



TIME ANALYSIS

FOR THE

IAAF World Championships

LONDON 2017

5,000 m Men's

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INTRODUCTION

The men's 5000 m final was held on the evening of August 12th. The average speeds for each of the top eight athletes over every 400 m segment (and last 200 m) are included in this report, as well as a graph of each of these athletes' positions at each 400 m split (and last 200 m). The split data were provided by SEIKO. The results of the final are shown below.








IAAF World Championships		London 4-13 August 2017			
RESULTS					
5000 Metres Men - Final					
					
RECORDS	RESULT NAME	COUNTRY	AGE	VENUE	DATE
World Record WR	12:37.35 Kenenisa BEKELE	ETH	22	Hengelo (Blankers-Koen Stadion)	31 May 2004
Championships Record CR	12:52.79 Eliud KIPCHOGE	KEN	19	Paris Saint-Denis (Stade de France)	31 Aug 2003
World Leading WL	12:55.23 Muktar EDRIS	ETH	23	Lausanne (Pontaise)	6 Jul 2017
Area Record AR	National Record NR	Personal Best PB	Season Best SB		
12 August 2017 20:21 START TIME		21° C TEMPERATURE		53 % HUMIDITY	
PLACE	NAME	COUNTRY	DATE of BIRTH	ORDER	RESULT
1	Muktar EDRIS	ETH	14 Jan 94	6	13:32.79
2	Mohamed FARAH	GBR	23 Mar 83	4	13:33.22
3	Paul Kipkemol CHELIMO	USA	27 Oct 90	10	13:33.30
4	Yomif KEJELCHA	ETH	1 Aug 97	7	13:33.51
5	Selemon BAREGA	ETH	20 Jan 00	13	13:35.34
6	Mohammed AHMED	CAN	5 Jan 91	15	13:35.43
7	Aron KIFLE	ERI	20 Feb 98	2	13:36.91
8	Andrew BUTCHART	GBR	14 Oct 91	1	13:38.73
9	Justyn KNIGHT	CAN	19 Jul 96	11	13:39.15
10	Kemoy CAMPBELL	JAM	14 Jan 91	8	13:39.74
11	Patrick TIERNAN	AUS	11 Sep 94	9	13:40.01
12	Birhanu BALEW	BRN	27 Feb 96	3	13:43.25
13	Cyrus RUTTO	KEN	21 Apr 92	14	13:48.64
14	Awet HABTE	ERI	29 Sep 97	12	13:58.68
	Ryan HILL	USA	31 Jan 90	5	DNS
Timing and Measurement by SEIKO			AT-5000-M-f--1--.RS1..v1		Issued at 20:37 on Saturday, 12 August 2017
Official Partners					
					

Table 1. List of abbreviations used.

DNS	Did not start
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Final

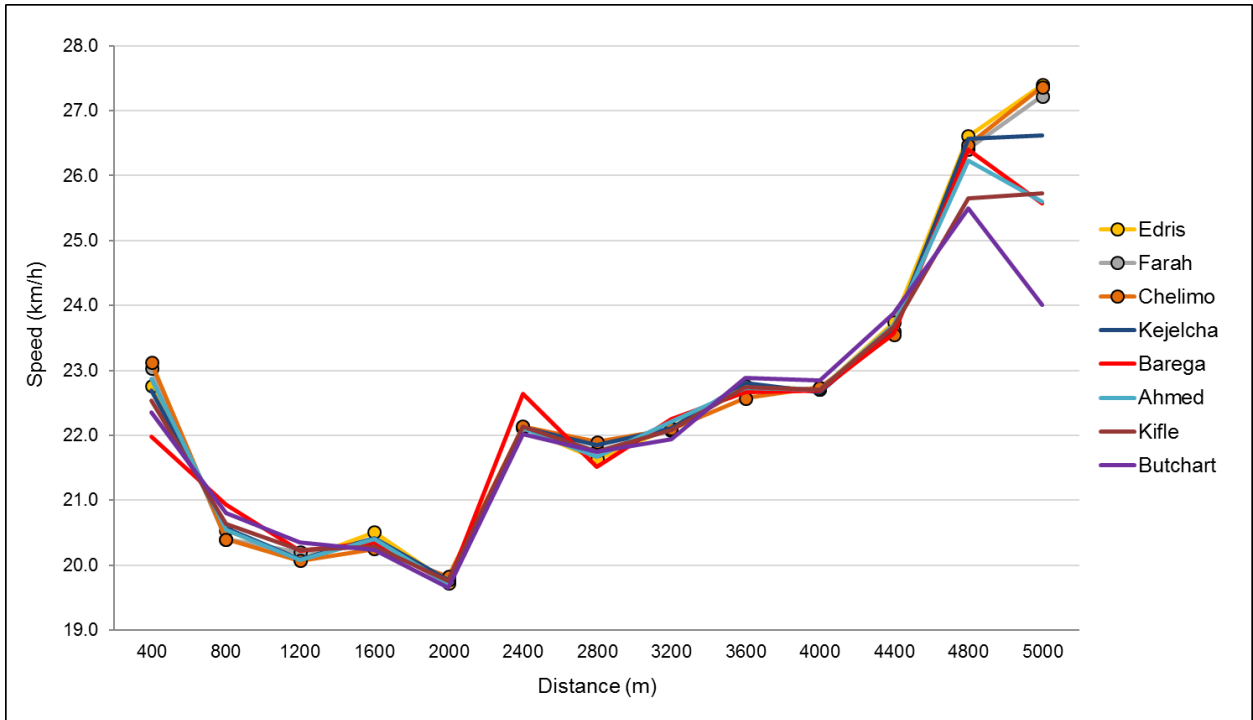


Figure 1. The mean speeds for each 400 m segment (and last 200 m) for the top eight athletes.

