

Race Analysis

Competition **World Championship 2019**
 Race **100 Free Final**

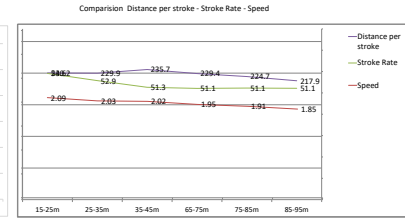
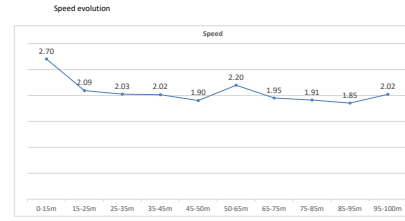


Name	Take off time	Average Speed	Rank
Average of the final	00:05.63	2.09	
Result	1'50	2'50	
00:47.89	Time 00:22.85 00:25.04	Split 1'28 2'28 3'28 4'28	
	Time 00:10.32 00:11.52 00:11.95 00:13.09		
	Stroke number * 32.6 38.1		

Start 15m	15-25m	25-35m	35-45m	45-50m	Turn 55-65m	65-75m	75-85m	85-95m	95-100m	Average swimming parameters
Split Time	00:05.55	00:10.32	00:15.26	00:20.22	00:22.85	00:29.67	00:34.79	00:40.02	00:45.41	00:47.89
Lap Time	00:05.55	00:04.77	00:04.94	00:04.96	00:02.63	00:09.45	00:05.12	00:05.23	00:05.39	00:02.47
Speed (m/s)	2.70	2.09	2.03	2.02	1.90	2.12	1.95	1.91	1.85	2.02
Stroke Rate (strokes)	34.6	32.9	33.3	33.7	31.1	33.1	31.1	31.1	30.8	32.02
Stroke tempo	Time	00:01.10	00:01.13	00:01.17	00:01.16	00:01.18	00:01.17	00:01.17	00:01.16	00:01.15
Distance per stroke	Co	23.2	22.9	23.7	22.8	24.7	23.7	23.9	23.8	22.98
Stroke index (m ³ /s)		4.82	4.66	4.75	4.48	4.90	4.05	4.52		

Total underwater parameters	
Underwater phase time	Time 00:07.16 14.88%
Underwater phase measure	Meters 19.91 19.93%
Underwater phase speed	Meters/Sec 2.70
Swimming phase speed	Meters/Sec 1.97

Underwater - Swimming phases	
Breakout time	Time 00:04.17 00:02.99
Breakout distance	Meters 12.28 7.66
Average 50m speed	Meters/Sec 2.19 2.00
Average swimming speed	Meters/Sec 2.02 1.92
Underwater phase speed	Meters/Sec 2.95 2.16
Speed difference between underwater and swimming	Meters/Sec 0.93 0.64

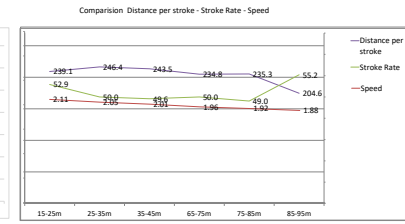
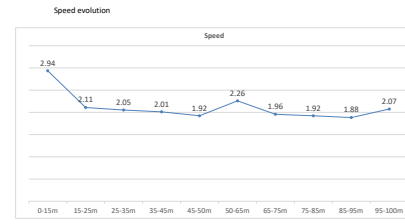


Name	Take off time	Average Speed	Rank
Caeleb Dressel	00:00.61	2.13	1
Result	1'50	2'50	
00:46.96	Time 00:22.29 00:24.67	Split 1'28 2'28 3'28 4'28	
	Time 00:09.85 00:12.44 00:11.75 00:12.92		
	Stroke number * 32 39		

Start 15m	15-25m	25-35m	35-45m	45-50m	Turn 55-65m	65-75m	75-85m	85-95m	95-100m	Average swimming parameters
Split Time	00:05.11	00:09.85	00:14.72	00:19.69	00:22.29	00:28.93	00:34.04	00:39.24	00:44.55	00:46.96
Lap Time	00:05.11	00:04.74	00:04.87	00:04.97	00:02.60	00:09.24	00:05.11	00:05.20	00:05.31	00:02.41
Speed (m/s)	2.94	2.11	2.05	2.01	1.92	2.16	1.96	1.92	1.88	2.07
Stroke Rate (strokes)	52.9	50.0	49.6	50.0	50.0	50.0	49.0	51.2	50.3	51.28
Stroke tempo	Time	00:01.13	00:01.20	00:01.21	00:01.20	00:01.22	00:01.09	00:01.19	00:01.13	00:01.18
Distance per stroke	Co	23.1	24.4	24.3	23.8	23.3	20.4	24.6	23.95	23.95
Stroke index (m ³ /s)		5.04	5.06	4.90	4.60	4.52	3.85	4.40		

Total underwater parameters	
Underwater phase time	Time 00:08.29 17.65%
Underwater phase measure	Meters 22.70 22.70%
Underwater phase speed	Meters/Sec 2.74
Swimming phase speed	Meters/Sec 2.00

Underwater - Swimming phases	
Breakout time	Time 00:04.38 00:03.91
Breakout distance	Meters 13.20 9.50
Average 50m speed	Meters/Sec 2.24 2.03
Average swimming speed	Meters/Sec 2.00 1.90
Underwater phase speed	Meters/Sec 3.01 2.43
Speed difference between underwater and swimming	Meters/Sec 0.96 0.48

