.28	48.28	48.28	48.28	9 / 7								
reaction time	0.179	interval		11.50	12.29	12.53				# of strides	11.96	11.50	12.29	12.53	23.46	24.82	1.36	
		velocity	8.36	8.70	8.14	7.98	8.29	8.29	8.29	176.2	8.36	8.70	8.14	7.98	8.53	8.06		
Satake, Yuzuki (JPN) (2003)																		
FINAL - 2021 Japanese High School National Championships (Fukui, JPN)																		
date	28-Jul-21	time	6.61	11.97	17.42	23.12	29.09	35.36	41.66	48.28	48.28	48.28	48.28	48.28	48.28	48.28	48.28	48.28
reaction time	0.146	interval		5.36	5.45	5.70	5.97	6.27	6.30	6.62								
		velocity	7.56	9.33	9.17	8.77	8.38	7.97	7.94	7.55	8.29	8.35	8.97	8.17	7.74	8.65	7.95	2.04
Okuda, Keisuke (JPN) (1996)																		
Decathlon - FINAL - 2022 Japanese Multi-Event National Championships (Akita, JPN)																		
date	04-Jun-22	time	6.34	11.55	16.92	22.63	28.67	34.94	41.50	48.28	48.28	48.28	48.28	48.28	48.28	48.28	48.28	48.28
reaction time		interval		5.21	5.37	5.71	6.04	6.27	6.56	6.78								
		velocity	7.89	9.60	9.31	8.76	8.28	7.97	7.62	7.37	8.29	8.66	9.03	8.12	7.50	8.84	7.80	3.02
Someya, Sho (JPN) (1997)																		
FINAL - 2015 Japanese National High School Championships (Wakayama, JPN)																		
date	29-Jul-15	time	6.71	12.12	17.68	23.48	29.39	35.38	41.59	48.29	48.29	48.29	48.29	48.29	48.29	48.29	48.29	48.29
reaction time		interval		5.41	5.56	5.80	5.91	5.99	6.21	6.70								
		velocity	7.45	9.24	8.99	8.62	8.46	8.35	8.05	7.46	8.28	8.25	8.80	8.40	7.75	8.52	8.06	1.33
Hudson-Smith, Matthew (GBR) (1994)																		
FINAL - 2021 Müller British Grand Prix (Gateshead, GBR)																		
date	13-Jul-21	time	6.3	11.4	16.7	22.3	28.2	34.3	41.0	48.29	48.29	48.29	48.29	48.29	48.29	48.29	48.29	48.29
reaction time	0.149	interval		5.10	5.30	5.60	5.90	6.10	6.70	7.29								
		velocity	7.94	9.80	9.43	8.93	8.47	8.20	7.46	6.86	8.28	8.77	9.17	8.33	7.15	8.97	7.70	3.69
Sakurai, Naoya (JPN) (1996)																		
Division 1 Semi-Final 1 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																		
date	26-May-17	time	11.70	22.81	34.93	48.30	48.30	48.30	48.30	48.30	48.30	48.30	48.30	48.30	48.30	48.30	48.30	48.30
reaction time		interval		11.11	12.12	13.37				# of strides	11.70	11.11	12.12	13.37	22.81	25.49	2.68	
		velocity	8.55	9.00	8.25	7.48	8.28	8.28	8.28	185.2	8.55	9.00	8.25	7.48	8.77	7.85		
Matsubara, Tetsuya (JPN) (1991)																		
FINAL - 2009 Japanese National High School Championships (Nara, JPN)																		
date	29-Jul-09	time	11.85	23.05	35.08	48.31	48.31	48.31	48.31	48.31	48.31	48.31	48.31	48.31	48.31	48.31	48.31	48.31
reaction time		interval		11.20	12.03	13.23				# of strides	11.85	11.20	12.03	13.23	23.05	25.26	2.21	
		velocity	8.44	8.93	8.31	7.56	8.28	8.28	8.28	184.2	8.44	8.93	8.31	7.56	8.68	7.92		
Furukawa, Ryo (JPN) (1992)																		
FINAL - 2010 Japanese National High School Championships (Okinawa, JPN)																		
date	29-Jul-10	time	6.47	11.97	17.43	23.14	28.96	35.14	41.51	48.31	48.31	48.31	48.31	48.31	48.31	48.31	48.31	48.31
reaction time		interval		5.50	5.46	5.71	5.82	6.18	6.37	6.80								
		velocity	7.73	9.09	9.16	8.76	8.59	8.09	7.85	7.35	8.28	8.35	8.95	8.33	7.59	8.64	7.95	2.03
Ishitsuka, Yusuke (JPN) (1987)																		
FINAL - 2015 National Sports Festival (Wakayama, JPN)																		
date	04-Oct-15	time	6.30	11.56	17.13	23.02	29.06	35.25	41.55	48.31	48.31	48.31	48.31	48.31	48.31	48.31	48.31	48.31
reaction time		interval		5.26	5.57	5.89	6.04	6.19	6.30	6.76								
		velocity	7.94	9.51	8.98	8.49	8.28	8.08	7.94	7.40	8.28	8.65	8.73	8.18	7.66	8.69	7.91	2.27
Swillims, Bastian (GER) (1982)																		
B FINAL - 2009 ISTAF (Berlin, GER)																		
date	14-Jun-09	time	11.51	22.56	34.73	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32
reaction time	0.354	interval		11.05	12.17	13.59				# of strides	11.51	11.05	12.17	13.59	22.56	25.76	3.20	
		velocity	8.69	9.05	8.22	7.36	8.28	8.28	8.28	184.2	8.69	9.05	8.22	7.36	8.87	7.76		
Furuta, Shinya (JPN) (1998)																		
FINAL - 2015 Japanese National Youth Championships (Nagoya, JPN)																		
date	16-Oct-15	time	6.56	11.90	17.27	22.98	29.01	35.18	41.57	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32
reaction time		interval		5.34	5.37	5.71	6.03	6.17	6.39	6.75								
		velocity	7.62	9.36	9.31	8.76	8.29	8.10	7.82	7.41	8.28	8.40	9.03	8.20	7.61	8.70	7.89	2.36
Kawabata, Kenta (JPN) (1996)																		
Heat 1 - 2017 National Sports Festival (Matsuyama, JPN)																		
date	08-Oct-17	time	12.22	23.63	35.51	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32
reaction time	0.172	interval		11.41	11.88	12.81				# of strides	12.22	11.41	11.88	12.81	23.63	24.69	1.06	
		velocity	8.18	8.76	8.42	7.81	8.28	8.28	8.28	198.0	8.18	8.76	8.42	7.81	8.46	8.10		
Mitsukiya, Kakeki (JPN)																		
FINAL - 2024 Shimane High School Championships (Izumo, JPN)																		
date	24-May-24	time	12.12	23.45	35.56	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32
reaction time		interval		11.33	12.11	12.76				# of strides	12.12	11.33	12.11	12.76	23.45	24.87	1.42	
		velocity	8.25	8.83	8.26	7.84	8.28	8.28	8.28	184.2	8.25	8.83	8.26	7.84	8.53	8.04		
Futayni, Ibrahim (KSA) (1999)																		
B FINAL - 2021 Doha Diamond League (Doha, QAT)																		
date	08-Oct-21	time	12.22	23.63	35.51	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32	48.32
reaction time	0.172	interval		11.41	11.88	12.81				# of strides	12.22	11.41	11.88	12.81	23.63	24.69	1.06	
		velocity	8.18	8.76	8.42	7.81	8.28	8.28	8.28	198.0	8.18	8.76	8.42	7.81	8.46	8.10		

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Kishida, Kentaro (JPN) (1994)																		
FINAL - 2012 Japanese National High School Championships (Niigata, JPN)																		
date	29-Jul-12	time	11.96	17.45	23.25	29.29	35.50	41.79	48.40	48.40	5 / 4							
reaction time		interval		11.62	12.02	12.80					# of strides	11.96	11.62	12.02	12.80	23.58	24.82	1.24
		velocity	8.36	8.61	8.32	7.81	8.26					8.36	8.61	8.32	7.81	8.48	8.06	
Miyagawa, Sota (JPN) (2001)																		
FINAL - 2018 Japanese National Youth (U18) Championships (Nagano, JPN)																		
date	19-Oct-18	time	6.62	11.94	17.45	23.25	29.29	35.50	41.79	48.40	8 / 6							
reaction time	0.186	interval		5.32	5.51	5.80	6.04	6.21	6.29	6.61	# of strides	11.94	11.31	12.25	12.90	23.25	25.15	1.90
		velocity	7.55	9.40	9.07	8.62	8.28	8.05	7.95	7.56		8.38	8.84	8.16	7.75	8.60	7.95	
Mayorga, Dexter (NCA) (1998)																		
Heat 5 - 2022 World Athletics Championships (Eugene, OR)																		
date	17-Jul-22	time		12.05	23.29	35.41	48.40		48.40	48.40	2 / 7							
reaction time	0.232	interval		11.24	12.12	12.99					# of strides	12.05	11.24	12.12	12.99	23.29	25.11	1.82
		velocity		8.30	8.90	8.25	7.70	8.26			191.7	8.30	8.90	8.25	7.70	8.59	7.96	
Takahashi, Yumitsu (JPN)																		
FINAL - 2017 Osaka University Athletics Championships (Osaka, JPN)																		
date	06-Apr-17	time	11.80	22.79	34.92	48.41		48.41	48.41	48.41	6 / 4							
reaction time		interval		10.99	12.13	13.49					# of strides	11.80	10.99	12.13	13.49	22.79	25.62	2.83
		velocity	8.47	9.10	8.24	7.41	8.26				184.5	8.47	9.10	8.24	7.41	8.78	7.81	
Yano, Takuto (JPN) (1994)																		
Heat 1 - 2017 National Sports Festival (Matsuyama, JPN)																		
date	08-Oct-17	time	11.43	22.45	34.85	48.41		48.41	48.41	48.41	2 / 5							
reaction time	0.166	interval		11.02	12.40	13.56					# of strides	11.43	11.02	12.40	13.56	22.45	25.96	3.51
		velocity	8.75	9.07	8.06	7.37	8.26				192.0	8.75	9.07	8.06	7.37	8.91	7.70	
Williams, Devon (USA) (1994)																		
Decathlon - Heat 1 - 2024 USA Olympic Trials (Eugene, OR)																		
date	21-Jun-24	time	11.45	22.81	35.02	48.42		48.42	48.42	48.42	5 / 1							
reaction time		interval		11.36	12.21	13.40					# of strides	11.45	11.36	12.21	13.40	22.81	25.61	2.80
		velocity	8.73	8.80	8.19	7.46	8.26					8.73	8.80	8.19	7.46	8.77	7.81	
Spence, Malcolm (RSA) (1937)																		
FINAL - 1956 Olympic Games (Melbourne, AUS)																		
date	29-Nov-56	time		22.0	34.1	48.3		48.3	48.3	48.3	1 / 6							
reaction time		interval		12.1	14.2	(48.40)					# of strides		22.00	12.10	14.20	22.00	26.30	4.30
		velocity		9.09	8.26	7.04	8.57						9.09	8.26	7.04	9.09	7.60	
Nomura, Kazuki (JPN) (1996)																		
FINAL - 2014 Japanese National High School Championships (Kofu, JPN)																		
date	30-Jul-14	time	6.64	11.92	17.18	22.67	28.29	34.54	41.29	48.44	8 / 8							
reaction time		interval		5.28	5.26	5.49	5.62	6.25	6.75	7.15	# of strides	11.92	10.75	11.87	13.90	22.67	25.77	3.10
		velocity	7.53	9.47	9.51	9.11	8.90	8.00	7.41	6.99		8.39	9.30	8.42	7.19	8.82	7.76	
Matyama, Haruki (JPN) (1996)																		
Division 1 Semi-Final 2 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																		
date	26-May-17	time	11.48	22.44	34.66	48.44		48.44	48.44	48.44	5 / 7							
reaction time		interval		10.96	12.22	13.78					# of strides	11.48	10.96	12.22	13.78	22.44	26.00	3.56
		velocity	8.71	9.12	8.18	7.26	8.26				195.7	8.71	9.12	8.18	7.26	8.91	7.69	
Noda, Taiga (JPN) (1999)																		
FINAL - 2017 Japanese National High School Championships (Yamagata, JPN)																		
date	29-Jul-17	time	6.44	11.81	17.32	23.24	29.39	35.73	42.10	48.44	3 / 6							
reaction time	0.178	interval		5.37	5.51	5.92	6.15	6.34	6.37	6.34	# of strides	11.81	11.43	12.49	12.71	23.24	25.20	1.96
		velocity	7.76	9.31	9.07	8.45	8.13	7.89	7.85	7.89		8.47	8.75	8.01	7.87	8.61	7.94	
Nyström, Alexander (SWE) (2003)																		
National FINAL - 2023 Bauhaus Galan (Stockholm, SWE)																		
date	02-Jul-23	time	6.50	11.76	17.26	22.98	28.87	35.07	41.52	48.44	3 / 7							
reaction time	0.175	interval		5.26	5.50	5.72	5.89	6.20	6.45	6.92	# of strides	11.76	11.22	12.09	13.37	22.98	25.46	2.48
		velocity	7.69	9.51	9.09	8.74	8.49	8.06	7.75	7.23		8.50	8.91	8.27	7.48	8.70	7.86	
Walburn, Lee (USA) (2000)																		
Decathlon - Heat 1 - 2024 USA Olympic Trials (Eugene, OR)																		
date	21-Jun-24	time	11.27	22.23	34.54	48.44		48.44	48.44	48.44	9 / 2							
reaction time		interval		10.96	12.31	13.90					# of strides	11.27	10.96	12.31	13.90	22.23	26.21	3.98
		velocity	8.87	9.12	8.12	7.19	8.26					8.87	9.12	8.12	7.19	9.00	7.63	
Al Jabri, Hah (OMA) (2004)																		
Heat A - West Asian Championships - 2024 Seashore Doha Meeting (Doha, QAT)																		
date	10-May-24	time	6.32	11.63	17.38	23.26	29.25	35.46	41.81	48.45	3 / 3							
reaction time	0.188	interval		5.31	5.75	5.88	5.99	6.21	6.35	6.64	# of strides	11.63	11.63	12.20	12.99	23.26	25.19	1.93
		velocity	7.91	9.42	8.70	8.50	8.35	8.05	7.87	7.53		8.60	8.60	8.20	7.70	8.60	7.94	
Yukihiko, Koki (JPN)																		
FINAL - 2016 Japanese National High School Championships (Okayama, JPN)																		
date	29-Jul-16	time	6.62	12.15	17.85	23.70	29.75	35.90	42.01	48.46	9 / 8							
reaction time	0.162	interval		5.53	5.70	5.85	6.05	6.15	6.11	6.45	# of strides	12.15	11.55	12.20	12.56	23.70	24.76	1.06
		velocity	7.55	9.04	8.77	8.55	8.26	8.13	8.18	7.75		8.23	8.66	8.20	7.96	8.44	8.08	
Tamura, Tomoya (JPN) (1992)																		
A FINAL - 2018 Shizuoka International Meeting (Fukuroi, JPN)																		
date		time																

