Race Analysis

Competition	World Championship 2019
Race	100 Back Final

GWANGJU 2019 · Fina WORLD CHAMPIONSHIPS · SwimLAB

Name	Take off time	Average Speed
Average of the final	00:00.64	1.69

Result: 00:59.16

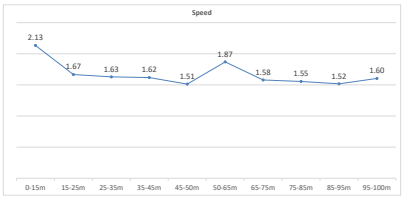
	1° 50	2° 50	Split	1° 25	2° 25	3° 25	4° 25
Time	00:28.66	00:30.50	Time	00:13.03	00:15.63	00:14.36	00:16.14
Stroke number *	35.9	39.9					

	Start 15m	15-25m	25-35m	35-45m	45-50m	Turn 45-65m	65-75m	75-85m	85-95m	95-100m	Average swimming parameters
Split Time	00:07.03	00:13.03	00:19.17	00:25.35	00:28.66	00:36.68	00:43.02	00:49.45	00:56.04	00:59.16	
Lap Time	00:07.03	00:06.00	00:06.14	00:06.18	00:03.31	00:11.33	00:06.34	00:06.43	00:06.59	00:03.12	
Speed Metre/Sec	2.13	1.67	1.63	1.62	1.51	1.77	1.58	1.55	1.52	1.60	1.59
Stroke Rate Cycle/Min		49.6	47.9	46.9	45.4		47.0	46.4	45.8	45.6	47.3
Stroke tempo Time		00:01.21	00:01.25	00:01.28	00:01.32		00:01.28	00:01.29	00:01.31	00:01.32	00:01.27
Distance per stroke Cm		201.6	203.8	206.9			201.7	201.0	198.8		202.3
Stroke index DPS*Speed		3.36	3.32	3.35			3.18	3.13	3.02		3.23

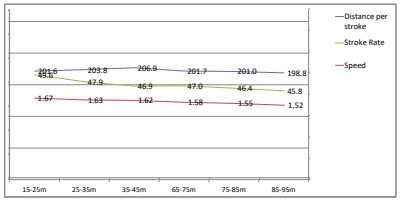
Total underwater parameters			
Underwater phase time	Time	00:11.11	18.60%
Underwater phase measure	Metre	23.61	23.61%
Underwater phase speed	Metre/Sec	2.12	
Swimming phase speed	Metre/Sec	1.59	

Underwater - Swimming phases	1° 50	2° 50
Breakout time Time	00:06.03	00:05.08
Breakout distance Metre	13.34	10.26
Average 50m speed Metre/Sec	1.74	1.64
Average swimming speed Metre/Sec	1.62	1.56
Underwater phase speed Metre/Sec	2.21	2.02
Speed difference between underwater and swimming Metre/Sec	0.59	0.45

Speed evolution



Comparision Distance per stroke - Stroke Rate - Speed



Name	Take off time	Average Speed	Rank
Kylie Masse	00:00.57	1.71	1

Result: 00:58.60

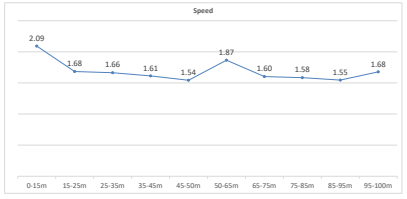
	1° 50	2° 50	Split	1° 25	2° 25	3° 25	4° 25
Time	00:28.56	00:30.04	Time	00:13.11	00:15.45	00:14.28	00:15.76
Stroke number *	38	42					

	Start 15m	15-25m	25-35m	35-45m	45-50m	Turn 45-65m	65-75m	75-85m	85-95m	95-100m	Average swimming parameters
Split Time	00:07.17	00:13.11	00:19.12	00:25.32	00:28.56	00:36.60	00:42.84	00:49.15	00:55.62	00:58.60	
Lap Time	00:07.17	00:05.94	00:06.01	00:06.20	00:03.24	00:11.28	00:06.24	00:06.31	00:06.47	00:02.98	
Speed Metre/Sec	2.09	1.68	1.66	1.61	1.54	1.77	1.60	1.58	1.55	1.68	1.61
Stroke Rate Cycle/Min		52.9	49.6	48.3	48.8		47.4	47.0	46.5	45.1	48.6
Stroke tempo Time		00:01.13	00:01.21	00:01.24	00:01.23		00:01.27	00:01.28	00:01.29	00:01.33	00:01.24
Distance per stroke Cm		190.8	201.3	200.5			203.0	202.3	199.4		199.6
Stroke index DPS*Speed		3.21	3.35	3.23			3.25	3.21	3.08		3.20

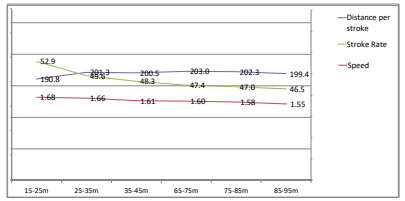
Total underwater parameters			
Underwater phase time	Time	00:08.98	15.32%
Underwater phase measure	Metre	19.95	19.95%
Underwater phase speed	Metre/Sec	2.22	
Swimming phase	Metre/Sec	1.61	

Underwater - Swimming phases	1° 50	2° 50
Breakout time Time	00:05.47	00:03.51
Breakout distance Metre	12.00	7.95
Average 50m speed Metre/Sec	1.75	1.66
Average swimming speed Metre/Sec	1.65	1.58
Underwater phase speed Metre/Sec	2.19	2.26
Speed difference between underwater and swimming Metre/Sec	0.55	0.68