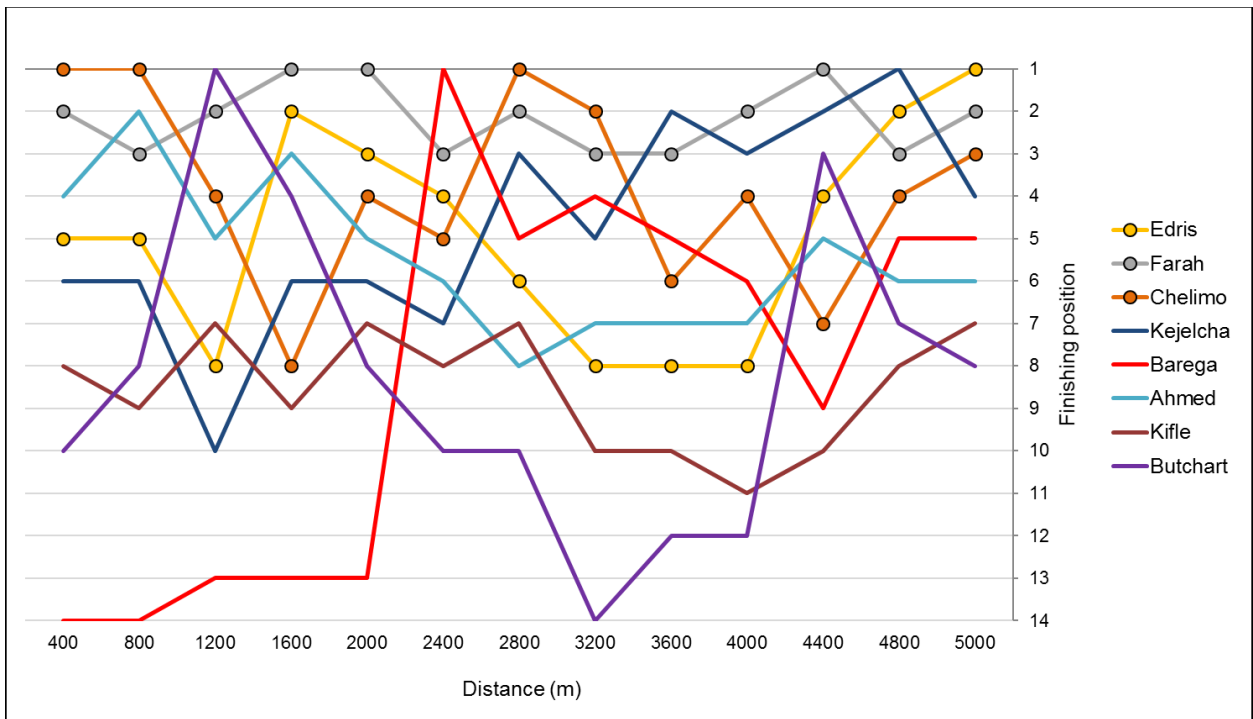


Figure 2. The position of the top eight athletes after each 400 m segment (and last 200 m).

896		Edris, Muktar (ETH)									Posn. 1
		100m	200m	300m	400m	500m	600m	700m	800m	900m	1000m
Race Time		16.11	32.33	47.61	1:03.25	1:19.63	1:37.12	1:55.15	2:13.35	2:31.22	2:48.77
100m		16.11	16.22	15.28	15.64	16.38	17.49	18.03	18.20	17.87	17.55
400m					1:03.25				1:10.10		
1000m											2:48.77
		1100m	1200m	1300m	1400m	1500m	1600m	1700m	1800m	1900m	2000m
Race Time		3:06.30	3:25.06	3:42.94	4:00.08	4:17.27	4:35.28	4:53.46	5:11.56	5:29.97	5:48.28
100m		17.53	18.76	17.88	17.14	17.19	18.01	18.18	18.10	18.41	18.31
400m			1:11.71				1:10.22				1:13.00
1000m											2:59.51
		2100m	2200m	2300m	2400m	2500m	2600m	2700m	2800m	2900m	3000m
Race Time		6:06.53	6:22.95	6:37.96	6:53.37	7:09.74	7:26.25	7:43.35	7:59.93	8:16.52	8:33.52
100m		18.25	16.42	15.01	15.41	16.37	16.51	17.10	16.58	16.59	17.00
400m					1:05.09				1:06.56		
1000m											2:45.24
		3100m	3200m	3300m	3400m	3500m	3600m	3700m	3800m	3900m	4000m
Race Time		8:49.70	9:05.04	9:20.73	9:36.27	9:52.30	10:08.33	10:24.49	10:40.13	10:56.07	11:11.75
100m		16.18	15.34	15.69	15.54	16.03	16.03	16.16	15.64	15.94	15.68
400m			1:05.11				1:03.29				1:03.42
1000m											2:38.23
		4100m	4200m	4300m	4400m	4500m	4600m	4700m	4800m	4900m	5000m
Race Time		11:27.58	11:42.30	11:57.53	12:12.40	12:26.76	12:40.41	12:53.98	13:06.51	13:19.63	13:32.79
100m		15.83	14.72	15.23	14.87	14.36	13.65	13.57	12.53	13.12	13.16
400m					1:00.65				54.11		
1000m											2:21.04