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Hukumura, Yuto (JPN) (2006)																			
FINAL - 2024 Japanese National High School Championships (Fukuoka, JPN)																			
date	28-Jul-24	time	11.58		22.79		34.80		48.55	48.55	3 / 6								
reaction time	0.178	interval			11.21		12.01		13.75		# of strides	11.58	11.21	12.01	13.75	22.79	25.76	2.97	
		velocity	8.64		8.92		8.33		7.27	8.24		8.64	8.92	8.33	7.27	8.78	7.76		
Hirose, Hideyuki (JPN) (1989)																			
Heat 1 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time	11.63		22.53		35.03		48.56	48.56	3 / 6								
reaction time	0.169	interval			10.90		12.50		13.53		# of strides	11.63	10.90	12.50	13.53	22.53	26.03	3.50	
		velocity	8.60		9.17		8.00		7.39	8.24	185.5	8.60	9.17	8.00	7.39	8.88	7.68		
Arai, Yusuke (JPN)																			
Division 2 Semi-Final 1 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time	11.83		23.23		35.36		48.56	48.56	3 / 7								
reaction time		interval			11.40		12.13		13.20		# of strides	11.83	11.40	12.13	13.20	23.23	25.33	2.10	
		velocity	8.45		8.77		8.24		7.58	8.24	182.2	8.45	8.77	8.24	7.58	8.61	7.90		
Nabeshima, Ebusu (JPN) (2000)																			
U19 Semi-Final 2 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time	11.62		22.54		34.98		48.56	48.56	2 / 7								
reaction time	0.197	interval			10.92		12.44		13.58		# of strides	11.62	10.92	12.44	13.58	22.54	26.02	3.48	
		velocity	8.61		9.16		8.04		7.36	8.24	185.2	8.61	9.16	8.04	7.36	8.87	7.69		
Fujita, Shinya (JPN) (1993)																			
FINAL - 2017 Osaka University Athletics Championships (Osaka, JPN)																			
date	06-Apr-17	time	11.81		23.18		35.00		48.57	48.57	3 / 6								
reaction time		interval			11.37		11.82		13.57		# of strides	11.81	11.37	11.82	13.57	23.18	25.39	2.21	
		velocity	8.47		8.80		8.46		7.37	8.24	193.0	8.47	8.80	8.46	7.37	8.63	7.88		
Maizen, Ali (QAT)																			
FINAL - 2023 Doha Diamond League (Doha, QAT)																			
date	05-May-23	time	6.38	11.65	17.31	23.14	29.15	35.22	41.43	48.57	48.57	2 / 4							
reaction time	0.199	interval		5.27	5.66	5.83	6.01	6.07	6.21	7.14		# of strides	11.65	11.49	12.08	13.35	23.14	25.43	
		velocity	7.84	9.49	8.83	8.58	8.32	8.24	8.05	7.00	8.24		8.58	8.70	8.28	7.49	8.64	7.86	
Bouraada, Larbi (ALG) (1988)																			
Decathlon - Heat 2 - 2009 IAAF World Championships (Berlin, GER)																			
date	19-Aug-09	time	11.35		22.00		34.20		48.58	48.58	2 / 6								
reaction time	0.141	interval			10.65		12.20		14.38		# of strides	11.35	10.65	12.20	14.38	22.00	26.58	4.58	
		velocity	8.81		9.39		8.20		6.95	8.23		8.81	9.39	8.20	6.95	9.09	7.52		
Tilga, Karel (EST) (1998)																			
Decathlon - Heat 2 - 2023 World Athletics Championships (Budapest, HUN)																			
date	25-Aug-23	time	11.78		23.13		34.99		48.58	48.58	9 / 4								
reaction time	0.178	interval			11.35		11.86		13.59		# of strides	11.78	11.35	11.86	13.59	23.13	25.45	2.32	
		velocity	8.49		8.81		8.43		7.36	8.23		8.49	8.81	8.43	7.36	8.65	7.86		
Baldwin, Heath (USA) (2001)																			
Decathlon - Heat 1 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time	11.46		22.48		34.79		48.58	48.58	8 / 3								
reaction time		interval			11.02		12.31		13.79	PB	# of strides	11.46	11.02	12.31	13.79	22.48	26.10	3.62	
		velocity	8.73		9.07		8.12		7.25	8.23		8.73	9.07	8.12	7.25	8.90	7.66		
Aikyo, Shotaro (JPN) (1994)																			
FINAL - 2011 Japanese National High School Championships (Kitamaki, JPN)																			
date	04-Aug-11	time	11.78		23.03		34.95		48.59	48.59	8 / 8								
reaction time		interval			11.25		11.92		13.64		# of strides	11.78	11.25	11.92	13.64	23.03	25.56	2.53	
		velocity	8.49		8.89		8.39		7.33	8.23		8.49	8.89	8.39	7.33	8.68	7.82		
Nozaki, Tsuyoshi (JPN)																			
FINAL - 2016 Japanese National Youth Championships (Mizuho, JPN)																			
date	21-Oct-16	time	6.59	12.00	17.52	23.25	29.18	35.38	41.84	48.59	48.59	8 / 7							
reaction time		interval		5.41	5.52	5.73	5.93	6.20	6.46	6.75		# of strides	12.00	11.25	12.13	13.21	23.25	25.34	
		velocity	7.59	9.24	9.06	8.73	8.43	8.06	7.74	7.41	8.23		8.33	8.89	8.24	7.57	8.60	7.89	
Umikawa, Shigeru (JPN)																			
FINAL - 2016 Japanese National Youth Championships (Mizuho, JPN)																			
date	21-Oct-16	time	6.53	11.86	17.32	22.93	28.85	35.13	41.71	48.60	48.60	2 / 8							
reaction time		interval		5.33	5.46	5.61	5.92	6.28	6.58	6.89		# of strides	11.86	11.07	12.20	13.47	22.93	25.67	
		velocity	7.66	9.38	9.16	8.91	8.45	7.96	7.60	7.26	8.23		8.43	9.03	8.20	7.42	8.72	7.79	
Suzuki, Yumeto (JPN)																			
Division 2 FINAL - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time	11.98		23.50		35.72		48.60	48.60	2 / 7								
reaction time		interval			11.52		12.22		12.88		# of strides	11.98	11.52	12.22	12.88	23.50	25.10	1.60	
		velocity	8.35		8.68		8.18		7.76	8.23		8.35	8.68	8.18	7.76	8.51	7.97		
Wang Hongliang (CHN) (2000)																			
FINAL - 2023 Chinese National Grand Prix 1 (Rizhao, CHN)																			
date	26-Apr-23	time	12.09		23.54		35.74		48.60	48.60	2 / 6								
reaction time	0.155	interval			11.45		12.20		6.32	6.54	# of strides	12.09	11.45	12.20	12.86	23.54	25.06	1.52	
		velocity	8.27		8.73		8.20		7.91	7.65	8.23		8.27	8.73	8.20	7.78	8.50	7.98	
Tang Jiajun (CHN) (2005)																			
FINAL - 2023 Chinese National Grand Prix 1 (Rizhao, CHN)																			

date	26-Apr-23	time	11.96	23.29	35.50	41.90	48.60	48.60	1 / 7										
reaction time	0.179	interval		11.33	12.21	6.40	6.70		# of strides	11.96	11.33	12.21	13.10	23.29	25.31	2.02			
		velocity	8.36	8.83	8.19	7.81	7.46	8.23	180.7	8.36	8.83	8.19	7.63	8.59	7.90				
Zheng Chiyu (CHN) (2003)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2024 Chinese National Championships (Quzhou, CHN)																			
date	16-Sep-24	time	12.21	23.59	35.80	42.01	48.60	48.60	2 / 8										
reaction time	0.200	interval		11.38	12.21	6.21	6.59		# of strides	12.21	11.38	12.21	12.80	23.59	25.01	1.42			
		velocity	8.19	8.79	8.19	8.05	7.59	8.23	175.0	8.19	8.79	8.19	7.81	8.48	8.00				
Kitamura, Shuya (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Division 2 Semi-Final 2 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time	11.76	22.89	35.07	48.62	48.62	48.62	9 / 5										
reaction time		interval		11.13	12.18	13.55			# of strides	11.76	11.13	12.18	13.55	22.89	25.73	2.84			
		velocity	8.50	8.98	8.21	7.38	8.23	8.23	184.2	8.50	8.98	8.21	7.38	8.74	7.77				
Nakatsukue, Haruhiko (JPN) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
U19 FINAL - 2016 National Sports Festival (Kitakami, JPN)																			
date	10-Oct-16	time	6.54	11.92	17.50	23.39	29.44	35.64	42.01	48.62	48.62								
reaction time	0.208	interval		5.38	5.58	5.89	6.05	6.20	6.37	6.61		# of strides	11.92	11.47	12.25	12.98	23.39	25.23	1.84
		velocity	7.65	9.29	8.96	8.49	8.26	8.06	7.85	7.56	8.23	8.39	8.72	8.16	7.70	8.55	7.93		
Coertzen, Willem (RSA) (1982)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Decathlon - Heat 4 - 2009 IAAF World Championships (Berlin, GER)																			
date	19-Aug-09	time	11.42	22.62	34.84	48.63	48.63	48.63	2 / 3										
reaction time	0.189	interval		11.20	12.22	13.79			# of strides	11.42	11.20	12.22	13.79	22.62	26.01	3.39			
		velocity	8.76	8.93	8.18	7.25	8.23	8.23	184.2	8.76	8.93	8.18	7.25	8.84	7.69				
Kawauchi, Mitsuki (JPN) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 1 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time	11.57	22.34	34.73	48.63	48.63	48.63	7 / 7										
reaction time	0.211	interval		10.77	12.39	13.90			# of strides	11.57	10.77	12.39	13.90	22.34	26.29	3.95			
		velocity	8.64	9.29	8.07	7.19	8.23	8.23	193.2	8.64	9.29	8.07	7.19	8.95	7.61				
Asano, Daichi (JPN) (2004)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2021 Japanese High School National Championships (Fukui, JPN)																			
date	28-Jul-21	time	6.73	12.16	17.75	23.45	29.31	35.46	41.86	48.63	48.63								
reaction time	0.171	interval		5.43	5.59	5.70	5.86	6.15	6.40	6.77		# of strides	12.16	11.29	12.01	13.17	23.45	25.18	1.73
		velocity	7.43	9.21	8.94	8.77	8.53	8.13	7.81	7.39	8.23	8.22	8.86	8.33	7.59	8.53	7.94		
Myers, Lon (USA) (1858)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1881 Time Trial in Solo Effort (New York, NY) (640y Circuit)																			
date	22-Oct-81	time			34.8	48.5	48.5	48.5	1 / 1										
reaction time		interval			8.62	13.7			# of strides					13.70					
		velocity				7.30	8.25	8.25	(48 4/5 /440y)					7.30					
Miki, Kondo (JPN)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2016 China Perfecture High School Championships (Okayama, JPN)																			
date	17-Jun-16	time	12.35	23.60	35.51	48.64	48.64	48.64	6 / 6										
reaction time		interval		11.25	11.91	13.13			# of strides	12.35	11.25	11.91	13.13	23.60	25.04	1.44			
		velocity	8.10	8.89	8.40	7.62	8.22	8.22	184.2	8.10	8.89	8.40	7.62	8.47	7.99				
Claridge, Ben (GBR) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
National FINAL - 2019 Bislett Games (Oslo, NOR)																			
date	13-Jun-19	time	11.5	22.4	34.6	48.64	48.64	48.64	5 / 4										
reaction time	0.160	interval		10.9	12.2	14.0			# of strides	11.50	10.90	12.20	14.04	22.40	26.24	3.84			
		velocity	8.70	9.17	8.20	7.12	8.22	8.22	184.2	8.70	9.17	8.20	7.12	8.93	7.62				
Flück, Luca (SUI) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
B Race - 2021 Athletissima (Lausanne, SUI)																			
date	26-Aug-21	time	6.5	11.9	17.5	23.3	29.3	35.5	41.8	48.64	48.64								
reaction time	0.167	interval		5.40	5.60	5.80	6.00	6.20	6.30	6.84		# of strides	11.90	11.40	12.20	13.14	23.30	25.34	2.04
		velocity	7.69	9.26	8.93	8.62	8.33	8.06	7.94	7.31	8.22	8.40	8.77	8.20	7.61	8.58	7.89		
Sato, Kentaro (JPN) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2020 All Japan Corporate Championships (Kumagaya, JPN)																			
date	19-Sep-20	time	6.24	11.33	16.55	21.99	27.86	34.36	41.24	48.65	48.65								
reaction time	0.225	interval		5.09	5.22	5.44	5.87	6.50	6.88	7.41		# of strides	11.33	10.66	12.37	14.29	21.99	26.66	4.67
		velocity	8.01	9.82	9.58	9.19	8.52	7.69	7.27	6.75	8.22	8.83	9.38	8.08	7.00	9.10	7.50		
Tilga, Karel (EST) (1998)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Decathlon - Heat 2 - 2024 Olympic Games (Paris, FRA)																			
date	02-Aug-24	time	6.50	11.82	17.25	22.92	28.84	35.10	41.65	48.67	48.67								
reaction time	0.189	interval		5.32	5.43	5.67	5.92	6.26	6.55	7.02		# of strides	11.82	11.10	12.18	13.57	22.92	25.75	2.83
		velocity	7.69	9.40	9.21	8.82	8.45	7.99	7.63	7.12	8.22	165.0	8.46	9.01	8.21	7.37	8.73	7.77	
Sato, Keitaro (JPN) (1991)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2007 Japanese National High School Championships (Saga, JPN)																			
date	02-Aug-07	time	6.32	12.04	18.07	24.32	30.54	36.51	42.41	48.68	48.68								
reaction time		interval		5.72	6.03	6.25	6.22	5.97	5.90	6.27		# of strides	12.04	12.28	12.19	12.17	24.32	24.36	0.04
		velocity	7.91	8.74	8.29	8.00	8.04	8.38	8.47	7.97	8.22	8.31	8.14	8.20	8.22	8.22	8.21		
Shirahata, Daiki (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Division 1 Semi-Final 1 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time	11.78	23.07	35.17	48.68	48.68	48.68	2 / 6										
reaction time		interval		11.29	12.10	13.51			# of strides	11.78	11.29	12.10	13.51	23.07	25.61	2.54			
		velocity	8.49	8.86	8.26	7.40	8.22	8.22	176.5	8.49	8.86	8.26	7.40	8.67	7.81				

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Nakagawa, Yuichiro (JPN)																			
B FINAL - 2017 Nanbu Memorial Meeting (Sapporo, JPN)																			
date	09-Jul-17	time	11.75		23.33		35.45		48.68	48.68	3 / 2								
reaction time		interval			11.58		12.12		13.23		# of strides	11.75	11.58	12.12	13.23	23.33	25.35	2.02	
		velocity	8.51		8.64		8.25		7.56	8.22	195.0	8.51	8.64	8.25	7.56	8.57	7.89		
Kojima, Sota (JPN) (2004)																			
FINAL - 2022 Japanese National High School Championships (Naruto, JPN)																			
date	03-Aug-22	time	11.95		23.45		35.80		48.68	48.68	2 / 7								
reaction time	0.162	interval			11.50		12.35		12.88		# of strides	11.95	11.50	12.35	12.88	23.45	25.23	1.78	
		velocity	8.37		8.70		8.10		7.76	8.22	186.0	8.37	8.70	8.10	7.76	8.53	7.93		
Wakabayashi, Kota (JPN) (1997)																			
Heat 2 - 2020 Japanese National Championships (Niigata, JPN)																			
date	01-Oct-20	time	6.22	11.21	16.40	22.01	27.94	34.22	40.88	48.70	48.70	4 / 5							
reaction time	0.169	interval		4.99	5.19	5.61	5.93	6.28	6.66	7.82		# of strides	11.21	10.80	12.21	14.48	22.01	26.69	4.68
		velocity	8.04	10.02	9.63	8.91	8.43	7.96	7.51	6.39	8.21	8.92	9.26	8.19	6.91	9.09	7.49		
Taleb, Lahssen (MAR) (2005)																			
National FINAL - 2023 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR)																			
date	28-May-23	time	6.76	12.23	17.72	23.49	29.32	35.37	41.75	48.70	48.70	8 / 6							
reaction time	0.240	interval		5.47	5.49	5.77	5.83	6.05	6.38	6.95	PB	# of strides	12.23	11.26	11.88	13.33	23.49	25.21	1.72
		velocity	7.40	9.14	9.11	8.67	8.58	8.26	7.84	7.19	8.21	8.18	8.88	8.42	7.50	8.51	7.93		
Muraki, Daiki (JPN) (1996)																			
Division 1 Semi-Final 1 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time	11.83		23.14		35.49		48.71	48.71	8 / 7								
reaction time		interval			11.31		12.35		13.22		# of strides	11.83	11.31	12.35	13.22	23.14	25.57	2.43	
		velocity	8.45		8.84		8.10		7.56	8.21	184.5	8.45	8.84	8.10	7.56	8.64	7.82		
Behrenbruch, Pascal (GER) (1985)																			
Decathlon - Heat 3 - 2009 IAAF World Championships (Berlin, GER)																			
date	19-Aug-09	time	11.35		22.54		34.86		48.72	48.72	8 / 2								
reaction time	0.142	interval			11.19		12.32		13.86		# of strides	11.35	11.19	12.32	13.86	22.54	26.18	3.64	
		velocity	8.81		8.94		8.12		7.22	8.21	185.0	8.81	8.94	8.12	7.22	8.87	7.64		
Sakurai, Takahiro (JPN) (1995)																			
FINAL - 2012 Japanese National High School Championships (Niigata, JPN)																			
date	29-Jul-12	time	12.11		24.05		36.48		48.72	48.72	7 / 5								
reaction time		interval			11.94		12.43		12.24		# of strides	12.11	11.94	12.43	12.24	24.05	24.67	0.62	
		velocity	8.26		8.38		8.05		8.17	8.21	185.0	8.26	8.38	8.05	8.17	8.32	8.11		
Arai, Masanori (JPN) (1994)																			
FINAL - 2012 Japanese National High School Championships (Niigata, JPN)																			
date	29-Jul-12	time	12.11		24.05		36.48		48.72	48.72	2 / 6								
reaction time		interval			11.94		12.43		12.24		# of strides	12.11	11.94	12.43	12.24	24.05	24.67	0.62	
		velocity	8.26		8.38		8.05		8.17	8.21	185.0	8.26	8.38	8.05	8.17	8.32	8.11		
Suzuki, Mitsuhiro (JPN) (1995)																			
Division 1 FINAL - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time	11.77		22.91		34.86		48.72	48.72	2 / 8								
reaction time		interval			11.14		11.95		13.86		# of strides	11.77	11.14	11.95	13.86	22.91	25.81	2.90	
		velocity	8.50		8.98		8.37		7.22	8.21	187.2	8.50	8.98	8.37	7.22	8.73	7.75		
Tsunaga, Kanno (JPN) (1999)																			
U19 Heat 1 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time	11.71		23.34		35.47		48.72	48.72	3 / 5								
reaction time	0.186	interval			11.63		12.13		13.25		# of strides	11.71	11.63	12.13	13.25	23.34	25.38	2.04	
		velocity	8.54		8.60		8.24		7.55	8.21	200.5	8.54	8.60	8.24	7.55	8.57	7.88		
Wiberg, Nicklas (SWE) (1985)																			
Decathlon - Heat 4 - 2009 IAAF World Championships (Berlin, GER)																			
date	19-Aug-09	time	11.76		22.95		35.09		48.73	48.73	4 / 4								
reaction time	0.198	interval			11.19		12.14		13.64		# of strides	11.76	11.19	12.14	13.64	22.95	25.78	2.83	
		velocity	8.50		8.94		8.24		7.33	8.21	185.0	8.50	8.94	8.24	7.33	8.71	7.76		
Kudo, Taisei (JPN) (1996)																			
Heat 1 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time	11.61		22.55		34.79		48.74	48.74	4 / 8								
reaction time	0.214	interval			10.94		12.24		13.95		# of strides	11.61	10.94	12.24	13.95	22.55	26.19	3.64	
		velocity	8.61		9.14		8.17		7.17	8.21	188.0	8.61	9.14	8.17	7.17	8.87	7.64		
Delgado, Joe (USA) (1995)																			
Decathlon - Heat 1 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time	11.71		22.94		35.43		48.74	48.74	7 / 4								
reaction time		interval			11.23		12.49		13.31		# of strides	11.71	11.23	12.49	13.31	22.94	25.80	2.86	
		velocity	8.54		8.90		8.01		7.51	8.21	185.0	8.54	8.90	8.01	7.51	8.72	7.75		
Katayama, Takuya (JPN) (2000)																			
U19 Semi-Final 1 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time	11.98		23.43		35.60		48.75	48.75	8 / 8								
reaction time	0.209	interval			11.45		12.17		13.15		# of strides	11.98	11.45	12.17	13.15	23.43	25.32	1.89	
		velocity	8.35		8.73		8.22		7.60	8.21	179.0	8.35	8.73	8.22	7.60	8.54	7.90		
Krauchanka, Andrei (BLR) (1986)																			
Decathlon - Heat 4 - 2009 IAAF World Championships (Berlin, GER)																			