Speed evolution



Comparision Distance per stroke - Stroke Rate - Speed



Name	Take off time	Average Speed
Average of first three	00:00.59	1.70

Result: 00:58.79

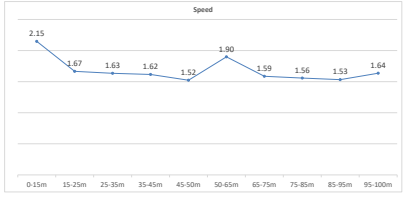
	1° 50	2° 50	Split	1° 25	2° 25	3° 25	4° 25
Time	00:28.58	00:30.21	Time	00:12.99	00:15.59	00:14.20	00:16.00
Stroke number *	36.3	39.9					

	Start 15m	15-25m	25-35m	35-45m	45-50m	Turn 45-65m	65-75m	75-85m	85-95m	95-100m	Average swimming parameters
Split Time	00:06.98	00:12.99	00:19.11	00:25.30	00:28.58	00:36.48	00:42.78	00:49.20	00:55.73	00:58.79	
Lap Time	00:06.98	00:06.00	00:06.12	00:06.19	00:03.28	00:11.18	00:06.30	00:06.42	00:06.53	00:03.06	
Speed Metre/Sec	2.15	1.67	1.63	1.62	1.52	1.79	1.59	1.56	1.53	1.64	1.60
Stroke Rate Cycle/Min		50.0	47.8	47.1	45.8		46.8	46.8	46.3	47.1	47.5
Stroke tempo Time		00:01.20	00:01.26	00:01.27	00:01.31		00:01.28	00:01.28	00:01.30	00:01.27	00:01.26
Distance per stroke Cm		199.9	205.1	205.9			203.3	198.6	198.7		202.1
Stroke index DPS*Speed		3.33	3.35	3.33			3.23	3.11	3.04		3.23

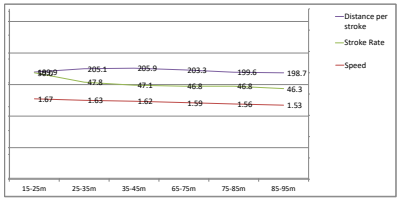
Total underwater parameters			
Underwater phase time	Time	00:11.11	18.80%
Underwater phase measure	Metre	23.15	23.15%
Underwater phase speed	Metre/Sec	2.16	
Swimming phase	Metre/Sec	1.61	

Underwater - Swimming phases	1° 50	2° 50
Breakout time Time	00:05.68	00:05.02
Breakout distance Metre	12.72	10.43
Average 50m speed Metre/Sec	1.75	1.66
Average swimming speed Metre/Sec	1.63	1.57
Underwater phase speed Metre/Sec	2.24	2.08
Speed difference between underwater and swimming Metre/Sec	0.61	0.51

Speed evolution



Comparision Distance per stroke - Stroke Rate - Speed



Name	Take off time	Average Speed
Average last 5	00:00.60	1.68

Result: 00:59.38

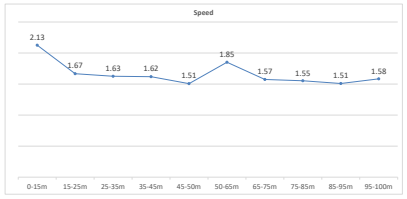
	1° 50	2° 50	Split	1° 25	2° 25	3° 25	4° 25
Time	00:28.70	00:30.68	Time	00:13.06	00:15.65	00:14.46	00:16.22
Stroke number *	35.6	40.2					

	Start 15m	15-25m	25-35m	35-45m	45-50m	Turn 45-65m	65-75m	75-85m	85-95m	95-100m	Average swimming parameters
Split Time	00:07.06	00:13.06	00:19.21	00:25.39	00:28.70	00:36.81	00:43.16	00:49.60	00:56.23	00:59.38	
Lap Time	00:07.06	00:06.00	00:06.15	00:06.18	00:03.32	00:11.42	00:06.35	00:06.44	00:06.63	00:03.16	
Speed Metre/Sec	2.13	1.67	1.63	1.62	1.51	1.75	1.57	1.55	1.51	1.58	1.59
Stroke Rate Cycle/Min		49.3	48.0	46.8	45.1		47.0	46.2	45.5	44.7	47.2
Stroke tempo Time		00:01.22	00:01.25	00:01.28	00:01.33		00:01.28	00:01.30	00:01.32	00:01.34	00:01.27
Distance per stroke Cm		202.6	203.0	207.5			200.7	201.8	198.9		202.4
Stroke index DPS*Speed		3.38	3.30	3.36			3.16	3.14	3.00		3.22

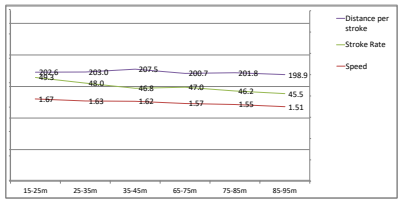
Total underwater parameters			
Underwater phase time	Time	00:11.36	19.27%
Underwater phase measure	Metre	23.88	23.88%
Underwater phase speed	Metre/Sec	2.10	
Swimming phase	Metre/Sec	1.59	

Underwater - Swimming phases	1° 50	2° 50
Breakout time Time	00:06.24	00:05.12
Breakout distance Metre	13.72	10.16
Average 50m speed Metre/Sec	1.74	1.63
Average swimming speed Metre/Sec	1.61	1.56
Underwater phase speed Metre/Sec	2.20	1.98
Speed difference between underwater and swimming Metre/Sec	0.58	0.42

Speed evolution



Comparision Distance per stroke - Stroke Rate - Speed



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

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