954		Farah, Mohamed (GBR)									Posn. 2
		100m	200m	300m	400m	500m	600m	700m	800m	900m	1000m
Race Time		15.95	31.64	46.85	1:02.53	1:19.14	1:36.83	1:54.96	2:13.13	2:31.09	2:48.36
100m		15.95	15.69	15.21	15.68	16.61	17.69	18.13	18.17	17.96	17.27
400m					1:02.53				1:10.60		
1000m											2:48.36
		1100m	1200m	1300m	1400m	1500m	1600m	1700m	1800m	1900m	2000m
Race Time		3:05.77	3:24.43	3:42.98	4:00.03	4:17.52	4:35.26	4:53.55	5:11.60	5:30.02	5:48.08
100m		17.41	18.66	18.55	17.05	17.49	17.74	18.29	18.05	18.42	18.06
400m			1:11.30				1:10.83				1:12.82
1000m											2:59.72
		2100m	2200m	2300m	2400m	2500m	2600m	2700m	2800m	2900m	3000m
Race Time		6:06.27	6:22.62	6:37.71	6:53.18	7:09.56	7:25.93	7:42.96	7:59.34	8:15.94	8:33.03
100m		18.19	16.35	15.09	15.47	16.38	16.37	17.03	16.38	16.60	17.09
400m					1:05.10				1:06.16		
1000m											2:44.95
		3100m	3200m	3300m	3400m	3500m	3600m	3700m	3800m	3900m	4000m
Race Time		8:49.01	9:04.55	9:20.34	9:35.73	9:51.84	10:07.83	10:23.91	10:39.54	10:55.37	11:11.24
100m		15.98	15.54	15.79	15.39	16.11	15.99	16.08	15.63	15.83	15.87
400m			1:05.21				1:03.28				1:03.41
1000m											2:38.21
		4100m	4200m	4300m	4400m	4500m	4600m	4700m	4800m	4900m	5000m
Race Time		11:27.12	11:42.14	11:57.32	12:12.24	12:26.40	12:40.42	12:54.23	13:06.77	13:19.88	13:33.22
100m		15.88	15.02	15.18	14.92	14.16	14.02	13.81	12.54	13.11	13.34
400m					1:01.00				54.53		
1000m											2:21.98

1382		Chelimo, Paul Kipkemoi (USA)									Posn. 3
		100m	200m	300m	400m	500m	600m	700m	800m	900m	1000m
<i>Race Time</i>		16.32	31.38	46.59	1:02.29	1:18.94	1:36.70	1:54.64	2:12.88	2:30.75	2:48.31
100m		16.32	15.06	15.21	15.70	16.65	17.76	17.94	18.24	17.87	17.56
400m					1:02.29				1:10.59		
1000m											2:48.31
		1100m	1200m	1300m	1400m	1500m	1600m	1700m	1800m	1900m	2000m
<i>Race Time</i>		3:06.00	3:24.64	3:43.34	4:00.24	4:17.74	4:35.74	4:53.95	5:11.88	5:30.27	5:48.37
100m		17.69	18.64	18.70	16.90	17.50	18.00	18.21	17.93	18.39	18.10
400m			1:11.76				1:11.10				1:12.63
1000m											3:00.06
		2100m	2200m	2300m	2400m	2500m	2600m	2700m	2800m	2900m	3000m
<i>Race Time</i>		6:06.66	6:23.03	6:38.03	6:53.42	7:09.83	7:26.22	7:43.47	7:59.17	8:15.78	8:32.98
100m		18.29	16.37	15.00	15.39	16.41	16.39	17.25	15.70	16.61	17.20
400m					1:05.05				1:05.75		
1000m											2:44.61
		3100m	3200m	3300m	3400m	3500m	3600m	3700m	3800m	3900m	4000m
<i>Race Time</i>		8:48.85	9:04.33	9:20.19	9:36.01	9:52.09	10:08.13	10:24.12	10:39.79	10:55.63	11:11.46
100m		15.87	15.48	15.86	15.82	16.08	16.04	15.99	15.67	15.84	15.83
400m			1:05.16				1:03.80				1:03.54
1000m											2:38.48
		4100m	4200m	4300m	4400m	4500m	4600m	4700m	4800m	4900m	5000m
<i>Race Time</i>		11:27.38	11:42.55	11:57.73	12:12.60	12:26.82	12:40.87	12:54.58	13:06.99	13:19.83	13:33.30
100m		15.92	15.17	15.18	14.87	14.22	14.05	13.71	12.41	12.84	13.47
400m					1:01.14				54.39		
1000m											2:21.84