date	19-Aug-09	time	11.63	22.88	35.17	48.77	48.77	6 / 5												
reaction time	0.207	interval		11.25	12.29	13.60		# of strides	11.63	11.25	12.29	13.60	22.88	25.89	3.01					
		velocity	8.60	8.89	8.14	7.35	8.20		8.60	8.89	8.14	7.35	8.74	7.72						
Black, Sam (USA) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Decathlon - Heat 1 - 2024 USA Olympic Trials (Eugene, OR)																				
date	21-Jun-24	time	11.74	22.98	35.19	48.78	48.78	6 / 5												
reaction time		interval		11.24	12.21	13.59		# of strides	11.74	11.24	12.21	13.59	22.98	25.80	2.82					
		velocity	8.52	8.90	8.19	7.36	8.20		8.52	8.90	8.19	7.36	8.70	7.75						
Ferreira Santana, Jose (BRA) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Decathlon - Heat 1 - 2024 Olympic Games (Paris, FRA)																				
date	02-Aug-24	time	6.49	11.84	17.43	23.22	29.26	35.57	42.07	48.78	48.78	6 / 2								
reaction time	0.157	interval		5.35	5.59	5.79	6.04	6.31	6.50	6.71	PB	# of strides	11.84	11.38	12.35	13.21	23.22	25.56	2.34	
		velocity	7.70	9.35	8.94	8.64	8.28	7.92	7.69	7.45	8.20		181.0	8.45	8.79	8.10	7.57	8.61	7.82	
Honma, Daisuke (JPN) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2013 Japanese National High School Championships (Oita, JPN)																				
date	30-Jul-13	time	12.02	23.37	35.45	48.79	48.79	6 / 8												
reaction time		interval		11.35	12.08	13.34		# of strides	12.02	11.35	12.08	13.34	23.37	25.42	2.05					
		velocity	8.32	8.81	8.28	7.50	8.20		8.32	8.81	8.28	7.50	8.56	7.87						
Sasaki, Hayata (JPN) (1996)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2017 Osaka University Athletics Championships (Osaka, JPN)																				
date	06-Apr-17	time	11.93	22.92	35.22	48.79	48.79	9 / 7												
reaction time		interval		10.99	12.30	13.57		# of strides	11.93	10.99	12.30	13.57	22.92	25.87	2.95					
		velocity	8.38	9.10	8.13	7.37	8.20		8.38	9.10	8.13	7.37	8.73	7.73						
Öglane, Janek (EST) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Decathlon - Heat 1 - 2023 World Athletics Championships (Budapest, HUN)																				
date	25-Aug-23	time	11.78	23.19	35.29	48.41	48.41	2 / 2												
reaction time	0.163	interval		11.41	12.10	13.12	PB	# of strides	11.78	11.41	12.10	13.12	23.19	25.22	2.03					
		velocity	8.49	8.76	8.26	7.62	8.26		180.7	8.49	8.76	8.26	7.62	8.62	7.93					
Yoshimura, Kengo (JPN) (1991)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2009 Japanese National High School Championships (Nara, JPN)																				
date	29-Jul-09	time	11.72	23.67	35.99	48.82	48.82	8 / 7												
reaction time		interval		11.95	12.32	12.83		# of strides	11.72	11.95	12.32	12.83	23.67	25.15	1.48					
		velocity	8.53	8.37	8.12	7.79	8.19		8.53	8.37	8.12	7.79	8.45	7.95						
Masuda, Shion (JPN) (2001)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2018 Japanese National Youth (U18) Championships (Nagano, JPN)																				
date	19-Oct-18	time	6.52	11.87	17.37	23.18	29.15	35.32	41.79	48.84	48.84	1 / 8								
reaction time		interval		5.35	5.50	5.81	5.97	6.17	6.47	7.05		# of strides	11.87	11.31	12.14	13.52	23.18	25.66	2.48	
		velocity	7.67	9.35	9.09	8.61	8.38	8.10	7.73	7.09	8.19		8.42	8.84	8.24	7.40	8.63	7.79		
Abdulrahman, Mohamed Moussa (QAT)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
B FINAL - 2021 Doha Diamond League (Doha, QAT)																				
date	28-May-21	time	6.3	11.4	16.8	22.5	28.4	34.6	41.3	48.84	48.84	8 / 6								
reaction time	0.164	interval		5.10	5.40	5.70	5.90	6.20	6.70	7.54		# of strides	11.40	11.10	12.10	14.24	22.50	26.34	3.84	
		velocity	7.94	9.80	9.26	8.77	8.47	8.06	7.46	6.63	8.19		8.77	9.01	8.26	7.02	8.89	7.59		
Han Zhiyu (CHN) (2004)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 5 - 2023 Chinese National Grand Prix 1 (Rizhao, CHN)																				
date	26-Apr-23	time	11.73	22.64	35.22	41.93	48.84	48.84	2 / 4											
reaction time	0.197	interval		10.91	12.58	6.71	6.91	PB	# of strides	11.73	10.91	12.58	13.62	22.64	26.20	3.56				
		velocity	8.53	9.17	7.95	7.45	7.24	8.19		172.0	8.53	9.17	7.95	7.34	8.83	7.63				
El Boussiri, Walid (MAR) (2006)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
National FINAL - 2023 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR)																				
date	28-May-23	time	6.66	12.14	17.77	23.63	29.58	35.65	41.95	48.84	48.84	7 / 7								
reaction time	0.226	interval		5.48	5.63	5.86	5.95	6.07	6.30	6.89	PB	# of strides	12.14	11.49	12.02	13.19	23.63	25.21	1.58	
		velocity	7.51	9.12	8.88	8.53	8.40	8.24	7.94	7.26	8.19		8.24	8.70	8.32	7.58	8.46	7.93		
Hasidume, Tatuki (JPN) (2006)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2024 Japanese National High School Championships (Fukuoka, JPN)																				
date	28-Jul-24	time	11.76	22.96	35.19	48.84	48.84	7 / 7												
reaction time	0.170	interval		11.20	12.23	13.65		# of strides	11.76	11.20	12.23	13.65	22.96	25.88	2.92					
		velocity	8.50	8.93	8.18	7.33	8.19		8.50	8.93	8.18	7.33	8.71	7.73						
Thebe, Baboloki (BOT) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2019 Bauhaus Galan (Stockholm, SWE)																				
date	30-May-19	time	11.3	22.2	33.9	48.85	48.85	3 / 8												
reaction time	0.170	interval		10.9	11.7	15.0		# of strides	11.30	10.90	11.70	14.95	22.20	26.65	4.45					
		velocity	8.85	9.17	8.55	6.69	8.19		8.85	9.17	8.55	6.69	9.01	7.50						
Kanamori, Reiya (JPN) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2017 Kansai Regional University Championships (Osaka, JPN)																				
date	11-May-17	time	12.25	23.74	35.71	48.86	48.86	6 / 8												
reaction time		interval		11.49	11.97	13.15		# of strides	12.25	11.49	11.97	13.15	23.74	25.12	1.38					
		velocity	8.16	8.70	8.35	7.60	8.19		8.16	8.70	8.35	7.60	8.42	7.96						
Ibrahim Issaka, Hussein (QAT) (2003)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat B - West Asian Championships - 2024 Seashore Doha Meeting (Doha, QAT)																				
date	10-May-24	time	6.39	11.68	17.20	22.98	29.00	35.29	41.86	48.86	48.86	6 / 2								
reaction time	0.228	interval		5.29	5.52	5.78	6.02	6.29	6.57	7.00		# of strides	11.68	11.30	12.31	13.57	22.98	25.88	2.90	
		velocity	7.82	9.45	9.06	8.65	8.31	7.95	7.61	7.14										

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Nakamura, Akihiko (JPN) (1990)																			
Decathlon - Heat 2 - 2018 Tokyo Combined Event Meeting (Tokyo, JPN)																			
date	21-Apr-18	time	6.45	11.89	17.37	23.03	28.96	35.30	41.95	48.89	48.89	4 / 1							
reaction time		interval		5.44	5.48	5.66	5.93	6.34	6.65	6.94		# of strides	11.89	11.14	12.27	13.59	23.03	25.86	2.83
		velocity	7.75	9.19	9.12	8.83	8.43	7.89	7.52	7.20	8.18		8.41	8.98	8.15	7.36	8.68	7.73	
Nazih, Yahya (MAR) (2000)																			
National FINAL - 2022 Meeting International Mohammed VI d'Atlétime (Rabat, MAR)																			
date	05-Jun-22	time	6.44	11.78	17.38	23.13	29.27	35.55	41.91	48.89	48.89	8 / 5							
reaction time	0.164	interval		5.34	5.60	5.75	6.14	6.28	6.36	6.98		# of strides	11.78	11.35	12.42	13.34	23.13	25.76	2.63
		velocity	7.76	9.36	8.93	8.70	8.14	7.96	7.86	7.16	8.18		8.49	8.81	8.05	7.50	8.65	7.76	
Yousif, Rabah (GBR) (1986)																			
National FINAL - 2023 Bauhaus Galan (Stockholm, SWE)																			
date	02-Jul-23	time	6.56	11.87	17.30	22.90	28.82	35.10	41.67	48.89	48.89	7 / 7							
reaction time	0.164	interval		5.31	5.43	5.60	5.92	6.28	6.57	7.22		# of strides	11.87	11.03	12.20	13.79	22.90	25.99	3.09
		velocity	7.62	9.42	9.21	8.93	8.45	7.96	7.61	6.93	8.18		8.42	9.07	8.20	7.25	8.73	7.70	
Hoshino, Sota (JPN) (1998)																			
Division 2 FINAL - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time		12.42		23.65		35.74		48.90	48.90	3 / 8							
reaction time		interval			11.23		12.09		13.16			# of strides	12.42	11.23	12.09	13.16	23.65	25.25	1.60
		velocity		8.05		8.90		8.27		7.60	8.18		171.5	8.05	8.90	8.27	7.60	8.46	7.92
Kajiyama, Kaitama (JPN) (1999)																			
U19 Heat 1 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time		11.92		23.41		35.62		48.91	48.91	4 / 6							
reaction time	0.183	interval			11.49		12.21		13.29			# of strides	11.92	11.49	12.21	13.29	23.41	25.50	2.09
		velocity		8.39		8.70		8.19		7.52	8.18		8.39	8.70	8.19	7.52	8.54	7.84	
Mohadjir, Abdel Madjid (QAT) (2003)																			
B FINAL - 2021 Doha Diamond League (Doha, QAT)																			
date	28-May-21	time	6.4	11.8	17.2	23.0	28.9	35.1	41.5	48.91	48.91	3 / 7							
reaction time	0.149	interval		5.40	5.40	5.80	5.90	6.20	6.40	7.41	PB	# of strides	11.80	11.20	12.10	13.81	23.00	25.91	2.91
		velocity	7.81	9.26	9.26	8.62	8.47	8.06	7.81	6.75	8.18		8.47	8.93	8.26	7.24	8.70	7.72	
Han Zhiyu (CHN) (2004)																			
Heat 3 - 2023 Chinese National Grand Prix 5 (Huangshi, CHN)																			
date	09-Jun-23	time		11.64		22.82		35.30	41.89	48.91	48.91	7 / 6							
reaction time	0.239	interval			11.18		12.48	6.59	7.02			# of strides	11.64	11.18	12.48	13.61	22.82	26.09	3.27
		velocity		8.59		8.94		8.01	7.59	7.12	8.18		169.2	8.59	8.94	8.01	7.35	8.76	7.67
Garland, Kyle (USA) (2000)																			
Decathlon - Heat 3 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time		11.33		22.30		34.95		48.91	48.91	7 / 6							
reaction time		interval			10.97		12.65		13.96			# of strides	11.33	10.97	12.65	13.96	22.30	26.61	4.31
		velocity		8.83		9.12		7.91	7.16	8.18			8.83	9.12	7.91	7.16	8.97	7.52	
Yoshitsu, Takao (JPN)																			
FINAL - 2016 Japanese National Junior Championships (Mizuho, JPN)																			
date	21-Oct-16	time	6.59	12.17	17.82	23.59	29.55	35.68	42.02	48.92	48.92	1 / 8							
reaction time		interval		5.58	5.65	5.77	5.96	6.13	6.34	6.90		# of strides	12.17	11.42	12.09	13.24	23.59	25.33	1.74
		velocity	7.59	8.96	8.85	8.67	8.39	8.16	7.89	7.25	8.18		8.22	8.76	8.27	7.55	8.48	7.90	
Sakai, Yu (JPN)																			
Division 2 Semi-Final 1 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time		12.23		23.61		35.67		48.92	48.92	9 / 8							
reaction time		interval			11.38		12.06		13.25			# of strides	12.23	11.38	12.06	13.25	23.61	25.31	1.70
		velocity		8.18		8.79		8.29		7.55	8.18		194.0	8.18	8.79	8.29	7.55	8.47	7.90
Yoshioka, Fumiya (JPN) (1996)																			
FINAL - 2015 Japanese National Junior Championships (Nagoya, JPN)																			
date	16-Oct-15	time	6.49	11.78	17.32	23.09	28.99	35.19	41.66	48.93	48.93	1 / 8							
reaction time		interval		5.29	5.54	5.77	5.90	6.20	6.47	7.27		# of strides	11.78	11.31	12.10	13.74	23.09	25.84	2.75
		velocity	7.70	9.45	9.03	8.67	8.47	8.06	7.73	6.88	8.17		8.49	8.84	8.26	7.28	8.66	7.74	
Tau, Shun (JPN) (1997)																			
Decathlon - Heat 1 - 2023 Michitaka Kinami Memorial (Osaka, JPN)																			
date	06-May-23	time	6.49	11.74	17.11	22.79	28.82	35.12	41.76	48.94	48.94	8 / 2							
reaction time	0.141	interval		5.25	5.37	5.68	6.03	6.30	6.64	7.18		# of strides	11.74	11.05	12.33	13.82	22.79	26.15	3.36
		velocity	7.70	9.52	9.31	8.80	8.29	7.94	7.53	6.96	8.17		8.52	9.05	8.11	7.24	8.78	7.65	
Lysne, Torbjørn (NOR) (1990)																			
National FINAL - 2019 Bislett Games (Oslo, NOR)																			
date	13-Jun-19	time		11.9		23.4		35.9		48.95	48.95	1 / 5							
reaction time	0.178	interval			11.5		12.5		13.1			# of strides	11.90	11.50	12.50	13.05	23.40	25.55	2.15
		velocity		8.40		8.70		8.00		7.66	8.17		8.40	8.70	8.00	7.66	8.55	7.83	
Maruyama, Yuma (JPN) (1998)																			
Decathlon - Heat 1 - 2022 Michitaka Kinami Memorial (Osaka, JPN)																			
date	30-Apr-22	time	6.52	11.94	17.42	23.15	29.08	35.30	41.88	48.96	48.96	4 / 2							
reaction time	0.151	interval		5.42	5.48	5.73	5.93	6.22	6.58	7.08		# of strides	11.94	11.21	12.15	13.66	23.15	25.81	2.66
		velocity	7.67	9.23	9.12	8.73	8.43	8.04	7.60	7.06	8.17		8.38	8.92	8.23	7.32	8.64	7.75	
Ebed, Amar Ebed (QAT) (2002)																			
Heat A - West Asian Championships - 2024 Seashore Doha Meeting (Doha, QAT)																			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Cleve, Moritz (GER) (1987)																			
Decathlon - Heat 4 - 2009 IAAF World Championships (Berlin, GER)																			
date	19-Aug-09	time	12.08		23.43		35.36		49.17	49.17	8 / 6	<i>Graubner (2009) - biomechanical analyses at the 12th IAAF world championships</i>							
reaction time	0.195	interval			11.35		11.93		13.81		# of strides	12.08	11.35	11.93	13.81	23.43	25.74	2.31	
		velocity	8.28		8.81		8.38		7.24	8.14		8.28	8.81	8.38	7.24	8.54	7.77		
Nakamura, Akihiko (JPN) (1990)																			
Decathlon - Heat 3 - 2018 Japanese National Multi-Event Championships (Nagano, JPN)																			
date	16-Jun-18	time	6.51	11.97	17.75	23.80	29.98	36.19	42.53	49.17	49.17	6 / 1	<i>Matsubayashi (2018) - research on athlete performance and technique- 2018 data book</i>						
reaction time		interval	5.46	5.78	6.05	6.18	6.21	6.34	6.64		# of strides	11.97	11.83	12.39	12.98	23.80	25.37	1.57	
		velocity	7.68	9.16	8.65	8.26	8.09	8.05	7.89	7.53	8.14	8.35	8.45	8.07	7.70	8.40	7.88		
Jutzet, Juri (SUI) (2005)																			
B Race - 2024 Athletissima (Lausanne, SUI)																			
date	22-Aug-24	time	6.62	12.16	17.77	23.58	29.65	35.96	42.39	49.17	49.17	3 / 6	<i>Omega Timing (2024) - diamond league race analysis</i>						
reaction time	0.180	interval	5.54	5.61	5.81	6.07	6.31	6.43	6.78		# of strides	12.16	11.42	12.38	13.21	23.58	25.59	2.01	
		velocity	7.55	9.03	8.91	8.61	8.24	7.92	7.78	7.37	8.14	8.22	8.76	8.08	7.57	8.48	7.82		
Aieda, Kyoya (JPN)																			
FINAL - 2017 Japanese National High School Championships (Yamagata, JPN)																			
date	29-Jul-17	time	6.90	12.76	18.70	25.03	31.22	37.12	43.05	49.18	49.18	6 / 7	<i>Kota (2017) - 70th high school championships: JAF scientific committee - biomechanics data collection</i>						
reaction time	0.273	interval	5.86	5.94	6.33	6.19	5.90	5.93	6.13		# of strides	12.76	12.27	12.09	12.06	25.03	24.15	-0.88	
		velocity	7.25	8.53	8.42	7.90	8.08	8.47	8.43	8.16	8.13	7.84	8.15	8.27	8.29	7.99	8.28		
Okuda, Keisuke (JPN) (1996)																			
Decathlon - Heat 2 - 2022 Michitaka Kinami Memorial (Osaka, JPN)																			
date	30-Apr-22	time	6.32	11.65	17.08	22.79	28.73	34.97	41.67	49.18	49.18	3 / 1	<i>Takefu (2023) - performance analysis of decathlon athletes in the 2022 season</i>						
reaction time	0.146	interval	5.33	5.43	5.71	5.94	6.24	6.70	7.51		# of strides	11.65	11.14	12.18	14.21	22.79	26.39	3.60	
		velocity	7.91	9.38	9.21	8.76	8.42	8.01	7.46	6.66	8.13	8.58	8.98	8.21	7.04	8.78	7.58		
Gahne, Gustav (SWE) (2001)																			
FINAL - 2024 Bauhaus Galan (Stockholm, SWE)																			
date	02-Jun-24	time	6.51	11.88	17.39	23.12	29.15	35.57	42.16	49.19	49.19	1 / 8	<i>Omega Timing (2024) - diamond league race analysis</i>						
reaction time	0.177	interval	5.37	5.51	5.73	6.03	6.42	6.59	7.03		# of strides	11.88	11.24	12.45	13.62	23.12	26.07	2.95	
		velocity	7.68	9.31	9.07	8.73	8.29	7.79	7.59	7.11	8.13	8.42	8.90	8.03	7.34	8.65	7.67		
Matsuo, Ruhei (JPN)																			
U19 FINAL - 2016 National Sports Festival (Kitakami, JPN)																			
date	10-Oct-16	time	6.63	12.26	18.00	23.92	30.16	36.52	42.76	49.21	49.21	9 / 8	<i>Yamamoto (2016) - race analysis of male & female 400m runners at major competitions in 2016</i>						
reaction time	0.172	interval	5.63	5.74	5.92	6.24	6.36	6.24	6.45		# of strides	12.26	11.66	12.60	12.69	23.92	25.29	1.37	
		velocity	7.54	8.88	8.71	8.45	8.01	7.86	8.01	7.75	8.13	8.16	8.58	7.94	7.88	8.36	7.91		
Yamane, Kota (JPN)																			
Division 2 Semi-Final 2 - 2017 Kanto Collegiate Championships (Yokohama, JPN)																			
date	26-May-17	time		12.05		23.30		35.46		49.22	49.22	3 / 6	<i>(2017) - tfdata-store.com/2017/06/02/post-835/</i>						
reaction time		interval		11.25		12.16		13.76			# of strides	12.05	11.25	12.16	13.76	23.30	25.92	2.62	
		velocity		8.30		8.89		8.22		7.27	8.13	190.7	8.30	8.89	8.22	7.27	8.58	7.72	
Nakazawa, Shunsuke (JPN) (1999)																			
U19 Heat 1 - 2017 National Sports Festival (Matsuyama, JPN)																			
date	08-Oct-17	time		11.83		23.19		35.51		49.24	49.24	8 / 7	<i>(2017) - tfdata-store.com/2017/10/12/post-1100/</i>						
reaction time	0.188	interval		11.36		12.32		13.73			# of strides	11.83	11.36	12.32	13.73	23.19	26.05	2.86	
		velocity		8.45		8.80		8.12		7.28	8.12	185.2	8.45	8.80	8.12	7.28	8.62	7.68	
Matsuura, Taiga (JPN) (2002)																			
FINAL - 2020 Shimane High School Championships (Izumo, JPN)																			
date	11-Jul-20	time		11.38		22.73		35.41		49.24	49.24	6 / 1	<i>Shimizu (2020) - shimane high school championships 2020 - biomechanics data analysis</i>						
reaction time		interval		11.35		12.68		13.83			# of strides	11.38	11.35	12.68	13.83	22.73	26.51	3.78	
		velocity		8.79		8.81		7.89		7.23	8.12	8.79	8.81	7.89	7.23	8.80	7.54		
Garland, Kyle (USA) (2000)																			
Decathlon - Heat 2 - 2023 World Athletics Championships (Budapest, HUN)																			
date	25-Aug-23	time		11.76		23.34		35.89		49.24	49.24	5 / 5	<i>Seiko Timing (2023) - world championship race analysis</i>						
reaction time	0.156	interval		11.58		12.55		13.35			# of strides	11.76	11.58	12.55	13.35	23.34	25.90	2.56	
		velocity		8.50		8.64		7.97		7.49	8.12	8.50	8.64	7.97	7.49	8.57	7.72		
Mullings, Ken (BAH) (1997)																			
Decathlon - Heat 1 - 2022 World Athletics Championships (Eugene, OR)																			
date	23-Jul-22	time		11.87		23.64		36.13		49.25	49.25	5 / 2	<i>Timing by Seiko (2022) - world athletics championships race analysis</i>						
reaction time	0.137	interval		11.77		12.49		13.12			# of strides	11.87	11.77	12.49	13.12	23.64	25.61	1.97	
		velocity		8.42		8.50		8.01		7.62	8.12	181.0	8.42	8.50	8.01	7.62	8.46	7.81	
Mfomkpa, Alain-Hervé (SUI) (1996)																			
B Race - 2021 Athletissima (Lausanne, SUI)																			
date	26-Aug-21	time	6.5	12.0	17.6	23.5	29.5	35.7	42.2	49.27	49.27	6 / 4	<i>Omega Timing (2021) - diamond league race analysis</i>						
reaction time	0.149	interval	5.50	5.60	5.90	6.00	6.20	6.50	7.07		# of strides	12.00	11.50	12.20	13.57	23.50	25.77	2.27	
		velocity	7.69	9.09	8.93	8.47	8.33	8.06	7.69	7.07	8.12	8.33	8.70	8.20	7.37	8.51	7.76		
Victor, Linton (GRN) (1993)																			
Decathlon - Heat 2 - 2022 World Athletics Championships (Eugene, OR)																			
date	23-Jul-22	time		11.70		23.50		35.68		49.27	49.27	3 / 2	<i>Timing by Seiko (2022) - world athletics championships race analysis</i>						
reaction time	0.141	interval		11.80		12.18		13.59			# of strides	11.70	11.80	12.18	13.59	23.50	25.77	2.27	
		velocity		8.55		8.47		8.21		7.36	8.12	180.0	8.55	8.47	8.21	7.36	8.51	7.76	
Junya, Nagahisa (JPN)																			
FINAL - 2007 Japanese National High School Championships (Saga, JPN)																			