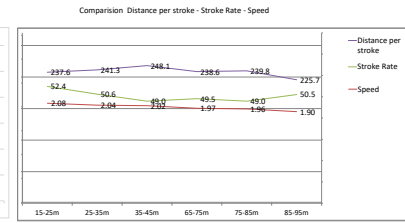
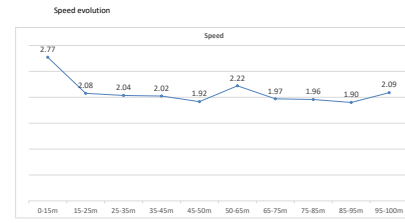


Name	Take off time	Average Speed	Rank
Average of first three	00:00.61	2.11	
Result	1'50	2'50	
00:47.29	Time 00:22.69 00:24.60	Split 1'28 2'28 3'28 4'28	
	Time 00:10.23 00:12.46 00:11.83 00:12.77		
	Stroke number * 31.0 35.3		

Start 15m	15-25m	25-35m	35-45m	45-50m	Turn 55-65m	65-75m	75-85m	85-95m	95-100m	Average swimming parameters
Split Time	00:05.41	00:10.23	00:15.14	00:20.08	00:22.69	00:29.44	00:34.52	00:39.63	00:44.89	00:47.29
Lap Time	00:05.41	00:04.82	00:04.91	00:04.94	00:02.61	00:09.36	00:05.08	00:05.11	00:05.26	00:02.39
Speed (m/s)	2.77	2.08	2.04	2.02	1.92	2.14	1.97	1.96	1.90	2.09
Stroke Rate (strokes)	52.4	50.6	49.0	50.4	49.5	49.0	50.5	49.7	48.7	50.37
Stroke tempo	Time	00:01.14	00:01.19	00:01.23	00:01.14	00:01.21	00:01.23	00:01.19	00:01.21	00:01.20
Distance per stroke	Co	23.76	24.13	24.1	23.8	23.8	23.8	23.7	23.8	23.851
Stroke index (m ³ /s)		4.93	4.91	5.02	4.70	4.69	4.29	4.74		

Total underwater parameters	
Underwater phase time	Time 00:07.16 14.95%
Underwater phase measure	Meters 21.48 21.48%
Underwater phase speed	Meters/Sec 2.87
Swimming phase speed	Meters/Sec 1.96

Underwater - Swimming phases	
Breakout time	Time 00:04.21 00:03.17
Breakout distance	Meters 12.72 8.77
Average 50m speed	Meters/Sec 2.20 2.03
Average swimming speed	Meters/Sec 2.02 1.90
Underwater phase speed	Meters/Sec 3.02 2.48
Speed difference between underwater and swimming	Meters/Sec 1.00 0.74

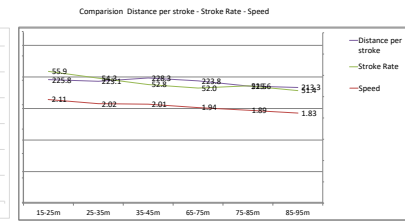
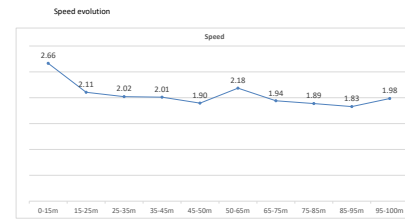


Name	Take off time	Average Speed	Rank
Average last 5	00:00.63	2.07	
Result	1'50	2'50	
00:48.25	Time 00:22.94 00:25.31	Split 1'28 2'28 3'28 4'28	
	Time 00:10.38 00:12.56 00:12.02 00:13.29		
	Stroke number * 31.6 39.8		

Start 15m	15-25m	25-35m	35-45m	45-50m	Turn 55-65m	65-75m	75-85m	85-95m	95-100m	Average swimming parameters
Split Time	00:05.63	00:10.38	00:15.33	00:20.80	00:22.94	00:29.81	00:34.96	00:40.26	00:45.73	00:48.25
Lap Time	00:05.63	00:04.75	00:04.95	00:04.97	00:02.64	00:09.50	00:05.15	00:05.30	00:05.47	00:02.52
Speed (m/s)	2.66	2.11	2.02	2.01	1.90	2.10	1.94	1.89	1.83	1.98
Stroke Rate (strokes)	45.8	44.8	52.8	52.2	52.0	52.0	52.0	51.4	51.1	51.99
Stroke tempo	Time	00:01.07	00:01.10	00:01.14	00:01.17	00:01.15	00:01.14	00:01.17	00:01.13	00:01.13
Distance per stroke	Co	22.8	22.1	22.8	22.8	21.6	21.3	21.6	22.186	22.186
Stroke index (m ³ /s)		4.75	4.51	4.93	4.34	4.07	3.90	4.40		

Total underwater parameters	
Underwater phase time	Time 00:06.96 14.52%
Underwater phase measure	Meters 19.00 19.00%
Underwater phase speed	Meters/Sec 2.73
Swimming phase speed	Meters/Sec 1.96

Underwater - Swimming phases	
Breakout time	Time 00:04.14 00:03.82
Breakout distance	Meters 12.01 6.99
Average 50m speed	Meters/Sec 2.18 1.98
Average swimming speed	Meters/Sec 2.02 1.90
Underwater phase speed	Meters/Sec 2.90 2.48
Speed difference between underwater and swimming	Meters/Sec 0.88 0.57



* - for Freestyle and Backstroke the movement of every single arm