899		Kejelcha, Yomif (ETH)									Posn. 4
		100m	200m	300m	400m	500m	600m	700m	800m	900m	1000m
<i>Race Time</i>		16.86	32.47	47.88	1:03.47	1:19.81	1:37.28	1:55.31	2:13.49	2:31.53	2:48.98
100m		16.86	15.61	15.41	15.59	16.34	17.47	18.03	18.18	18.04	17.45
400m					1:03.47				1:10.02		
1000m											2:48.98
		1100m	1200m	1300m	1400m	1500m	1600m	1700m	1800m	1900m	2000m
<i>Race Time</i>		3:06.52	3:25.14	3:43.66	4:00.46	4:18.02	4:35.69	4:54.04	5:11.86	5:30.43	5:48.53
100m		17.54	18.62	18.52	16.80	17.56	17.67	18.35	17.82	18.57	18.10
400m			1:11.65				1:10.55				1:12.84
1000m											2:59.55
		2100m	2200m	2300m	2400m	2500m	2600m	2700m	2800m	2900m	3000m
<i>Race Time</i>		6:06.83	6:23.17	6:38.24	6:53.62	7:09.99	7:26.14	7:43.19	7:59.51	8:16.06	8:33.15
100m		18.30	16.34	15.07	15.38	16.37	16.15	17.05	16.32	16.55	17.09
400m					1:05.09				1:05.89		
1000m											2:44.62
		3100m	3200m	3300m	3400m	3500m	3600m	3700m	3800m	3900m	4000m
<i>Race Time</i>		8:49.19	9:04.63	9:20.62	9:35.76	9:51.90	10:07.78	10:23.96	10:39.59	10:55.48	11:11.32
100m		16.04	15.44	15.99	15.14	16.14	15.88	16.18	15.63	15.89	15.84
400m			1:05.12				1:03.15				1:03.54
1000m											2:38.17
		4100m	4200m	4300m	4400m	4500m	4600m	4700m	4800m	4900m	5000m
<i>Race Time</i>		11:27.19	11:42.17	11:57.34	12:12.26	12:26.46	12:40.17	12:53.85	13:06.46	13:19.60	13:33.51
100m		15.87	14.98	15.17	14.92	14.20	13.71	13.68	12.61	13.14	13.91
400m					1:00.94				54.20		
1000m											2:22.19

893		Barega, Selemon (ETH)									Posn. 5
		100m	200m	300m	400m	500m	600m	700m	800m	900m	1000m
<i>Race Time</i>		17.30	33.84	49.94	1:05.50	1:21.47	1:38.25	1:56.43	2:14.28	2:32.45	2:49.95
100m		17.30	16.54	16.10	15.56	15.97	16.78	18.18	17.85	18.17	17.50
400m					1:05.50				1:08.78		
1000m											2:49.95
		1100m	1200m	1300m	1400m	1500m	1600m	1700m	1800m	1900m	2000m
<i>Race Time</i>		3:06.98	3:25.50	3:44.07	4:00.96	4:18.51	4:36.26	4:54.59	5:12.48	5:31.07	5:49.29
100m		17.03	18.52	18.57	16.89	17.55	17.75	18.33	17.89	18.59	18.22
400m			1:11.22				1:10.76				1:13.03
1000m											2:59.34
		2100m	2200m	2300m	2400m	2500m	2600m	2700m	2800m	2900m	3000m
<i>Race Time</i>		6:07.47	6:22.11	6:37.04	6:52.89	7:09.53	7:26.14	7:43.23	7:59.84	8:16.28	8:33.33
100m		18.18	14.64	14.93	15.85	16.64	16.61	17.09	16.61	16.44	17.05
400m					1:03.60				1:06.95		
1000m											2:44.04
		3100m	3200m	3300m	3400m	3500m	3600m	3700m	3800m	3900m	4000m
<i>Race Time</i>		8:49.42	9:04.56	9:20.46	9:36.22	9:52.36	10:08.10	10:24.19	10:39.80	10:55.75	11:11.55
100m		16.09	15.14	15.90	15.76	16.14	15.74	16.09	15.61	15.95	15.80
400m			1:04.72				1:03.54				1:03.45
1000m											2:38.22
		4100m	4200m	4300m	4400m	4500m	4600m	4700m	4800m	4900m	5000m
<i>Race Time</i>		11:27.73	11:42.53	11:57.74	12:12.64	12:26.96	12:40.57	12:54.33	13:07.18	13:21.10	13:35.34
100m		16.18	14.80	15.21	14.90	14.32	13.61	13.76	12.85	13.92	14.24
400m					1:01.09				54.54		
1000m											2:23.79

749		Ahmed, Mohammed (CAN)									Posn. 6
		100m	200m	300m	400m	500m	600m	700m	800m	900m	1000m
<i>Race Time</i>		16.06	32.09	47.30	1:02.96	1:19.52	1:36.92	1:54.89	2:13.06	2:30.94	2:48.54
100m		16.06	16.03	15.21	15.66	16.56	17.40	17.97	18.17	17.88	17.60
400m					1:02.96				1:10.10		
1000m											2:48.54
		1100m	1200m	1300m	1400m	1500m	1600m	1700m	1800m	1900m	2000m
<i>Race Time</i>		3:06.17	3:24.77	3:43.48	4:00.25	4:17.81	4:35.36	4:53.67	5:11.80	5:30.20	5:48.46
100m		17.63	18.60	18.71	16.77	17.56	17.55	18.31	18.13	18.40	18.26
400m			1:11.71				1:10.59				1:13.10
1000m											2:59.92
		2100m	2200m	2300m	2400m	2500m	2600m	2700m	2800m	2900m	3000m
<i>Race Time</i>		6:06.78	6:23.22	6:38.23	6:53.60	7:09.83	7:26.34	7:43.43	8:00.06	8:16.43	8:33.45
100m		18.32	16.44	15.01	15.37	16.23	16.51	17.09	16.63	16.37	17.02
400m					1:05.14				1:06.46		
1000m											2:44.99
		3100m	3200m	3300m	3400m	3500m	3600m	3700m	3800m	3900m	4000m
<i>Race Time</i>		8:49.46	9:04.87	9:20.55	9:36.04	9:52.13	10:08.21	10:24.31	10:39.95	10:55.83	11:11.65
100m		16.01	15.41	15.68	15.49	16.09	16.08	16.10	15.64	15.88	15.82
400m			1:04.81				1:03.34				1:03.44
1000m											2:38.20
		4100m	4200m	4300m	4400m	4500m	4600m	4700m	4800m	4900m	5000m
<i>Race Time</i>		11:27.51	11:42.34	11:57.52	12:12.41	12:26.59	12:40.61	12:54.43	13:07.30	13:21.26	13:35.43
100m		15.86	14.83	15.18	14.89	14.18	14.02	13.82	12.87	13.96	14.17
400m					1:00.76				54.89		
1000m											2:23.78