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Golubovic, Daniel (AUS) (1993)																			
Decathlon - Heat 2 - 2022 World Athletics Championships (Eugene, OR)												Timing by Seiko (2022) - world athletics championships race analysis							
date	23-Jul-22	time	12.05		23.73		36.08		49.44	49.44	2 / 6								
reaction time	0.149	interval			11.68		12.35		13.36		# of strides	12.05	11.68	12.35	13.36	23.73	25.71	1.98	
		velocity	8.30		8.56		8.10		7.49	8.09		8.30	8.56	8.10	7.49	8.43	7.78		
Karpov, Dmitriy (KAZ) (1981)																			
Decathlon - Heat 5 - 2009 IAAF World Championships (Berlin, GER)												Graubner (2009) - biomechanical analyses at the 12th IAAF world championships							
date	19-Aug-09	time	11.89		23.17		35.47		49.45	49.45	7 / 1								
reaction time	0.127	interval			11.28		12.30		13.98		# of strides	11.89	11.28	12.30	13.98	23.17	26.28	3.11	
		velocity	8.41		8.87		8.13		7.15	8.09		8.41	8.87	8.13	7.15	8.63	7.61		
Ishii, Yuto (JPN) (1990)																			
FINAL - 2017 Nanbu Memorial Meeting (Sapporo, JPN)												(2017) - tfdata-store.com/2017/07/11/post-1010/							
date	09-Jul-17	time	11.88		23.00		35.37		49.45	49.45	9 / 7								
reaction time		interval			11.12		12.37		14.08		# of strides	11.88	11.12	12.37	14.08	23.00	26.45	3.45	
		velocity	8.42		8.99		8.08		7.10	8.09		201.2	8.42	8.99	8.08	7.10	8.70	7.56	
Maruyama, Yuma (JPN) (1998)																			
Decathlon - Heat 2 - 2022 Japanese Multi-Event National Championships (Akita, JPN)												Matsubayashi (2024) - performance analysis of decathlon athletes in the 2023 season							
date	10-Jun-23	time	6.57	11.96	17.64	23.47	29.44	35.73	42.36	49.47	49.47	6 / 2							
reaction time		interval		5.39	5.68	5.83	5.97	6.29	6.63	7.11	# of strides	11.96	11.51	12.26	13.74	23.47	26.00	2.53	
		velocity	7.61	9.28	8.80	8.58	8.38	7.95	7.54	7.03		8.36	8.69	8.16	7.28	8.52	7.69		
Amherd, Fabian (SUI) (2001)																			
B Race - 2021 Athletissima (Lausanne, SUI)												Omega Timing (2021) - diamond league race analysis							
date	26-Aug-21	time	6.6	12.1	17.7	23.7	29.7	36.1	42.6	49.49	49.49	7 / 6							
reaction time	0.150	interval		5.50	5.60	6.00	6.00	6.40	6.50	6.89	# of strides	12.10	11.60	12.40	13.39	23.70	25.79	2.09	
		velocity	7.58	9.09	8.93	8.33	8.33	7.81	7.69	7.26		8.26	8.62	8.06	7.47	8.44	7.75		
Yamade, Masaki (JPN)																			
Division 2 Semi-Final 2 - 2017 Kanto Collegiate Championships (Yokohama, JPN)												(2017) - tfdata-store.com/2017/06/02/post-835/							
date	26-May-17	time	11.68		22.64		35.21		49.53	49.53	8 / 8								
reaction time		interval			10.96		12.57		14.32		# of strides	11.68	10.96	12.57	14.32	22.64	26.89	4.25	
		velocity	8.56		9.12		7.96		6.98	8.08		173.2	8.56	9.12	7.96	6.98	8.83	7.44	
Ziemek, Zachery (USA) (1993)																			
Decathlon - Heat 1 - 2022 World Athletics Championships (Eugene, OR)												Timing by Seiko (2022) - world athletics championships race analysis							
date	23-Jul-22	time	11.58		22.98		35.45		49.56	49.56	4 / 3								
reaction time	0.185	interval			11.40		12.47		14.11		# of strides	11.58	11.40	12.47	14.11	22.98	26.58	3.60	
		velocity	8.64		8.77		8.02		7.09	8.07		167.2	8.64	8.77	8.02	7.09	8.70	7.52	
Ito, Chikki (JPN)																			
FINAL - 2018 Shimane High School Championships (Izumo, JPN)												Shimizu (2018) - shimane high school championships 2018 - biomechanics data analysis							
date	25-May-18	time	12.43		24.50		36.71		49.60	49.60	6 / 1								
reaction time		interval			12.07		12.21		12.89		# of strides	12.43	12.07	12.21	12.89	24.50	25.10	0.60	
		velocity	8.05		8.29		8.19		7.76	8.06		8.05	8.29	8.19	7.76	8.16	7.97		
Bregenzner, Pierre-Yves (SUI) (2000)																			
B Race - 2024 Athletissima (Lausanne, SUI)												Omega Timing (2024) - diamond league race analysis							
date	22-Aug-24	time	6.39	11.71	17.23	23.04	29.07	35.51	42.35	49.60	49.60	6 / 8							
reaction time	0.172	interval		5.32	5.52	5.81	6.03	6.44	6.84	7.25	# of strides	11.71	11.33	12.47	14.09	23.04	26.56	3.52	
		velocity	7.82	9.40	9.06	8.61	8.29	7.76	7.31	6.90		8.54	8.83	8.02	7.10	8.68	7.53		
Kawauchi, Shogo (JPN) (2003)																			
FINAL - 2021 Japanese High School National Championships (Fukui, JPN)												Shibayama (2021) - national high school and U20 national championships							
date	28-Jul-21	time	6.70	12.42	18.30	24.31	30.40	36.61	42.90	49.61	49.61	7 / 8							
reaction time	0.183	interval		5.72	5.88	6.01	6.09	6.21	6.29	6.71	# of strides	12.42	11.89	12.30	13.00	24.31	25.30	0.99	
		velocity	7.46	8.74	8.50	8.32	8.21	8.05	7.95	7.45		8.05	8.41	8.13	7.69	8.23	7.91		
Ozawa, Yohei (JPN) (2007)																			
FINAL - 2024 Japanese National High School Championships (Fukuoka, JPN)												Takashima (2024) - national high school sports festival - biomechanics data							
date	28-Jul-24	time	12.06		22.62		34.83		49.63	49.63	4 / 8								
reaction time	0.280	interval			10.56		12.21		14.80		# of strides	12.06	10.56	12.21	14.80	22.62	27.01	4.39	
		velocity	8.29		9.47		8.19		6.76	8.06		8.29	9.47	8.19	6.76	8.84	7.40		
Kajima, Ayato (JPN) (2003)																			
FINAL - 2021 Shimane High School Championships (Izumo, JPN)												Shimizu (2021) - shimane high school championships 2021 - biomechanics data analysis							
date	28-May-21	time	12.15		23.47		35.67		49.64	49.64	4 / 1								
reaction time		interval			11.32		12.20		13.97		# of strides	12.15	11.32	12.20	13.97	23.47	26.17	2.70	
		velocity	8.23		8.83		8.20		7.16	8.06		8.23	8.83	8.20	7.16	8.52	7.64		
Garland, Kyle (USA) (2000)																			
Decathlon - Heat 2 - 2022 World Athletics Championships (Eugene, OR)												Timing by Seiko (2022) - world athletics championships race analysis							
date	23-Jul-22	time	11.71		23.58		36.07		49.64	49.64	5 / 7								
reaction time	0.152	interval			11.87		12.49		13.57		# of strides	11.71	11.87	12.49	13.57	23.58	26.06	2.48	
		velocity	8.54		8.42		8.01		7.37	8.06		179.0	8.54	8.42	8.01	7.37	8.48	7.67	
Ushiro, Keisuke (JPN) (1986)																			
Decathlon - Heat 2 - 2014 Japanese Multi-Event National Championships (Nagano, JPN)												Takeo (2014) - decathletes sprint ability & relationship of individual event performance							
date	31-May-14	time	6.45	11.90	17.55	23.38	29.51	35.98	42.57	49.66	49.66	4 / 3							
reaction time		interval		5.45	5.65	5.83	6.13	6.47	6.59	7.09	# of strides	11.90	11.48	12.60	13.68	23.38	26.28	2.90	
		velocity	7.75	9.17	8.85	8.58	8.16	7.73	7.59	7.05		8.40	8.71	7.94	7.31	8.55	7.61		
Tau, Shun (JPN) (1997)																			
Decathlon - Heat 2 - 2023 Japanese Multi-Event National Championships (Akita, JPN)												Matsubayashi (2024) - performance analysis of decathlon athletes in the 2023 season							

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Mitsukiya, Kakeki (JPN)																		
FINAL - 2023 Shimane High School Championships (Izumo, JPN)																		
date	26-May-23	time	11.57		22.73		35.34		49.89	49.89	6 / 1							
reaction time		interval			11.16		12.61		14.55		# of strides	11.57	11.16	12.61	14.55	22.73	27.16	4.43
		velocity	8.64		8.96		7.93		6.87	8.02		8.64	8.96	7.93	6.87	8.80	7.36	
Ikeda, Daisuke (JPN) (1986)																		
Decathlon - Heat 2 - 2009 Wakayama Athletics Meeting (Wakayama, JPN)																		
date	18-Apr-09	time	6.69		12.09		17.63		23.50	29.59	35.87	42.35	49.91	49.91	8 / 1			
reaction time		interval			5.40		5.54		5.87	6.09	6.28	6.48	7.56		# of strides	12.09	11.41	12.37
		velocity	7.47		9.26		9.03		8.52	8.21	7.96	7.72	6.61	8.01		8.27	8.76	8.08
Kotake, Rion (JPN) (1999)																		
U19 FINAL - 2017 National Sports Festival (Matsuyama, JPN)																		
date	09-Oct-17	time	11.88				23.68		36.31	49.92	2 / 8							
reaction time	0.148	interval				11.80		12.63	13.61		# of strides	11.88	11.80	12.63	13.61	23.68	26.24	2.56
		velocity	8.42			8.47		7.92	7.35	8.01	184.7	8.42	8.47	7.92	7.35	8.45	7.62	
Tveit, Espen (NOR) (1991)																		
National FINAL - 2019 Bislett Games (Oslo, NOR)																		
date	13-Jun-19	time	12.2				23.9		36.4	49.92	2 / 8							
reaction time	0.194	interval				11.7		12.5	13.5		# of strides	12.20	11.70	12.50	13.52	23.90	26.02	2.12
		velocity	8.20			8.55		8.00	7.40	8.01		8.20	8.55	8.00	7.40	8.37	7.69	
Vos, Ingmar (NED) (1986)																		
Decathlon - Heat 1 - 2009 IAAF World Championships (Berlin, GER)																		
date	19-Aug-09	time	11.68				22.90		35.21	49.99	6 / 5							
reaction time	0.155	interval				11.22		12.31	14.78		# of strides	11.68	11.22	12.31	14.78	22.90	27.09	4.19
		velocity	8.56			8.91		8.12	6.77	8.00		8.56	8.91	8.12	6.77	8.73	7.38	
Maruyama, Yuma (JPN) (1998)																		
Decathlon - Heat 1 - 2019 Japanese National Multi-Event Championships (Nagano, JPN)																		
date	08-Jun-19	time	6.41		11.81		17.38		23.29	29.49	35.85	42.65	49.99	49.99	5 / 1			
reaction time		interval			5.40		5.57		5.91	6.20	6.36	6.80	7.34		# of strides	11.81	11.48	12.56
		velocity	7.80		9.26		8.98		8.46	8.06	7.86	7.35	6.81	8.00		8.47	8.71	7.96
Arai, Iori (JPN)																		
FINAL - 2022 Shimane High School Championships (Izumo, JPN)																		
date	26-May-22	time	12.18				24.05		36.61	49.99	8 / 1							
reaction time		interval				11.87		12.56	13.38		# of strides	12.18	11.87	12.56	13.38	24.05	25.94	1.89
		velocity	8.21			8.42		7.96	7.47	8.00		8.21	8.42	7.96	7.47	8.32	7.71	
Nishikori, Yushin (JPN)																		
FINAL - 2024 Shimane High School Championships (Izumo, JPN)																		
date	24-May-24	time	12.13				23.93		36.49	49.99	8 / 3							
reaction time		interval				11.80		12.56	13.50		# of strides	12.13	11.80	12.56	13.50	23.93	26.06	2.13
		velocity	8.24			8.47		7.96	7.41	8.00		8.24	8.47	7.96	7.41	8.36	7.67	
Yamane, Yusuke (JPN) (2003)																		
FINAL - 2021 Shimane High School Championships (Izumo, JPN)																		
date	28-May-21	time	12.05				23.38		35.76	50.00	3 / 2							
reaction time		interval				11.33		12.38	14.24		# of strides	12.05	11.33	12.38	14.24	23.38	26.62	3.24
		velocity	8.30			8.83		8.08	7.02	8.00		8.30	8.83	8.08	7.02	8.55	7.51	
Spejcher, Daniel (USA) (2000)																		
Decathlon - Heat 2 - 2024 USA Olympic Trials (Eugene, OR)																		
date	21-Jun-24	time	11.56				22.85		35.71	50.00	8 / 2							
reaction time		interval				11.29		12.86	14.29		# of strides	11.56	11.29	12.86	14.29	22.85	27.15	4.30
		velocity	8.65			8.86		7.78	7.00	8.00		8.65	8.86	7.78	7.00	8.75	7.37	
Mishima, Sota (JPN)																		
FINAL - 2022 Shimane High School Championships (Izumo, JPN)																		
date	26-May-22	time	12.12				24.00		26.56	50.03	4 / 2							
reaction time		interval				11.88		2.56	23.47		# of strides	12.12	11.88	2.56	23.47	24.00	26.03	2.03
		velocity	8.25			8.42		39.06	4.26	8.00		8.25	8.42	39.06	4.26	8.33	7.68	
Flood, Jack (USA) (1995)																		
Decathlon - Heat 2 - 2024 USA Olympic Trials (Eugene, OR)																		
date	21-Jun-24	time	11.99				23.25		35.81	50.03	5 / 3							
reaction time		interval				11.26		12.56	14.22		# of strides	11.99	11.26	12.56	14.22	23.25	26.78	3.53
		velocity	8.34			8.88		7.96	7.03	8.00		8.34	8.88	7.96	7.03	8.60	7.47	
Nakamura, Akihiko (JPN) (1990)																		
Decathlon - Heat 3 - 2019 Japanese National Multi-Event Championships (Nagano, JPN)																		
date	08-Jun-19	time	6.45		11.90		17.48		23.39	29.57	35.95	42.67	50.06	50.06	7 / 4			
reaction time		interval			5.45		5.58		5.91	6.18	6.38	6.72	7.39		# of strides	11.90	11.49	12.56
		velocity	7.75		9.17		8.96		8.46	8.09	7.84	7.44	6.77	7.99		8.40	8.70	7.96
Tanaka, Hiromasa (JPN) (1981)																		
Decathlon - Heat 1 - 2009 Wakayama Athletics Meeting (Wakayama, JPN)																		
date	18-Apr-09	time	6.35		11.73		17.27		23.20	29.30	35.55	42.09	50.08	50.08	6 / 3			
reaction time		interval			5.38		5.54		5.93	6.10	6.25	6.54	7.99		# of strides	11.73	11.47	12.35
		velocity	7.87		9.29		9.03		8.43	8.20	8.00	7.65	6.26	7.99		8.53	8.72	8.10
Saito, Jona (JPN)																		
FINAL - 2018 Shimane High School Championships (Izumo, JPN)																		

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Šebrle, Roman (CZE) (1974)																			
Decathlon - Heat 1 - 2009 IAAF World Championships (Berlin, GER)																			
date	19-Aug-09	time	11.99	23.55	36.11	50.42	50.42	2 / 7											
reaction time	0.164	interval		11.56	12.56	14.31		# of strides	11.99	11.56	12.56	14.31	23.55	26.87	3.32				
		velocity	8.34	8.65	7.96	6.99	7.93		8.34	8.65	7.96	6.99	8.49	7.44					
Umeiuchi, Eiichi (JPN)																			
B FINAL - 2017 Nanbu Memorial Meeting (Sapporo, JPN)																			
date	09-Jul-17	time	11.95	23.58	36.04	50.42	50.42	8 / 3											
reaction time		interval		11.63	12.46	14.38		# of strides	11.95	11.63	12.46	14.38	23.58	26.84	3.26				
		velocity	8.37	8.60	8.03	6.95	7.93	189.7	8.37	8.60	8.03	6.95	8.48	7.45					
Ushiro, Keisuke (JPN) (1986)																			
Decathlon - Heat 1 - 2013 Japanese Multi-Event National Championship (Nagano, JPN)																			
date	01-Jun-13	time	6.66	12.23	17.88	23.85	30.04	36.41	43.16	50.43	50.43	6 / 4							
reaction time		interval		5.57	5.65	5.97	6.19	6.37	6.75	7.27		# of strides	12.23	11.62	12.56	14.02	23.85	26.58	2.73
		velocity	7.51	8.98	8.85	8.38	8.08	7.85	7.41	6.88	7.93		8.18	8.61	7.96	7.13	8.39	7.52	
Armadi, Daoud Ismail (SUD) (2006)																			
FINAL - 2023 Doha Diamond League (Doha, QAT)																			
date	05-May-23	time	6.59	11.86	17.54	23.58	30.03	36.57	43.26	50.50	50.50	1 / 7							
reaction time	0.241	interval		5.27	5.68	6.04	6.45	6.54	6.69	7.24		# of strides	11.86	11.72	12.99	13.93	23.58	26.92	3.34
		velocity	7.59	9.49	8.80	8.28	7.75	7.65	7.47	6.91	7.92		8.43	8.53	7.70	7.18	8.48	7.43	
Jones, Hunter (USA) (2000)																			
Decathlon - Heat 2 - 2024 USA Olympic Trials (Eugene, OR)																			
date	21-Jun-24	time	11.71	23.14	36.09	50.51	50.51	9 / 4											
reaction time		interval		11.43	12.95	14.42		# of strides	11.71	11.43	12.95	14.42	23.14	27.37	4.23				
		velocity	8.54	8.75	7.72	6.93	7.92		8.54	8.75	7.72	6.93	8.64	7.31					
Arai, Iori (JPN)																			
FINAL - 2021 Shimane High School Championships (Izumo, JPN)																			
date	28-May-21	time	12.45	24.48	36.88	50.52	50.52	5 / 3											
reaction time		interval		12.03	12.40	13.64		# of strides	12.45	12.03	12.40	13.64	24.48	26.04	1.56				
		velocity	8.03	8.31	8.06	7.33	7.92		8.03	8.31	8.06	7.33	8.17	7.68					
Funo, Shintaro (JPN)																			
FINAL - 2023 Shimane High School Championships (Izumo, JPN)																			
date	26-May-23	time	12.70	24.83	37.47	50.52	50.52	3 / 2											
reaction time		interval		12.13	12.64	13.05		# of strides	12.70	12.13	12.64	13.05	24.83	25.69	0.86				
		velocity	7.87	8.24	7.91	7.66	7.92		7.87	8.24	7.91	7.66	8.05	7.79					
Mitsunari, Reo (JPN)																			
FINAL - 2019 Shimane High School Championships (Izumo, JPN)																			
date	24-May-19	time	12.82	24.82	37.25	50.53	50.53	5 / 2											
reaction time		interval		12.00	12.43	13.28		# of strides	12.82	12.00	12.43	13.28	24.82	25.71	0.89				
		velocity	7.80	8.33	8.05	7.53	7.92		7.80	8.33	8.05	7.53	8.06	7.78					
Arai, Yuta (JPN)																			
FINAL - 2022 Shimane High School Championships (Izumo, JPN)																			
date	26-May-22	time	12.28	23.93	36.68	50.54	50.54	5 / 3											
reaction time		interval		11.65	12.75	13.86		# of strides	12.28	11.65	12.75	13.86	23.93	26.61	2.68				
		velocity	8.14	8.58	7.84	7.22	7.91		8.14	8.58	7.84	7.22	8.36	7.52					
Ushiro, Keisuke (JPN) (1986)																			
Decathlon - Heat ?? - 2010 Japanese Multi-Event National Championships (Kawasaki, JPN)																			
date	12-Jun-10	time	6.80	12.45	18.22	24.18	30.15	36.48	43.26	50.58	50.58	???							
reaction time		interval		5.65	5.77	5.96	5.97	6.33	6.78	7.32		# of strides	12.45	11.73	12.30	14.10	24.18	26.40	2.22
		velocity	7.35	8.85	8.67	8.39	8.38	7.90	7.37	6.83	7.91		8.03	8.53	8.13	7.09	8.27	7.58	
Ushiro, Keisuke (JPN) (1986)																			
Decathlon - Heat 1 - 2012 Japanese Multi-Event National Championships (Nagano, JPN)																			
date	02-Jun-12	time	6.66	12.17	17.76	23.64	29.70	36.15	43.01	50.58	50.58	6 / 4							
reaction time		interval		5.51	5.59	5.88	6.06	6.45	6.86	7.57		# of strides	12.17	11.47	12.51	14.43	23.64	26.94	3.30
		velocity	7.51	9.07	8.94	8.50	8.25	7.75	7.29	6.61	7.91		8.22	8.72	7.99	6.93	8.46	7.42	
Hasnaoui, Farid (MAR) (2005)																			
National FINAL - 2022 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR)																			
date	05-Jun-22	time	6.72	12.35	18.27	24.40	30.75	37.27	43.80	50.49	50.59	1 / 7							
reaction time	0.144	interval		5.63	5.92	6.13	6.35	6.52	6.53	6.69		# of strides	12.35	12.05	12.87	13.22	24.40	26.09	1.69
		velocity	7.44	8.88	8.45	8.16	7.87	7.67	7.66	7.47	7.91		8.10	8.30	7.77	7.56	8.20	7.67	
Ushiro, Keisuke (JPN) (1986)																			
Decathlon - Heat 2 - 2009 Wakayama Athletics Meeting (Wakayama, JPN)																			
date	18-Apr-09	time	6.92	12.57	18.17	24.06	30.13	36.38	42.93	50.60	50.60	9 / 3							
reaction time		interval		5.65	5.60	5.89	6.07	6.25	6.55	7.67		# of strides	12.57	11.49	12.32	14.22	24.06	26.54	2.48
		velocity	7.23	8.85	8.93	8.49	8.24	8.00	7.63	6.52	7.91		7.96	8.70	8.12	7.03	8.31	7.54	
Ushiro, Keisuke (JPN) (1986)																			
Decathlon - Heat 1 - 2010 Wakayama Athletics Meeting (Wakayama, JPN)																			
date	24-Apr-10	time	7.01	12.69	18.55	24.50	30.63	36.91	43.52	50.61	50.61	8 / 4							
reaction time		interval		5.68	5.86	5.95	6.13	6.28	6.61	7.09		# of strides	12.69	11.81	12.41	13.70	24.50	26.11	1.61
		velocity	7.13	8.80	8.53	8.40	8.16	7.96	7.56	7.05	7.90		7.88	8.47	8.06	7.30	8.16	7.66	
Tanaka, Hiromasa (JPN) (1981)																			
Decathlon - Heat 2 - 2009 Japanese National Championships (Hiroshima, JPN)																			

date	25-Jun-09	time	6.52	12.28	18.29	24.38	30.61	37.03	43.62	50.65	50.65	2 / 5							
reaction time		interval	5.76	6.01	6.09	6.23	6.42	6.59	7.03			# of strides	12.28	12.10	12.65	13.62	24.38	26.27	1.89
		velocity	7.67	8.68	8.32	8.21	8.03	7.79	7.59	7.11	7.90		8.14	8.26	7.91	7.34	8.20	7.61	
Tobita, Riku (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2020 Shimane High School Championships (Izumo, JPN)																			
date	11-Jul-20	time	11.81		23.50		36.53		50.72	50.72	7 / 2								
reaction time		interval			11.69		13.03		14.19		# of strides	11.81	11.69	13.03	14.19	23.50	27.22	3.72	
		velocity	8.47		8.55		7.67		7.05	7.89		8.47	8.55	7.67	7.05	8.51	7.35		
Miyahiro, Mitsuki (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2024 Shimane High School Championships (Izumo, JPN)																			
date	24-May-24	time	12.67		24.57		37.21		50.72	50.72	6 / 4								
reaction time		interval			11.90		12.64		13.51		# of strides	12.67	11.90	12.64	13.51	24.57	26.15	1.58	
		velocity	7.89		8.40		7.91		7.40	7.89		7.89	8.40	7.91	7.40	8.14	7.65		
Shimizu, Tsuyoshi (JPN) (1993)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Decathlon - Heat 2 - 2018 Tokyo Combined Event Meeting (Tokyo, JPN)																			
date	21-Apr-18	time	6.56	12.12	17.77	23.61	29.71	36.22	43.13	50.73	50.73	4 / 3							
reaction time		interval	5.56	5.65	5.84	6.10	6.51	6.91	7.60		# of strides	12.12	11.49	12.61	14.51	23.61	27.12	3.51	
		velocity	7.62	8.99	8.85	8.56	8.20	7.68	7.24	6.58	7.88	8.25	8.70	7.93	6.89	8.47	7.37		
Steinmann, Matthias (SUI) (1992)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
B Race - 2021 Athletissima (Lausanne, SUI)																			
date	26-Aug-21	time	6.7	12.1	17.9	23.8	29.8	36.3	43.1	50.73	50.73	2 / 8							
reaction time	0.144	interval	5.40	5.80	5.90	6.00	6.50	6.80	7.63		# of strides	12.10	11.70	12.50	14.43	23.80	26.93	3.13	
		velocity	7.46	9.26	8.62	8.47	8.33	7.69	7.35	6.55	7.88	8.26	8.55	8.00	6.93	8.40	7.43		
Maruyama, Yuma (JPN) (1998)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Decathlon - Heat 1 - 2023 World Athletics Championships (Budapest, HUN)																			
date	25-Aug-23	time	6.51	11.93	17.58	23.56	29.75	36.26	43.18	50.75	50.75	5 / 4							
reaction time	0.157	interval	5.42	5.65	5.98	6.19	6.51	6.92	7.57		# of strides	11.93	11.63	12.70	14.49	23.56	27.19	3.63	
		velocity	7.68	9.23	8.85	8.36	8.08	7.68	7.23	6.61	7.88	8.38	8.60	7.87	6.90	8.49	7.36		
Ushiro, Keisuke (JPN) (1986)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Decathlon - Heat 2 - 2009 Japanese National Championships (Hiroshima, JPN)																			
date	25-Jun-09	time	6.93	12.85	18.82	24.85	31.07	37.35	43.83	50.77	50.77	4 / 6							
reaction time		interval	5.92	5.97	6.03	6.22	6.28	6.48	6.94		# of strides	12.85	12.00	12.50	13.42	24.85	25.92	1.07	
		velocity	7.22	8.45	8.38	8.29	8.04	7.96	7.72	7.20	7.88	7.78	8.33	8.00	7.45	8.05	7.72		
Ushiro, Keisuke (JPN) (1986)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Decathlon - Heat 1 - 2012 Olympic Games (London, GBR)																			
date	08-Aug-12	time	6.70	12.34	18.12	24.13	30.39	36.87	43.61	50.78	50.78	7 / 4							
reaction time	0.190	interval	5.64	5.78	6.01	6.26	6.48	6.74	7.17		# of strides	12.34	11.79	12.74	13.91	24.13	26.65	2.52	
		velocity	7.46	8.87	8.65	8.32	7.99	7.72	7.42	6.97	7.88	179.5	8.10	8.48	7.85	7.19	8.29	7.50	
Naruto, Ueki (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2024 Shimane High School Championships (Izumo, JPN)																			
date	24-May-24	time	12.77		24.93		37.51		50.78	50.78	2 / 5								
reaction time		interval			12.16		12.58		13.27		# of strides	12.77	12.16	12.58	13.27	24.93	25.85	0.92	
		velocity	7.83		8.22		7.95		7.54	7.88		7.83	8.22	7.95	7.54	8.02	7.74		
Ziemek, Zachery (USA) (1993)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Decathlon - Heat 1 - 2024 Olympic Games (Paris, FRA)																			
date	02-Aug-24	time	6.37	11.45	16.83	22.39	28.37	35.01	42.39	50.79	50.79	3 / 6							
reaction time	0.172	interval	5.08	5.38	5.56	5.98	6.64	7.38	8.40		# of strides	11.45	10.94	12.62	15.78	22.39	28.40	6.01	
		velocity	7.85	9.84	9.29	8.99	8.36	7.53	6.78	5.95	7.88	171.5	8.73	9.14	7.92	6.34	8.93	7.04	
Ushiro, Keisuke (JPN) (1986)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Decathlon - Heat 1 - 2011 Wakayama Athletics Meeting (Wakayama, JPN)																			
date	23-Apr-11	time	6.73	12.42	18.30	24.45	30.74	37.19	43.75	50.80	50.80	6 / 3							
reaction time		interval	5.69	5.88	6.15	6.29	6.45	6.56	7.05		# of strides	12.42	12.03	12.74	13.61	24.45	26.35	1.90	
		velocity	7.43	8.79	8.50	8.13	7.95	7.75	7.62	7.09	7.87	8.05	8.31	7.85	7.35	8.18	7.59		
Ushiro, Keisuke (JPN) (1986)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Decathlon - Heat 1 - 2018 Tokyo Combined Event Meeting (Tokyo, JPN)																			
date	21-Apr-18	time	6.62	12.10	17.72	23.67	29.84	36.37	43.28	50.80	50.80	5 / 5							
reaction time		interval	5.48	5.62	5.95	6.17	6.53	6.91	7.52		# of strides	12.10	11.57	12.70	14.43	23.67	27.13	3.46	
		velocity	7.55	9.12	8.90	8.40	8.10	7.66	7.24	6.65	7.87	8.26	8.64	7.87	6.93	8.45	7.37		
Ushiro, Keisuke (JPN) (1986)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Decathlon - Heat 1 - 2018 Japanese National Multi-Event Championships (Nagano, JPN)																			
date	16-Jun-18	time	6.55	12.17	17.95	24.06	30.33	36.76	43.49	50.80	50.80	5 / 5							
reaction time		interval	5.62	5.78	6.11	6.27	6.43	6.73	7.31		# of strides	12.17	11.89	12.70	14.04	24.06	26.74	2.68	
		velocity	7.63	8.90	8.65	8.18	7.97	7.78	7.43	6.84	7.87	8.22	8.41	7.87	7.12	8.31	7.48		
Ibukun, Hisashiyo (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2020 Shimane High School Championships (Izumo, JPN)																			
date	11-Jul-20	time	12.14		24.08		36.83												