852		Kifle, Aron (ERI)									Posn. 7
		100m	200m	300m	400m	500m	600m	700m	800m	900m	1000m
Race Time		16.50	32.78	48.41	1:03.91	1:20.12	1:37.49	1:55.55	2:13.70	2:31.66	2:49.05
100m		16.50	16.28	15.63	15.50	16.21	17.37	18.06	18.15	17.96	17.39
400m					1:03.91				1:09.79		
1000m											2:49.05
		1100m	1200m	1300m	1400m	1500m	1600m	1700m	1800m	1900m	2000m
Race Time		3:06.50	3:24.88	3:43.71	4:00.51	4:18.06	4:35.86	4:54.19	5:12.04	5:30.63	5:48.76
100m		17.45	18.38	18.83	16.80	17.55	17.80	18.33	17.85	18.59	18.13
400m			1:11.18				1:10.98				1:12.90
1000m											2:59.71
		2100m	2200m	2300m	2400m	2500m	2600m	2700m	2800m	2900m	3000m
Race Time		6:07.06	6:23.30	6:38.44	6:53.81	7:10.01	7:26.46	7:43.58	8:00.04	8:16.67	8:33.72
100m		18.30	16.24	15.14	15.37	16.20	16.45	17.12	16.46	16.63	17.05
400m					1:05.05				1:06.23		
1000m											2:44.96
		3100m	3200m	3300m	3400m	3500m	3600m	3700m	3800m	3900m	4000m
Race Time		8:49.91	9:05.24	9:20.96	9:36.49	9:52.71	10:08.55	10:24.60	10:40.20	10:56.16	11:11.96
100m		16.19	15.33	15.72	15.53	16.22	15.84	16.05	15.60	15.96	15.80
400m			1:05.20				1:03.31				1:03.41
1000m											2:38.24
		4100m	4200m	4300m	4400m	4500m	4600m	4700m	4800m	4900m	5000m
Race Time		11:27.76	11:42.58	11:57.91	12:12.79	12:27.15	12:41.05	12:54.88	13:08.92	13:23.28	13:36.91
100m		15.80	14.82	15.33	14.88	14.36	13.90	13.83	14.04	14.36	13.63
400m					1:00.83				56.13		
1000m											2:24.95

950		Butchart, Andrew (GBR)									Posn. 8
		100m	200m	300m	400m	500m	600m	700m	800m	900m	1000m
Race Time		16.34	33.02	48.94	1:04.41	1:20.60	1:37.72	1:55.89	2:13.61	2:31.15	2:48.20
100m		16.34	16.68	15.92	15.47	16.19	17.12	18.17	17.72	17.54	17.05
400m					1:04.41				1:09.20		
1000m											2:48.20
		1100m	1200m	1300m	1400m	1500m	1600m	1700m	1800m	1900m	2000m
Race Time		3:05.73	3:24.37	3:43.07	4:00.00	4:17.55	4:35.52	4:53.86	5:12.04	5:30.50	5:48.77
100m		17.53	18.64	18.70	16.93	17.55	17.97	18.34	18.18	18.46	18.27
400m			1:10.76				1:11.15				1:13.25
1000m											3:00.57
		2100m	2200m	2300m	2400m	2500m	2600m	2700m	2800m	2900m	3000m
Race Time		6:07.01	6:23.54	6:38.92	6:54.17	7:10.25	7:26.68	7:43.82	8:00.37	8:16.92	8:33.99
100m		18.24	16.53	15.38	15.25	16.08	16.43	17.14	16.55	16.55	17.07
400m					1:05.40				1:06.20		
1000m											2:45.22
		3100m	3200m	3300m	3400m	3500m	3600m	3700m	3800m	3900m	4000m
Race Time		8:50.40	9:06.01	9:21.50	9:36.82	9:52.90	10:08.94	10:25.02	10:40.38	10:56.37	11:11.97
100m		16.41	15.61	15.49	15.32	16.08	16.04	16.08	15.36	15.99	15.60
400m			1:05.64				1:02.93				1:03.03
1000m											2:37.98
		4100m	4200m	4300m	4400m	4500m	4600m	4700m	4800m	4900m	5000m
Race Time		11:28.04	11:42.82	11:58.03	12:12.27	12:26.68	12:40.93	12:54.97	13:08.74	13:23.07	13:38.73
100m		16.07	14.78	15.21	14.24	14.41	14.25	14.04	13.77	14.33	15.66
400m					1:00.30				56.47		
1000m											2:26.76