		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Ushiro, Keisuke (JPN) (1986)																			
Decathlon - Heat 2 - 2009 Gunma Relays (Maebashi, JPN)																			
date	10-Oct-09	time	6.95	12.75	18.68	24.69	30.77	37.09	43.73	50.88	50.88	3 / 5	<i>Hisashi (2010) - the run performance analysis in the decathlon sprint events</i>						
reaction time		interval		5.80	5.93	6.01	6.08	6.32	6.64	7.15		# of strides	12.75	11.94	12.40	13.79	24.69	26.19	1.50
		velocity	7.19	8.62	8.43	8.32	8.22	7.91	7.53	6.99	7.86		7.84	8.38	8.06	7.25	8.10	7.64	
Miyamura, Yushi (JPN)																			
FINAL - 2024 Shimane High School Championships (Izumo, JPN)																			
date	24-May-24	time	12.65		24.77		37.50		50.88	50.88	3 / 6	<i>Shimizu (2024) - shimane high school championships 2024 - biomechanics data analysis</i>							
reaction time		interval			12.12		12.73		13.38	7.86		# of strides	12.65	12.12	12.73	13.38	24.77	26.11	1.34
		velocity	7.91		8.25		7.86		7.47	7.86		7.91	8.25	7.86	7.47	8.07	7.66		
Sugitate, Yasuharu (JPN)																			
FINAL - 2018 Shimane High School Championships (Izumo, JPN)																			
date	25-May-18	time	12.08		23.98		36.49		50.92	50.92	3 / 4	<i>Shimizu (2018) - shimane high school championships 2018 - biomechanics data analysis</i>							
reaction time		interval			11.90		12.51		14.43	7.86		# of strides	12.08	11.90	12.51	14.43	23.98	26.94	2.96
		velocity	8.28		8.40		7.99		6.93	7.86		8.28	8.40	7.99	6.93	8.34	7.42		
Nakamura, Akihiko (JPN) (1990)																			
Decathlon - FINAL - 2022 Japanese Multi-Event National Championships (Akita, JPN)																			
date	04-Jun-22	time	6.37	11.78	17.33	23.26	29.55	36.19	43.17	50.94	50.94	4 / 7	<i>Takefu (2023) - performance analysis of decathlon athletes in the 2022 season</i>						
reaction time		interval		5.41	5.55	5.93	6.29	6.64	6.98	7.77		# of strides	11.78	11.48	12.93	14.75	23.26	27.68	4.42
		velocity	7.85	9.24	9.01	8.43	7.95	7.53	7.16	6.44	7.85		8.49	8.71	7.73	6.78	8.60	7.23	
Nowak, Tim (GER) (1995)																			
Decathlon - Heat 1 - 2022 World Athletics Championships (Eugene, OR)																			
date	23-Jul-22	time	11.86		23.17		36.03		50.94	50.94	2 / 5	<i>Timing by Seiko (2022) - world athletics championships race analysis</i>							
reaction time	0.161	interval			11.31		12.86		14.91	7.85		# of strides	11.86	11.31	12.86	14.91	23.17	27.77	4.60
		velocity	8.43		8.84		7.78		6.71	7.85		186.0	8.43	8.84	7.78	6.71	8.63	7.20	
Sakamoto, Yuto (JPN)																			
FINAL - 2019 Shimane High School Championships (Izumo, JPN)																			
date	24-May-19	time	12.90		25.36		38.03		50.97	50.97	7 / 4	<i>Shimizu (2019) - shimane high school championships 2019 - biomechanics data analysis</i>							
reaction time		interval			12.46		12.67		12.94	7.85		# of strides	12.90	12.46	12.67	12.94	25.36	25.61	0.25
		velocity	7.75		8.03		7.89		7.73	7.85		7.75	8.03	7.89	7.73	7.89	7.81		
Matsubara, Shuichiro (JPN) (1997)																			
FINAL - 2015 Japanese National High School Championships (Wakayama, JPN)																			
date	29-Jul-15	time	6.55	12.04	17.72	23.65	29.93	36.59	43.58	50.98	50.98	/ 8	<i>Kohei (2015) - 400m race analysis of male & female at major 2015 competitions</i>						
reaction time		interval		5.49	5.68	5.93	6.28	6.66	6.99	7.40		# of strides	12.04	11.61	12.94	14.39	23.65	27.33	3.68
		velocity	7.63	9.11	8.80	8.43	7.96	7.51	7.15	6.76	7.85		8.31	8.61	7.73	6.95	8.46	7.32	
Tobita, Riku (JPN)																			
FINAL - 2019 Shimane High School Championships (Izumo, JPN)																			
date	24-May-19	time	12.09		24.21		37.47		50.99	50.99	8 / 5	<i>Shimizu (2019) - shimane high school championships 2019 - biomechanics data analysis</i>							
reaction time		interval			12.12		13.26		13.52	7.84		# of strides	12.09	12.12	13.26	13.52	24.21	26.78	2.57
		velocity	8.27		8.25		7.54		7.40	7.84		8.27	8.25	7.54	7.40	8.26	7.47		
Mizunara, Oba (JPN)																			
FINAL - 2019 Shimane High School Championships (Izumo, JPN)																			
date	24-May-19	time	12.37		24.36		37.35		51.03	51.03	3 / 6	<i>Shimizu (2019) - shimane high school championships 2019 - biomechanics data analysis</i>							
reaction time		interval			11.99		12.99		13.68	7.84		# of strides	12.37	11.99	12.99	13.68	24.36	26.67	2.31
		velocity	8.08		8.34		7.70		7.31	7.84		8.08	8.34	7.70	7.31	8.21	7.50		
Fujimoto, Takashi (JPN)																			
FINAL - 2023 Shimane High School Championships (Izumo, JPN)																			
date	26-May-23	time	12.35		24.32		37.11		51.04	51.04	8 / 3	<i>Shimizu (2023) - shimane high school championships 2023 - biomechanics data analysis</i>							
reaction time		interval			11.97		12.79		13.93	7.84		# of strides	12.35	11.97	12.79	13.93	24.32	26.72	2.40
		velocity	8.10		8.35		7.82		7.18	7.84		8.10	8.35	7.82	7.18	8.22	7.49		
Horinishi, Koji (JPN)																			
FINAL - 2019 Shimane High School Championships (Izumo, JPN)																			
date	24-May-19	time	12.65		25.04		38.05		51.05	51.05	4 / 7	<i>Shimizu (2019) - shimane high school championships 2019 - biomechanics data analysis</i>							
reaction time		interval			12.39		13.01		13.00	7.84		# of strides	12.65	12.39	13.01	13.00	25.04	26.01	0.97
		velocity	7.91		8.07		7.69		7.69	7.84		7.91	8.07	7.69	7.69	7.99	7.69		
Ushiro, Keisuke (JPN) (1986)																			
Decathlon - Heat 1 - 2013 Wakayama Athletics Meeting (Wakayama, JPN)																			
date	27-Apr-13	time	6.66	12.23	17.92	23.90	30.22	36.76	43.66	51.11	51.11	6 / 4	<i>Takeo (2014) - decathletes sprint ability & relationship of individual event performance</i>						
reaction time		interval		5.57	5.69	5.98	6.32	6.54	6.90	7.45		# of strides	12.23	11.67	12.86	14.35	23.90	27.21	3.31
		velocity	7.51	8.98	8.79	8.36	7.91	7.65	7.25	6.71	7.83		8.18	8.57	7.78	6.97	8.37	7.35	
Ushiro, Keisuke (JPN) (1986)																			
Decathlon - Heat 2 - 2010 Asian Games (Guangzhou, CHN)																			
date	24-Nov-10	time	6.80	12.54	18.50	24.70	31.04	37.49	44.12	51.14	51.14	/ 4	<i>Takeo (2014) - decathletes sprint ability & relationship of individual event performance</i>						
reaction time		interval		5.74	5.96	6.20	6.34	6.45	6.63	7.02		# of strides	12.54	12.16	12.79	13.65	24.70	26.44	1.74
		velocity	7.35	8.71	8.39	8.06	7.89	7.75	7.54	7.12	7.82		7.97	8.22	7.82	7.33	8.10	7.56	
Arai, Yuta (JPN)																			
FINAL - 2021 Shimane High School Championships (Izumo, JPN)																			
date	28-May-21	time	13.13		25.37		37.73		51.15	51.15	8 / 4	<i>Shimizu (2021) - shimane high school championships 2021 - biomechanics data analysis</i>							
reaction time		interval			12.24		12.36		13.42	7.82		# of strides	13.13	12.24	12.36	13.42	25.37	25.78	0.41
		velocity	7.62		8.17		8.09		7.45	7.82		7.62	8.17	8.09	7.45	7.88	7.76		
Ushiro, Keisuke (JPN) (1986)																			
Decathlon - Heat ?? - 2012 Tokyo Athletics Championships (Chofu, JPN)																			

date	21-Apr-12	time	6.59	12.16	17.88	23.89	30.10	36.68	43.67	51.16	51.16	???									
reaction time		interval		5.57	5.72	6.01	6.21	6.58	6.99	7.49		# of strides	12.16	11.73	12.79	14.48	23.89	27.27	3.38		
		velocity	7.59	8.98	8.74	8.32	8.05	7.60	7.15	6.68	7.82		8.22	8.53	7.82	6.91	8.37	7.33			
Ito, Chikki (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2017 Shimane High School Championships (Izumo, JPN)																					
date	26-May-17	time		12.43		24.47		37.57		51.18	51.18	9 / 2									
reaction time		interval			12.04		13.10		13.61			# of strides	12.43	12.04	13.10	13.61	24.47	26.71	2.24		
		velocity		8.05	8.31		7.63		7.35	7.82		8.05	8.31	7.63	7.35	8.17	7.49				
Mishima, Sota (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2021 Shimane High School Championships (Izumo, JPN)																					
date	28-May-21	time		12.80		25.55	★	37.90	★	51.20	51.20	6 / 5									
reaction time		interval			12.75		12.35		13.30			# of strides	12.80	12.75	12.35	13.30	25.55	25.65	0.10		
		velocity		7.81	7.84		8.10		7.52	7.81		7.81	7.84	8.10	7.52	7.83	7.80				
Kageyama, Hiromasa (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2024 Shimane High School Championships (Izumo, JPN)																					
date	24-May-24	time		12.15		24.03		37.16		51.20	51.20	4 / 7									
reaction time		interval			11.88		13.13		14.04			# of strides	12.15	11.88	13.13	14.04	24.03	27.17	3.14		
		velocity		8.23	8.42		7.62		7.12	7.81		8.23	8.42	7.62	7.12	8.32	7.36				
Higo, Akiteru (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2024 Shimane High School Championships (Izumo, JPN)																					
date	24-May-24	time		12.80		24.90		37.57		51.32	51.32	9 / 8									
reaction time		interval			12.10		12.67		13.75			# of strides	12.80	12.10	12.67	13.75	24.90	26.42	1.52		
		velocity		7.81	8.26		7.89		7.27	7.79		7.81	8.26	7.89	7.27	8.03	7.57				
Tenkawa, Ten (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2023 Shimane High School Championships (Izumo, JPN)																					
date	26-May-23	time		12.93		25.30		38.06		51.33	51.33	4 / 4									
reaction time		interval			12.37		12.76		13.27			# of strides	12.93	12.37	12.76	13.27	25.30	26.03	0.73		
		velocity		7.73	8.08		7.84		7.54	7.79		7.73	8.08	7.84	7.54	7.91	7.68				
Nilsson, Marcus (SWE) (1991)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Decathlon - Heat 1 - 2023 World Athletics Championships (Budapest, HUN)																					
date	25-Aug-23	time		12.33		24.09		37.17		51.36	51.36	3 / 5									
reaction time	0.204	interval			11.76		13.08		14.19			# of strides	12.33	11.76	13.08	14.19	24.09	27.27	3.18		
		velocity		8.11	8.50		7.65		7.05	7.79		8.11	8.50	7.65	7.05	8.30	7.33				
Zakaria, Abdulmajid (QAT)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
National FINAL - 2019 Doha (Doha, QAT)																					
date	03-May-19	time		12.5		24.5		37.7		51.44	51.44	1 / 5									
reaction time	0.164	interval			12.0		13.2		13.7			# of strides	12.50	12.00	13.20	13.74	24.50	26.94	2.44		
		velocity		8.00	8.33		7.58		7.28	7.78		8.00	8.33	7.58	7.28	8.16	7.42				
Hazzard, Aiden (AIA) (1998)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Heat 6 - 2022 World Athletics Championships (Eugene, OR)																					
date	17-Jul-22	time		11.75		23.40		36.39		51.44	51.44	3 / 7									
reaction time	0.128	interval			11.65		12.99		15.05			# of strides	11.75	11.65	12.99	15.05	23.40	28.04	4.64		
		velocity		8.51	8.58		7.70		6.64	7.78		8.51	8.58	7.70	6.64	8.55	7.13				
Ushiro, Keisuke (JPN) (1986)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
Decathlon - Heat 1 - 2019 Japanese National Multi-Event Championships (Nagano, JPN)																					
date	08-Jun-19	time		6.65		12.28		18.05		24.15	30.54	36.97	43.85	51.46	51.46	6 / 4					
reaction time		interval			5.63	5.77	6.10	6.39	6.43	6.88	7.61			# of strides	12.28	11.87	12.82	14.49	24.15	27.31	3.16
		velocity		7.52	8.88	8.67	8.20	7.82	7.78	7.27	6.57	7.77		8.14	8.42	7.80	6.90	8.28	7.32		
Ishibashi, Naoaki (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2023 Shimane High School Championships (Izumo, JPN)																					
date	26-May-23	time		12.20		24.17		37.08		51.54	51.54	7 / 5									
reaction time		interval			11.97		12.91		14.46			# of strides	12.20	11.97	12.91	14.46	24.17	27.37	3.20		
		velocity		8.20	8.35		7.75		6.92	7.76		8.20	8.35	7.75	6.92	8.27	7.31				
Adachi, Yuki (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2017 Shimane High School Championships (Izumo, JPN)																					
date	26-May-17	time		12.53		24.27		37.73		51.56	51.56	5 / 3									
reaction time		interval			11.74		13.46		13.83			# of strides	12.53	11.74	13.46	13.83	24.27	27.29	3.02		
		velocity		7.98	8.52		7.43		7.23	7.76		7.98	8.52	7.43	7.23	8.24	7.33				
Aoki, Haruka (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2018 Shimane High School Championships (Izumo, JPN)																					
date	25-May-18	time		12.48		24.75		37.33		51.69	51.69	2 / 5									
reaction time		interval			12.27		12.58		14.36			# of strides	12.48	12.27	12.58	14.36	24.75	26.94	2.19		
		velocity		8.01	8.15		7.95		6.96	7.74		8.01	8.15	7.95	6.96	8.08	7.42				
Ryotaro, Masaki (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2019 Shimane High School Championships (Izumo, JPN)																					
date	24-May-19	time		13.04		25.66		38.71		51.72	51.72	9 / 8									
reaction time		interval			12.62		13.05		13.01			# of strides	13.04	12.62	13.05	13.01	25.66	26.06	0.40		
		velocity		7.67	7.92		7.66		7.69	7.73		7.67	7.92	7.66	7.69	7.79	7.67				
Nakao, Hyousei (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential			
FINAL - 2021 Shimane High School Championships (Izumo, JPN)																					
date	28-May-21	time		12.95		25.03		37.79		51.79	51.79	1 / 6									
reaction time		interval			12.08		12.76		14.00			# of strides	12.95	12.08	12.76	14.00	25.03	26.76	1.73		
		velocity		7.72	8.28		7.84		7.14	7.72		7.72	8.28	7.84	7.14	7.99	7.47				