758		Knight, Justyn (CAN)									Posn. 9
		100m	200m	300m	400m	500m	600m	700m	800m	900m	1000m
Race Time		16.35	32.86	48.63	1:04.16	1:20.34	1:37.61	1:55.77	2:13.84	2:31.80	2:49.26
100m		16.35	16.51	15.77	15.53	16.18	17.27	18.16	18.07	17.96	17.46
400m					1:04.16				1:09.68		
1000m											2:49.26
		1100m	1200m	1300m	1400m	1500m	1600m	1700m	1800m	1900m	2000m
Race Time		3:06.69	3:25.09	3:43.73	4:00.63	4:18.23	4:36.00	4:54.36	5:12.32	5:30.99	5:49.14
100m		17.43	18.40	18.64	16.90	17.60	17.77	18.36	17.96	18.67	18.15
400m			1:11.25				1:10.91				1:13.14
1000m											2:59.88
		2100m	2200m	2300m	2400m	2500m	2600m	2700m	2800m	2900m	3000m
Race Time		6:07.46	6:23.99	6:39.24	6:54.23	7:10.40	7:26.80	7:43.88	8:00.52	8:17.11	8:33.58
100m		18.32	16.53	15.25	14.99	16.17	16.40	17.08	16.64	16.59	16.47
400m					1:05.09				1:06.29		
1000m											2:44.44
		3100m	3200m	3300m	3400m	3500m	3600m	3700m	3800m	3900m	4000m
Race Time		8:49.67	9:05.20	9:20.77	9:36.52	9:52.66	10:08.70	10:24.79	10:40.47	10:56.34	11:11.87
100m		16.09	15.53	15.57	15.75	16.14	16.04	16.09	15.68	15.87	15.53
400m			1:04.68				1:03.50				1:03.17
1000m											2:38.29
		4100m	4200m	4300m	4400m	4500m	4600m	4700m	4800m	4900m	5000m
Race Time		11:27.94	11:42.84	11:58.11	12:13.09	12:27.72	12:42.34	12:56.96	13:11.40	13:25.55	13:39.15
100m		16.07	14.90	15.27	14.98	14.63	14.62	14.62	14.44	14.15	13.60
400m					1:01.22				58.31		
1000m											2:27.28

1076		Campbell, Kemoy (JAM)									Posn. 10
		100m	200m	300m	400m	500m	600m	700m	800m	900m	1000m
Race Time		16.61	33.26	49.23	1:04.73	1:20.81	1:37.80	1:56.03	2:14.05	2:31.96	2:49.51
100m		16.61	16.65	15.97	15.50	16.08	16.99	18.23	18.02	17.91	17.55
400m					1:04.73				1:09.32		
1000m											2:49.51
		1100m	1200m	1300m	1400m	1500m	1600m	1700m	1800m	1900m	2000m
Race Time		3:06.89	3:25.33	3:43.92	4:00.82	4:18.45	4:36.17	4:54.53	5:12.55	5:31.26	5:49.25
100m		17.38	18.44	18.59	16.90	17.63	17.72	18.36	18.02	18.71	17.99
400m			1:11.28				1:10.84				1:13.08
1000m											2:59.74
		2100m	2200m	2300m	2400m	2500m	2600m	2700m	2800m	2900m	3000m
Race Time		6:07.64	6:24.19	6:39.53	6:54.53	7:10.58	7:27.02	7:44.03	8:00.41	8:17.02	8:33.85
100m		18.39	16.55	15.34	15.00	16.05	16.44	17.01	16.38	16.61	16.83
400m					1:05.28				1:05.88		
1000m											2:44.60
		3100m	3200m	3300m	3400m	3500m	3600m	3700m	3800m	3900m	4000m
Race Time		8:49.87	9:05.54	9:21.32	9:36.94	9:53.02	10:09.04	10:25.20	10:40.70	10:56.50	11:12.10
100m		16.02	15.67	15.78	15.62	16.08	16.02	16.16	15.50	15.80	15.60
400m			1:05.13				1:03.50				1:03.06
1000m											2:38.25
		4100m	4200m	4300m	4400m	4500m	4600m	4700m	4800m	4900m	5000m
Race Time		11:28.06	11:43.17	11:58.24	12:13.23	12:28.06	12:42.64	12:57.23	13:11.55	13:25.84	13:39.74
100m		15.96	15.11	15.07	14.99	14.83	14.58	14.59	14.32	14.29	13.90
400m					1:01.13				58.32		
1000m											2:27.64

655		Tiernan, Patrick (AUS)									Posn. 11
		100m	200m	300m	400m	500m	600m	700m	800m	900m	1000m
Race Time		16.66	32.64	48.17	1:03.71	1:19.92	1:37.37	1:55.35	2:13.57	2:31.46	2:48.84
100m		16.66	15.98	15.53	15.54	16.21	17.45	17.98	18.22	17.89	17.38
400m					1:03.71				1:09.68		
1000m											2:48.84
		1100m	1200m	1300m	1400m	1500m	1600m	1700m	1800m	1900m	2000m
Race Time		3:06.28	3:24.77	3:43.52	4:00.41	4:17.94	4:35.73	4:54.14	5:12.15	5:30.75	5:48.98
100m		17.44	18.49	18.75	16.89	17.53	17.79	18.41	18.01	18.60	18.23
400m			1:11.20				1:10.96				1:13.25
1000m											3:00.14
		2100m	2200m	2300m	2400m	2500m	2600m	2700m	2800m	2900m	3000m
Race Time		6:07.28	6:23.76	6:39.04	6:54.40	7:10.48	7:26.91	7:44.06	8:00.51	8:17.30	8:32.93
100m		18.30	16.48	15.28	15.36	16.08	16.43	17.15	16.45	16.79	15.63
400m					1:05.42				1:06.11		
1000m											2:43.95
		3100m	3200m	3300m	3400m	3500m	3600m	3700m	3800m	3900m	4000m
Race Time		8:48.19	9:03.49	9:19.05	9:34.82	9:50.54	10:06.34	10:22.21	10:38.17	10:53.86	11:09.67
100m		15.26	15.30	15.56	15.77	15.72	15.80	15.87	15.96	15.69	15.81
400m			1:02.98				1:02.85				1:03.33
1000m											2:36.74
		4100m	4200m	4300m	4400m	4500m	4600m	4700m	4800m	4900m	5000m
Race Time		11:25.44	11:41.09	11:56.77	12:12.43	12:27.03	12:41.37	12:55.30	13:09.41	13:24.34	13:40.01
100m		15.77	15.65	15.68	15.66	14.60	14.34	13.93	14.11	14.93	15.67
400m					1:02.76				56.98		
1000m											2:30.34