Yamane, Yusuke (JPN) (2003)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2020 Shimane High School Championships (Izumo, JPN)		Shimizu (2020) - shimane high school championships 2020 - biomechanics data analysis																	
date	11-Jul-20	time	11.91	24.00	37.41	51.85	51.85		8 / 4										
reaction time	interval			12.09	13.41	14.44			# of strides	11.91	12.09	13.41	14.44	24.00	27.85	3.85			
	velocity	8.40	8.27	7.46	6.93	7.71				8.40	8.27	7.46	6.93	8.33	7.18				
Miyazaki, Yumeta (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2022 Shimane High School Championships (Izumo, JPN)		Shimizu (2022) - shimane high school championships 2022 - biomechanics data analysis																	
date	26-May-22	time	12.43	24.33	37.48	51.85	51.85		9 / 4										
reaction time	interval			11.90	13.15	14.37			# of strides	12.43	11.90	13.15	14.37	24.33	27.52	3.19			
	velocity	8.05	8.40	7.60	6.96	7.71				8.05	8.40	7.60	6.96	8.22	7.27				
Tenkawa, Ten (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2022 Shimane High School Championships (Izumo, JPN)		Shimizu (2022) - shimane high school championships 2022 - biomechanics data analysis																	
date	26-May-22	time	12.97	25.43	38.28	51.99	51.99		7 / 5										
reaction time	interval			12.46	12.85	13.71			# of strides	12.97	12.46	12.85	13.71	25.43	26.56	1.13			
	velocity	7.71	8.03	7.78	7.29	7.69				7.71	8.03	7.78	7.29	7.86	7.53				
Ushiro, Keisuke (JPN) (1986)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Decathlon - Heat 1 - 2020 Japanese Multi-Event National Championships (Nagano, JPN)		Matsubayashi (2020) - research on athlete performance and technique- 2020 data book																	
date	26-Sep-20	time	6.71	12.34	18.17	24.30	30.61	37.24	44.30	52.11	52.11								
reaction time	interval			5.63	5.83	6.13	6.31	6.63	7.06	7.81									
	velocity	7.45	8.88	8.58	8.16	7.92	7.54	7.08	6.40	7.68									
Fujimoto, Takashi (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2022 Shimane High School Championships (Izumo, JPN)		Shimizu (2022) - shimane high school championships 2022 - biomechanics data analysis																	
date	26-May-22	time	12.65	24.70	38.16	52.16	52.16		2 / 6										
reaction time	interval			12.05	13.46	14.00			# of strides	12.65	12.05	13.46	14.00	24.70	27.46	2.76			
	velocity	7.91	8.30	7.43	7.14	7.67				7.91	8.30	7.43	7.14	8.10	7.28				
Hashiwata, Hibiki (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2023 Shimane High School Championships (Izumo, JPN)		Shimizu (2023) - shimane high school championships 2023 - biomechanics data analysis																	
date	26-May-23	time	12.57	24.92	38.23	52.28	52.28		5 / 6										
reaction time	interval			12.35	13.31	14.05			# of strides	12.57	12.35	13.31	14.05	24.92	27.36	2.44			
	velocity	7.96	8.10	7.51	7.12	7.65				7.96	8.10	7.51	7.12	8.03	7.31				
Morinaga, Natsuno (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2018 Shimane High School Championships (Izumo, JPN)		Shimizu (2018) - shimane high school championships 2018 - biomechanics data analysis																	
date	25-May-18	time	12.83	25.33	38.28	52.33	52.33		8 / 6										
reaction time	interval			12.50	12.95	14.05			# of strides	12.83	12.50	12.95	14.05	25.33	27.00	1.67			
	velocity	7.79	8.00	7.72	7.12	7.64				7.79	8.00	7.72	7.12	7.90	7.41				
Natsuki, Senimoto (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2018 Shimane High School Championships (Izumo, JPN)		Shimizu (2018) - shimane high school championships 2018 - biomechanics data analysis																	
date	25-May-18	time	12.47	24.95	38.23	52.57	52.57		1 / 7										
reaction time	interval			12.48	13.28	14.34			# of strides	12.47	12.48	13.28	14.34	24.95	27.62	2.67			
	velocity	8.02	8.01	7.53	6.97	7.61				8.02	8.01	7.53	6.97	8.02	7.24				
Ushiro, Keisuke (JPN) (1986)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Decathlon - FINAL - 2022 Japanese Multi-Event National Championships (Akita, JPN)		Takefu (2023) - performance analysis of decathlon athletes in the 2022 season																	
date	04-Jun-22	time	6.69	12.21	17.97	24.07	30.54	37.37	44.64	52.57	52.57								
reaction time	interval			5.52	5.76	6.10	6.47	6.83	7.27	7.93									
	velocity	7.47	9.06	8.68	8.20	7.73	7.32	6.88	6.31	7.61									
Ushiro, Keisuke (JPN) (1986)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Decathlon - Heat 1 - 2023 Michitaka Kinami Memorial (Osaka, JPN)		Matsubayashi (2024) - performance analysis of decathlon athletes in the 2023 season																	
date	06-May-23	time	6.84	12.47	18.00	24.41	30.80	37.57	44.75	52.61	52.61								
reaction time	interval	0.187		5.63	5.53	6.41	6.39	6.77	7.18	7.86									
	velocity	7.31	8.88	9.04	7.80	7.82	7.39	6.96	6.36	7.60									
Watanabe, Koki (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2017 Shimane High School Championships (Izumo, JPN)		Shimizu (2018) - shimane high school championships 2018 - biomechanics data analysis																	
date	26-May-17	time	12.87	25.50	39.03	52.70	52.70		4 / 4										
reaction time	interval			12.63	13.53	13.67			# of strides	12.87	12.63	13.53	13.67	25.50	27.20	1.70			
	velocity	7.77	7.92	7.39	7.32	7.59				7.77	7.92	7.39	7.32	7.84	7.35				
Miyazaki, Kanta (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2017 Shimane High School Championships (Izumo, JPN)		Shimizu (2018) - shimane high school championships 2018 - biomechanics data analysis																	
date	26-May-17	time	12.47	24.87	38.63	52.73	52.73		6 / 5										
reaction time	interval			12.40	13.76	14.10			# of strides	12.47	12.40	13.76	14.10	24.87	27.86	2.99			
	velocity	8.02	8.06	7.27	7.09	7.59				8.02	8.06	7.27	7.09	8.04	7.18				
Higashihara, Shun (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2023 Shimane High School Championships (Izumo, JPN)		Shimizu (2023) - shimane high school championships 2023 - biomechanics data analysis																	
date	26-May-23	time	12.67	25.25	38.73	52.77	52.77		2 / 7										
reaction time	interval			12.58	13.48	14.04			# of strides	12.67	12.58	13.48	14.04	25.25	27.52	2.27			
	velocity	7.89	7.95	7.42	7.12	7.58				7.89	7.95	7.42	7.12	7.92	7.27				
Ushiro, Keisuke (JPN) (1986)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
Decathlon - Heat 1 - 2022 Michitaka Kinami Memorial (Osaka, JPN)		Takefu (2023) - performance analysis of decathlon athletes in the 2022 season																	
date	30-Apr-22	time	6.75	12.37	18.11	24.23	30.62	37.43	44.83	52.93	52.93								
reaction time	interval	0.174		5.62	5.74	6.12	6.39	6.81	7.40	8.10									
	velocity	7.41	8.90	8.71	8.17	7.82	7.34	6.76	6.17	7.56									
Kitamura, Yasukazu (JPN)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2021 Shimane High School Championships (Izumo, JPN)		Shimizu (2021) - shimane high school championships 2021 - biomechanics data analysis																	

date	28-May-21	time	12.80	24.93	37.83	52.99	52.99	2 / 7											
reaction time		interval		12.13	12.90	15.16		# of strides	12.80	12.13	12.90	15.16	24.93	28.06	3.13				
		velocity	7.81	8.24	7.75	6.60	7.55		7.81	8.24	7.75	6.60	8.02	7.13					
Mukuno, Ryosuke (JPN)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2023 Shimane High School Championships (Izumo, JPN)	<i>Shimizu (2023) - shimane high school championships 2023 - biomechanics data analysis</i>																		
date	26-May-23	time	13.20	26.37	39.57	53.21	53.21	1 / 8											
reaction time		interval		13.17	13.20	13.64		# of strides	13.20	13.17	13.20	13.64	26.37	26.84	0.47				
		velocity	7.58	7.59	7.58	7.33	7.52		7.58	7.59	7.58	7.33	7.58	7.45					
Timbaci, Obediah (VAN) (2003)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Heat 3 - 2022 World Athletics Championships (Eugene, OR)	<i>Timing by Seiko (2022) - world athletics championships race analysis</i>																		
date	17-Jul-22	time	12.30	24.49	37.87	53.32	53.32	4 / 7											
reaction time	0.209	interval		12.19	13.38	15.45		# of strides	12.30	12.19	13.38	15.45	24.49	28.83	4.34				
		velocity	8.13	8.20	7.47	6.47	7.50		8.13	8.20	7.47	6.47	8.17	6.94					
Haroun, Mohamed Darm (QAT)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
National FINAL - 2019 Doha (Doha, QAT)	<i>Omega Timing (2019) - diamond league race analysis</i>																		
date	03-May-19	time	13.0	25.9	39.4	53.47	53.47	8 / 6											
reaction time	0.163	interval		12.9	13.5	14.1		# of strides	13.00	12.90	13.50	14.07	25.90	27.57	1.67				
		velocity	7.69	7.75	7.41	7.11	7.48		7.69	7.75	7.41	7.11	7.72	7.25					
Kanetsuki, Satoshi (JPN)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2021 Shimane High School Championships (Izumo, JPN)	<i>Shimizu (2021) - shimane high school championships 2021 - biomechanics data analysis</i>																		
date	28-May-21	time	13.53	26.72	40.22	54.01	54.01	7 / 8											
reaction time		interval		13.19	13.50	13.79		# of strides	13.53	13.19	13.50	13.79	26.72	27.29	0.57				
		velocity	7.39	7.58	7.41	7.25	7.41		7.39	7.58	7.41	7.25	7.49	7.33					
Nishikori, Yushin (JPN)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2022 Shimane High School Championships (Izumo, JPN)	<i>Shimizu (2022) - shimane high school championships 2022 - biomechanics data analysis</i>																		
date	26-May-22	time	12.65	25.30	39.29	54.68	54.68	3 / 7											
reaction time		interval		12.65	13.99	15.39		# of strides	12.65	12.65	13.99	15.39	25.30	29.38	4.08				
		velocity	7.91	7.91	7.15	6.50	7.32		7.91	7.91	7.15	6.50	7.91	6.81					
Ushiro, Keisuke (JPN) (1986)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Decathlon - Heat 1 - 2023 Japanese Multi-Event National Championships (Akita, JPN)	<i>Matsubayashi (2024) - performance analysis of decathlon athletes in the 2023 season</i>																		
date	10-Jun-23	time	6.72	12.36	18.22	24.51	31.32	38.75	46.58	55.13	55.13	9 / 7							
reaction time		interval		5.64	5.86	6.29	6.81	7.43	7.83	8.55		# of strides	12.36	12.15	14.24	16.38	24.51	30.62	6.11
		velocity	7.44	8.87	8.53	7.95	7.34	6.73	6.39	5.85	7.26		8.09	8.23	7.02	6.11	8.16	6.53	
Matsumura, Kohei (JPN)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2018 Shimane High School Championships (Izumo, JPN)	<i>Shimizu (2018) - shimane high school championships 2018 - biomechanics data analysis</i>																		
date	25-May-18	time	13.18	26.18	39.98	55.21	55.21	7 / 8											
reaction time		interval		13.00	13.80	15.23		# of strides	13.18	13.00	13.80	15.23	26.18	29.03	2.85				
		velocity	7.59	7.69	7.25	6.57	7.25		7.59	7.69	7.25	6.57	7.64	6.89					
Hashiwata, Hibiki (JPN)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2022 Shimane High School Championships (Izumo, JPN)	<i>Shimizu (2022) - shimane high school championships 2022 - biomechanics data analysis</i>																		
date	26-May-22	time	12.40	24.72	39.39	56.79	56.79	6 / 8											
reaction time		interval		12.32	14.67	17.40		# of strides	12.40	12.32	14.67	17.40	24.72	32.07	7.35				
		velocity	8.06	8.12	6.82	5.75	7.04		8.06	8.12	6.82	5.75	8.09	6.24					
Doom, Alexander (BEL) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
Semi-Final 1 - 2024 Olympic Games (Paris, FRA)	<i>Paris 2024 Olympic Games - Results Book (2024)</i>																		
date	06-Aug-24	time	6.26	11.12	16.01	21.09	26.48	32.88	1:55.10	6 / 8									
reaction time	0.150	interval		4.86	4.89	5.08	5.39	6.40		# of strides	11.12	9.97	11.79						
		velocity	7.99	10.29	10.22	9.84	9.28	7.81			8.99	10.03	8.48						
Hudson-Smith, Matthew (GBR) (1994)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2024 Memorial van damme (Brussels, BEL)	<i>Omega Timing (2024) - diamond league race analysis</i>																		
date	13-Sep-24	time	6.22	11.18	17.43	27.19	2:37.21	5 / 8											
reaction time	0.164	interval		4.96	6.25	9.76		# of strides	11.18	16.01				27.19					
		velocity	8.04	10.08	8.00	5.12			8.94	6.25				7.36					
Ismail, Ibrahim (QAT) (1972)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 1996 Olympic Games (Atlanta, GA)	<i>Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016</i>																		
date	29-Jul-96	time		21.65					dnf	7 / --									
reaction time	0.365	interval								# of strides		21.65			21.65				
		velocity		9.24								9.24			9.24				
Gardiner, Steven (BAH) (1995)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2018 Weltklasse (Zürich, SUI)	<i>Omega Timing (2018) - diamond league race analysis</i>																		
date	30-Aug-18	time	12.1						dnf	4 / --									
reaction time	0.126	interval								# of strides	12.10								
		velocity	8.26								8.26								
Makwala, Isaac (BOT) (1986)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2019 Shanghai (Shanghai, CHN)	<i>Omega Timing (2019) - diamond league race analysis</i>																		
date	18-May-19	time	11.9	22.3					dnf	7 / --									
reaction time	0.211	interval		10.4						# of strides	11.90	10.40			22.30				
		velocity	8.40	9.62							8.40	9.62			8.97				
Jones, Jonathan (BAR) (1999)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential		
FINAL - 2019 Herculis Meeting International d'Athlétisme (Monaco, MON)	<i>Omega Timing (2019) - diamond league race analysis</i>																		
date	12-Jul-19	time	11.2	21.5	32.6	nt	nt	7 / --											
reaction time		interval		10.3	11.1			DNS		# of strides	11.20	10.30	11.10		21.50				
		velocity	8.93	9.71	9.01						8.93	9.71	9.01		9.30				

Zambrano, Anthony (COL) (1998)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
FINAL - 2019 Herculis Meeting International d'Athlétisme (Monaco, MON)																		
date	12-Jul-19	time	11.3	16.5	21.9				nt	nt	8 / --							
reaction time		interval		10.6						DNS	# of strides	11.30	10.60			21.90		
		velocity	8.85	9.43								8.85	9.43			9.13		
Omega Timing (2019) - diamond league race analysis did not hear the recall gun for the false start in lane 4																		
Makwala, Isaac (BOT) (1986)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
National FINAL - 2019 Memorial van Damme (Brussels, BEL)																		
date	06-Sep-19	time	6.4	11.3	16.5	21.9	27.3	33.1	39.4	???	8 / --							
reaction time		interval	4.9	5.2	5.4	5.4	5.8	6.3		DQ	# of strides	11.30	10.60	11.20		21.90		
		velocity	7.81	10.20	9.62	9.26	9.26	8.62	7.94			8.85	9.43	8.93		9.13		
Omega Timing (2019) - diamond league race analysis																		
Cedenio, Machel (TTO) (1995)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
FINAL - 2021 Golden Gala Pietro Mennea (Florence, ITA)																		
date	10-Jun-21	time	6.3	11.6						dnf	3 / --							
reaction time	0.185	interval		5.30							# of strides	11.60						
		velocity	7.94	9.43								8.62						
Omega Timing (2021) - diamond league race analysis																		
Warner, Damian (CAN) (1989)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Decathlon - Heat 3 - 2022 World Athletics Championships (Eugene, OR)																		
date	23-Jul-22	time	11.15							dnf	1 / --							
reaction time	0.139	interval									# of strides	11.15						
		velocity	8.97									8.97						
Timing by Seiko (2022) - world athletics championships race analysis																		
Amene, Dubem (NGR) (2002)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Semi-Final 1 - 2022 Commonwealth Games (Birmingham, GBR)																		
date	05-Aug-22	time	6.4	11.5	17.0	22.8	28.8			dnf	9 / --							
reaction time	0.189	interval		5.10	5.50	5.80	6.00				# of strides	11.50	11.30			22.80		
		velocity	7.81	9.80	9.09	8.62	8.33					8.70	8.85			8.77		
Longines Timing (2022) - commonwealth games race analysis																		
Borlée, Kevin (BEL) (1988)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Semi-Final 2 - 2022 European Athletics Championships (Munich, GER)																		
date	16-Aug-22	time	11.30							dnf	6 / --							
reaction time	0.166	interval									# of strides	11.30						
		velocity	8.85									8.85						
European Athletics (2022) - european athletics championships race analysis																		
Litvin, Mikhail (KAZ) (1996)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
FINAL - 2023 Doha Diamond League (Doha, QAT)																		
date	05-May-23	time	6.4	11.6	17.6					dnf	5 / --							
reaction time	0.222	interval		5.20	6.00						# of strides	11.60						
		velocity	7.81	9.62	8.33							8.62						
Omega Timing (2023) - diamond league race analysis																		
Hudson-Smith, Matthew (GBR) (1994)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
FINAL - 2023 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR)																		
date	28-May-23	time	6.21							dnf	4 / --							
reaction time	0.156	interval									# of strides							
		velocity	8.05															
Omega Timing (2023) - diamond league race analysis																		
Samukonga, Muzala (ZAM) (2002)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
FINAL - 2023 Kamila Skolimowska Memorial (Silesia, POL)																		
date	16-Jul-23	time	6.27	11.22	21.80					dnf	3 / --							
reaction time	0.218	interval		4.95	10.58						# of strides	11.22						
		velocity	7.97	10.10	4.73							8.91						
Omega Timing (2023) - diamond league race analysis																		
Boyce, Desean (BAR) (2001)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Heat 5 - 2023 World Athletics Championships (Budapest, HUN)																		
date	20-Aug-23	time	11.14		21.82		33.77			dnf	8 / --							
reaction time	0.168	interval			10.68		11.95				# of strides	11.14	10.68	11.95		21.82		
		velocity	8.98		9.36		8.37					8.98	9.36	8.37		9.17		
Seiko Timing (2023) - world championship race analysis																		
Gardiner, Steven (BAH) (1995)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Semi-Final 3 - 2023 World Athletics Championships (Budapest, HUN)																		
date	22-Aug-23	time	11.17		21.15		32.57			dnf	6 / --							
reaction time	0.221	interval			9.98		11.42				# of strides	11.17	9.98	11.42		21.15		
		velocity	8.95		10.02		8.76					8.95	10.02	8.76		9.46		
Seiko Timing (2023) - world championship race analysis																		
Ndori, Bayapo (BOT) (1999)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Semi-Final 3 - 2023 World Athletics Championships (Budapest, HUN)																		
date	22-Aug-23	time	12.69							dnf	8 / --							
reaction time	0.159	interval									# of strides	12.69						
		velocity	7.88									7.88						
Seiko Timing (2023) - world championship race analysis																		
Hudson-Smith, Matthew (GBR) (1994)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
FINAL - 2023 Prefontaine Classic (Eugene, OR)																		
date	16-Sep-23	time	6.17	11.16	17.22					dnf	5 / --							
reaction time	0.166	interval		4.99	6.06						# of strides	11.16						
		velocity	8.10	10.02	8.25							8.96						
Omega Timing (2023) - diamond league race analysis																		
Victor, Lndon (GRN) (1993)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Decathlon - Heat 2 - 2024 USA Olympic Trials (Eugene, OR)																		
date	21-Jun-24	time	11.22		22.52					dnf	3 / --							
reaction time		interval			11.30						# of strides	11.22	11.30			22.52		
		velocity	8.91		8.85							8.91	8.85			8.88		
USATF and Karmarush (2024) - USA Olympic trials results and race analysis																		
Ekwan, Zablon Ekhal (KEN) (1997)		50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Heat 6 - 2024 Olympic Games (Paris, FRA)																		
Paris 2024 Olympc Games - Results Book (2024)																		

date	04-Aug-24	time	6.09	10.95	15.94	21.50	dnf	6 / --											
reaction time	0.142	interval		4.86	4.99	5.56		# of strides	10.95	10.55									
		velocity	8.21	10.29	10.02	8.99			9.13	9.48									

Bailey, Sean (JAM) (1997)	50m	100m	150m	200m	250m	300m	350m	400m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Repechage 4 - 2024 Olympic Games (Paris, FRA)																	
date	05-Aug-24	time	6.26	11.36					dnf	5 / 6							
reaction time	0.184	interval		5.10						# of strides	11.36						
		velocity	7.99	9.80							8.80						

Men's 300m Split Times - by time

van Niekerk, Wayde (RSA) (1992)	50m	100m	150m	200m	250m	300m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2017 Golden Spike (Ostrava, CZE) (300m)																
date	28-Jun-17	time	10.49	19.98	30.81		30.81	5 / 1								
reaction time	0.152	interval		9.49	10.83		WR	# of strides	10.49	9.49	10.83		19.98		20.32	
		velocity	9.53	10.54	9.23		9.74	121.2	9.53	10.54	9.23		10.01		9.84	
Makwala, Isaac (BOT) (1986)	50m	100m	150m	200m	250m	300m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2017 Golden Spike (Ostrava, CZE) (300m)																
date	28-Jun-17	time	10.64	20.39	31.44		31.44	6 / 2								
reaction time	0.217	interval		9.75	11.05		NR	# of strides	10.64	9.75	11.05		20.39		20.80	
		velocity	9.40	10.26	9.05		9.54	133.0	9.40	10.26	9.05		9.81		9.62	
Munyai, Clarence (RSA) (1998)	50m	100m	150m	200m	250m	300m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2017 Golden Spike (Ostrava, CZE) (300m)																
date	28-Jun-17	time	10.55	20.42	31.61		31.61	3 / 3								
reaction time	0.155	interval		9.87	11.19		WJR	# of strides	10.55	9.87	11.19		20.42		21.06	
		velocity	9.48	10.13	8.94		9.49	136.2	9.48	10.13	8.94		9.79		9.50	
Fujimitsu, Kenji (JPN) (1986)	50m	100m	150m	200m	250m	300m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2017 Izumo Athletics Games (Izumo, JPN) (300m)																
date	23-Apr-17	time	10.74	21.02	32.47		32.47	4 / 1								
reaction time		interval		10.28	11.45			# of strides	10.74	10.28	11.45		21.02		21.73	
		velocity	9.31	9.73	8.73		9.24	137.0	9.31	9.73	8.73		9.51		9.20	
Sato, Kentaro (JPN) (1994)	50m	100m	150m	200m	250m	300m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2023 Japanese National Sports Festival (Kagoshima, JPN) (300m)																
date	15-Oct-23	time	6.29	11.34	16.41	21.64	26.97	32.59	6 / 1							
reaction time	0.191	interval		5.05	5.07	5.23	5.33	5.62		# of strides	11.34	10.30	10.95	21.64	21.25	
		velocity	7.95	9.90	9.86	9.56	9.38	8.90		9.21	131.5	8.82	9.71	9.13	9.24	9.41
Azuma, Kaiki (JPN) (1993)	50m	100m	150m	200m	250m	300m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2017 Izumo Athletics Games (Izumo, JPN) (300m)																
date	23-Apr-17	time	10.84	21.24	32.86		32.86	6 / 2								
reaction time		interval		10.40	11.62		PB	# of strides	10.84	10.40	11.62		21.24		22.02	
		velocity	9.23	9.62	8.61		9.13	140.5	9.23	9.62	8.61		9.42		9.08	
Fujisawa, Rui (JPN) (2003)	50m	100m	150m	200m	250m	300m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2023 Japanese National Sports Festival (Kagoshima, JPN) (300m)																
date	15-Oct-23	time	6.33	11.37	16.52	21.87	27.26	32.88	32.88	8 / 2						
reaction time	0.167	interval		5.04	5.15	5.35	5.39	5.62		# of strides	11.37	10.50	11.01	21.87	21.51	
		velocity	7.90	9.92	9.71	9.35	9.28	8.90		9.12	141.0	8.80	9.52	9.08	9.14	9.30
Ekejunia, Ruo (JPN) (2004)	50m	100m	150m	200m	250m	300m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2023 Japanese National Sports Festival (Kagoshima, JPN) (300m)																
date	15-Oct-23	time	6.29	11.34	16.42	21.72	27.16	32.90	32.90	4 / 3						
reaction time	0.199	interval		5.05	5.08	5.30	5.44	5.74		# of strides	11.34	10.38	11.18	21.72	21.56	
		velocity	7.95	9.90	9.84	9.43	9.19	8.71		9.12	135.5	8.82	9.63	8.94	9.21	9.28
Mori, Masato (JPN) (2001)	50m	100m	150m	200m	250m	300m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2023 Japanese National Sports Festival (Kagoshima, JPN) (300m)																
date	15-Oct-23	time	6.44	11.58	16.60	21.76	27.15	32.98	32.98	1 / 4						
reaction time	0.195	interval		5.14	5.02	5.16	5.39	5.83		# of strides	11.58	10.18	11.22	21.76	21.40	
		velocity	7.76	9.73	9.96	9.69	9.28	8.58		9.10	8.64	9.82	8.91	9.19	9.35	
Imazumi, Kenki (JPN) (2001)	50m	100m	150m	200m	250m	300m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2023 Japanese National Sports Festival (Kagoshima, JPN) (300m)																
date	15-Oct-23	time	6.23	11.21	16.36	21.77	27.25	32.98	32.98	1 / 4						
reaction time	0.184	interval		4.98	5.15	5.41	5.48	5.73		# of strides	11.21	10.56	11.21	21.77	21.77	
		velocity	8.03	10.04	9.71	9.24	9.12	8.73		9.10	8.92	9.47	8.92	9.19	9.19	
Kimura, Kazushi (JPN) (1993)	50m	100m	150m	200m	250m	300m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential	
FINAL - 2017 Izumo Athletics Games (Izumo, JPN) (300m)																
date	23-Apr-17	time	11.11	21.54	33.04		33.04	3 / 3								
reaction time		interval		10.43	11.50		PB	# of strides	11.11	10.43	11.50		21.54		21.93	
		velocity	9.00	9.59	8.70		9.08	140.0	9.00	9.59	8.70		9.29		9.12	

WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation

		50m	100m	150m	200m	250m	300m	Official Time	Lane / Place	0-100m	100-200m	200-300m	300-400m	0-200m	200m-400m	Differential
Kimura, Jun (JPN) (1991)																
FINAL - 2017 Izumo Athletics Games (Izumo, JPN) (300m)																
date	23-Apr-17	time	11.02		21.50		33.05	33.05	5 / 4							
reaction time		interval			10.48		11.55	PB	# of strides	11.02	10.48	11.55		21.50		22.03
		velocity	9.07		9.54		8.66	9.08	134.5	9.07	9.54	8.66		9.30		9.08
Kinoshita, Yuichi (JPN) (2002)																
U18 FINAL - 2019 Japanese National U18/U20 Championships (Hiroshima, JPN) (300m)																
date	18-Oct-19	time	11.12		21.58		33.07	33.07	4 / 1							
reaction time	0.159	interval			10.46		11.49	9.07	# of strides	11.12	10.46	11.49		21.58		21.95
		velocity	8.99		9.56		8.70	9.07	140.0	8.99	9.56	8.70		9.27		9.11
Inoue, Futoshi (JPN)																
U18 FINAL - 2019 Japanese National U18/U20 Championships (Hiroshima, JPN) (300m)																
date	18-Oct-19	time	11.38		21.92		33.46	33.46	5 / 2							
reaction time	0.192	interval			10.54		11.54	8.97	# of strides	11.38	10.54	11.54		21.92		22.08
		velocity	8.79		9.49		8.67	8.97	135.5	8.79	9.49	8.67		9.12		9.06
Hirakawa, Kira (JPN) (2005)																
FINAL - 2021 Japanese U18 National Championships (Matsuyama, JPN) (300m)																
date	23-Oct-21	time	6.23	11.23	16.42	21.80	27.47	33.56	3 / 1							
reaction time	0.204	interval			5.00	5.19	5.38	5.67	# of strides	11.23	10.57	11.76		21.80		22.33
		velocity	8.03	10.00	9.63	9.29	8.82	8.21	8.94	138.0	8.90	9.46	8.50		9.17	8.96
Takasu, Fuuto (JPN) (2004)																
FINAL - 2021 Japanese U18 National Championships (Matsuyama, JPN) (300m)																
date	23-Oct-21	time	6.06	11.03	16.31	21.83	27.56	33.64	9 / 2							
reaction time	0.165	interval			4.97	5.28	5.52	5.73	# of strides	11.03	10.80	11.81		21.83		22.61
		velocity	8.25	10.06	9.47	9.06	8.73	8.22	8.92	132.2	9.07	9.26	8.47		9.16	8.85
Yamamoto, Reishin (JPN) (2004)																
FINAL - 2021 Japanese U18 National Championships (Matsuyama, JPN) (300m)																
date	23-Oct-21	time	6.23	11.30	16.53	21.90	27.56	33.68	6 / 3							
reaction time	0.180	interval			5.07	5.23	5.37	5.66	# of strides	11.30	10.60	11.78		21.90		22.38
		velocity	8.03	9.86	9.56	9.31	8.83	8.17	8.91	129.2	8.85	9.43	8.49		9.13	8.94
Takahashi, Yumi (JPN) (1995)																
FINAL - 2017 Izumo Athletics Games (Izumo, JPN) (300m)																
date	23-Apr-17	time	11.23		22.00		33.85	33.85	7 / 5							
reaction time		interval			10.77		11.85	PB	# of strides	11.23	10.77	11.85		22.00		22.62
		velocity	8.90		9.29		8.44	8.86	137.2	8.90	9.29	8.44		9.09		8.84
Hirano, Yuki (JPN) (2002)																
U18 FINAL - 2019 Japanese National U18/U20 Championships (Hiroshima, JPN) (300m)																
date	18-Oct-19	time	11.29		22.23		33.87	33.87	7 / 3							
reaction time	0.187	interval			10.94		11.64	8.86	# of strides	11.29	10.94	11.64		22.23		22.58
		velocity	8.86		9.14		8.59	8.86	140.0	8.86	9.14	8.59		9.00		8.86
Shimizu, Tkeru (JPN) (2004)																
FINAL - 2021 Japanese U18 National Championships (Matsuyama, JPN) (300m)																
date	23-Oct-21	time	6.27	11.31	16.67	22.21	27.86	33.87	2 / 4							
reaction time	0.205	interval			5.04	5.36	5.54	5.65	# of strides	11.31	10.90	11.66		22.21		22.56
		velocity	7.97	9.92	9.33	9.03	8.85	8.32	8.86	135.0	8.84	9.17	8.58		9.00	8.87
Hata, Keiichiro (JPN) (1995)																
FINAL - 2017 Izumo Athletics Games (Izumo, JPN) (300m)																
date	23-Apr-17	time	11.14		21.91		33.92	33.92	2 / 6							
reaction time		interval			10.77		12.01	PB	# of strides	11.14	10.77	12.01		21.91		22.78
		velocity	8.98		9.29		8.33	8.84	126.0	8.98	9.29	8.33		9.13		8.78
Konishi, Yuta (JPN) (1990)																
FINAL - 2017 Izumo Athletics Games (Izumo, JPN) (300m)																
date	23-Apr-17	time	11.64		22.52		33.95	33.95	9 / 7							
reaction time		interval			10.88		11.43	PB	# of strides	11.64	10.88	11.43		22.52		22.31
		velocity	8.59		9.19		8.75	8.84	131.0	8.59	9.19	8.75		8.88		8.96
Mamada, Kodai (JPN) (2002)																
U18 FINAL - 2019 Japanese National U18/U20 Championships (Hiroshima, JPN) (300m)																
date	18-Oct-19	time	11.39		22.07		34.00	34.00	3 / 4							
reaction time	0.160	interval			10.68		11.93	8.82	# of strides	11.39	10.68	11.93		22.07		22.61
		velocity	8.78		9.36		8.38	8.82	145.7	8.78	9.36	8.38		9.06		8.85
Shibutani, Hiroya (JPN) (2004)																
FINAL - 2021 Japanese U18 National Championships (Matsuyama, JPN) (300m)																
date	23-Oct-21	time	6.13	11.09	16.32	21.81	27.61	34.02	7 / 5							
reaction time	0.198	interval			4.96	5.23	5.49	5.80	# of strides	11.09	10.72	12.21		21.81		22.93
		velocity	8.16	10.08	9.56	9.11	8.62	7.80	8.82	137.0	9.02	9.33	8.19		9.17	8.72
Hirai, Masato (JPN) (2002)																
U18 FINAL - 2019 Japanese National U18/U20 Championships (Hiroshima, JPN) (300m)																
date	18-Oct-19	time	11.59		22.41		34.25	34.25	6 / 5							
reaction time	0.153	interval			10.82		11.84	8.76	# of strides	11.59	10.82	11.84		22.41		22.66
		velocity	8.63		9.24		8.45	8.76	138.0	8.63	9.24	8.45		8.92		8.83
Morikawa, Hazuki (JPN) (2004)																
FINAL - 2021 Japanese U18 National Championships (Matsuyama, JPN) (300m)																
date	23-Oct-21	time	6.13	11.09	16.32	21.81	27.61	34.02	7 / 5							
reaction time	0.198	interval			4.96	5.23	5.49	5.80	# of strides	11.09	10.72	12.21		21.81		22.93
		velocity	8.16	10.08	9.56	9.11	8.62	7.80	8.82	137.0	9.02	9.33	8.19		9.17	8.72