734		Balew, Birhanu (BRN)									Posn. 12
		100m	200m	300m	400m	500m	600m	700m	800m	900m	1000m
Race Time		17.06	33.58	49.71	1:05.30	1:21.29	1:37.94	1:56.14	2:14.03	2:31.94	2:49.32
100m		17.06	16.52	16.13	15.59	15.99	16.65	18.20	17.89	17.91	17.38
400m					1:05.30				1:08.73		
1000m											2:49.32
		1100m	1200m	1300m	1400m	1500m	1600m	1700m	1800m	1900m	2000m
Race Time		3:06.73	3:25.28	3:43.95	4:00.72	4:18.29	4:36.10	4:54.49	5:12.31	5:30.87	5:49.03
100m		17.41	18.55	18.67	16.77	17.57	17.81	18.39	17.82	18.56	18.16
400m			1:11.25				1:10.82				1:12.93
1000m											2:59.71
		2100m	2200m	2300m	2400m	2500m	2600m	2700m	2800m	2900m	3000m
Race Time		6:07.43	6:23.57	6:38.65	6:54.02	7:10.22	7:26.58	7:43.70	8:00.21	8:16.76	8:33.73
100m		18.40	16.14	15.08	15.37	16.20	16.36	17.12	16.51	16.55	16.97
400m					1:04.99				1:06.19		
1000m											2:44.70
		3100m	3200m	3300m	3400m	3500m	3600m	3700m	3800m	3900m	4000m
Race Time		8:50.12	9:05.47	9:20.90	9:36.39	9:52.52	10:08.45	10:24.45	10:40.04	10:55.95	11:11.83
100m		16.39	15.35	15.43	15.49	16.13	15.93	16.00	15.59	15.91	15.88
400m			1:05.26				1:02.98				1:03.38
1000m											2:38.10
		4100m	4200m	4300m	4400m	4500m	4600m	4700m	4800m	4900m	5000m
Race Time		11:27.79	11:42.52	11:57.80	12:12.88	12:27.82	12:42.13	12:56.65	13:11.87	13:27.51	13:43.25
100m		15.96	14.73	15.28	15.08	14.94	14.31	14.52	15.22	15.64	15.74
400m					1:01.05				58.99		
1000m											2:31.42

1147		Rutto, Cyrus (KEN)									Posn. 13
		100m	200m	300m	400m	500m	600m	700m	800m	900m	1000m
Race Time		15.69	31.85	47.10	1:02.76	1:19.31	1:36.93	1:55.15	2:13.24	2:31.29	2:48.63
100m		15.69	16.16	15.25	15.66	16.55	17.62	18.22	18.09	18.05	17.34
400m					1:02.76				1:10.48		
1000m											2:48.63
		1100m	1200m	1300m	1400m	1500m	1600m	1700m	1800m	1900m	2000m
Race Time		3:06.04	3:24.56	3:43.30	4:00.23	4:17.61	4:35.58	4:53.82	5:11.67	5:30.10	5:48.18
100m		17.41	18.52	18.74	16.93	17.38	17.97	18.24	17.85	18.43	18.08
400m			1:11.32				1:11.02				1:12.60
1000m											2:59.55
		2100m	2200m	2300m	2400m	2500m	2600m	2700m	2800m	2900m	3000m
Race Time		6:06.36	6:22.73	6:37.77	6:53.14	7:09.72	7:25.99	7:43.02	7:59.56	8:16.12	8:33.24
100m		18.18	16.37	15.04	15.37	16.58	16.27	17.03	16.54	16.56	17.12
400m					1:04.96				1:06.42		
1000m											2:45.06
		3100m	3200m	3300m	3400m	3500m	3600m	3700m	3800m	3900m	4000m
Race Time		8:49.27	9:04.80	9:20.46	9:35.96	9:52.05	10:08.00	10:24.29	10:39.82	10:55.68	11:11.49
100m		16.03	15.53	15.66	15.50	16.09	15.95	16.29	15.53	15.86	15.81
400m			1:05.24				1:03.20				1:03.49
1000m											2:38.25
		4100m	4200m	4300m	4400m	4500m	4600m	4700m	4800m	4900m	5000m
Race Time		11:27.44	11:42.31	11:57.60	12:12.61	12:27.45	12:42.74	12:58.52	13:14.84	13:31.52	13:48.64
100m		15.95	14.87	15.29	15.01	14.84	15.29	15.78	16.32	16.68	17.12
400m					1:01.12				1:02.23		
1000m											2:37.15

850		Habte, Awet (ERI)									Posn. 14
		100m	200m	300m	400m	500m	600m	700m	800m	900m	1000m
Race Time		17.05	33.24	49.50	1:05.08	1:21.16	1:38.15	1:56.30	2:14.20	2:32.20	2:49.68
100m		17.05	16.19	16.26	15.58	16.08	16.99	18.15	17.90	18.00	17.48
400m					1:05.08				1:09.12		
1000m											2:49.68
		1100m	1200m	1300m	1400m	1500m	1600m	1700m	1800m	1900m	2000m
Race Time		3:07.13	3:25.60	3:44.13	4:01.10	4:18.68	4:36.42	4:54.83	5:12.72	5:31.33	5:49.47
100m		17.45	18.47	18.53	16.97	17.58	17.74	18.41	17.89	18.61	18.14
400m			1:11.40				1:10.82				1:13.05
1000m											2:59.79
		2100m	2200m	2300m	2400m	2500m	2600m	2700m	2800m	2900m	3000m
Race Time		6:07.80	6:24.00	6:39.36	6:54.64	7:10.67	7:27.16	7:44.24	8:00.81	8:17.53	8:34.14
100m		18.33	16.20	15.36	15.28	16.03	16.49	17.08	16.57	16.72	16.61
400m					1:05.17				1:06.17		
1000m											2:44.67
		3100m	3200m	3300m	3400m	3500m	3600m	3700m	3800m	3900m	4000m
Race Time		8:50.43	9:05.80	9:21.61	9:37.14	9:53.23	10:09.24	10:25.51	10:41.16	10:57.10	11:12.90
100m		16.29	15.37	15.81	15.53	16.09	16.01	16.27	15.65	15.94	15.80
400m			1:04.99				1:03.44				1:03.66
1000m											2:38.76
		4100m	4200m	4300m	4400m	4500m	4600m	4700m	4800m	4900m	5000m
Race Time		11:29.25	11:45.64	12:02.16	12:18.78	12:35.89	12:52.80	13:09.15	13:25.97	13:42.73	13:58.68
100m		16.35	16.39	16.52	16.62	17.11	16.91	16.35	16.82	16.76	15.95
400m					1:05.88				1:07.19		
1000m											2:45.78

COACH'S COMMENTARY

Winning a global championship requires a substantial amount of fitness, skill, judgement and ability to respond to both predictable and unpredictable events during the competition. Winning margins in the men's 5000 m are very small, with less than a second covering the first four finishers. Athletes in this final also had to cope with the fact that one of the favourites, Farah, was running in front of his home crowd and in his last major race on the track.

The evidence from the analysis indicates that the first two athletes, Edris and Farah, appeared to maintain a dominant position throughout the race. They showed less variability in their positioning than did athletes who finished lower down the field, with Edris making his main move to the front with 1000 m remaining. During a race, athletes have to judge if the energy required to maintain a position near the front throughout a race is worthwhile. In this case, Edris and Farah judged it was and were vindicated by the final result.

However, the race analysis does not give any comfort to coaches who prefer athletes to run at an even pace to harbour their reserves of energy. The athletes had to cope with substantial variations of pace. For example, the difference between the fastest and slowest 100 m splits for several athletes was around four seconds; for Edris the range was even larger, between 12.53 s during the last lap to 18.41 s nearing the end of the fifth lap. Coaching athletes for success in global distance finals requires attention therefore not just to absolute speed but also to the ability to withstand substantial variations in speed within the race whilst maintaining the ability to sprint over the final phase of the race.

The final kilometre of the race was fast (2:21 for the medallists), even if the final times were unremarkable, with no season's bests recorded. It appears the speed requirement is to be able to run in the vicinity of 1.50 to 1.51 for the last 800 m, or thereabouts, for the athlete to succeed. However, the athlete must be tactically aware so that the speed is used optimally. Making sure not to drop off one's main rivals unnecessarily when the pace is easier is important in ensuring that any gaps can be made up as the race speeds up; for instance, Chelimo ran a slightly faster last kilometre than Farah but Farah was far enough ahead of him to secure the silver medal.

Positioning, pacing, speed, pace changes and the determination to fight to the finish line were evidenced in an epic final.

CONTRIBUTORS

Dr Brian Hanley is a Senior Lecturer in Sport and Exercise Biomechanics. Brian's particular research interests are in the area of elite athletics, especially race walking and distance running, as well as the pacing profiles adopted by endurance athletes. He is also interested in musculotendon profiling of athletes to appreciate internal limiting and contributing factors affecting performance, in addition to longitudinal studies measuring the technical development of junior athletes as they progress to become senior athletes.



Dr Athanassios Bissas is the Head of the Biomechanics Department in the Carnegie School of Sport at Leeds Beckett University. His research includes a range of topics but his main expertise is in the areas of biomechanics of sprint running, neuromuscular adaptations to resistance training, and measurement and evaluation of strength and power. Dr Bissas has supervised a vast range of research projects whilst having a number of successful completions at PhD level. Together with his team he has produced over 100 research outputs and he is actively involved in research projects with institutions across Europe.



Malcolm Brown has coached at five Olympic Games in two different sports. He was National Event coach for Endurance with British Athletics from 1991 to 2000. He then established the Leeds Triathlon centre in 2003 and coached the Brownlee brothers, with colleagues from British Triathlon, to four Olympic medals. In the Rio Olympics, his athletes from Leeds finished 1st 2nd 3rd and 4th across the men's and women's races.

