



**NORGES
SVØMMEFORBUND**



COMPETITION ANALYSIS DATA

2025 SINGAPORE WORLD CHAMPIONSHIPS
27th of July – 3rd of August

**Importance of race elements and race parameters
for evaluation of world class swimmers**

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Race Analysis Comparison 50m Butterfly Women

Name	Start	No Kicks	Str.Rate	Split	Str.Rate	Split	Str.Rate	Split	Lap	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-35	(cycle/min)	35-45	45-50	25-50	25-50
WALSH	5.92	8	61	11.32	59	16.80	58	22.14	2.69	24.83	13.51
PERKINS	5.94	9	62	11.32	63	17.00	63	22.66	2.65	25.31	13.99
VANOTTER	6.06	10	62	11.54	60	17.10	59	22.84	2.59	25.43	13.89
KOHLER	6.16	9	61	11.52	61	17.02	61	22.88	2.62	25.50	13.98
SURKOVA	6.16	9	70	11.78	70	17.18	69	22.90	2.69	25.59	13.81
PRICE	6.36	10	68	11.84	67	17.32	65	22.86	2.75	25.61	13.77
di PIETRO	6.24	12	75	11.50	71	17.02	70	22.90	2.74	25.64	14.14
GALLAGHE	6.28	11	65	11.74	64	17.30	61	22.90	2.76	25.66	13.92
Average	6.14	10	65	11.57	64	17.09	63	22.76	2.69	25.45	13.88
min-max	5.92-6.36	8-12	55-66	11.32-11.84	52-63	16.8-17.32	50-59	22.14-22.9	2.59-2.76	24.83-25.66	13.51-14.14

Race Analysis Comparison 50m Backstroke Women

Name	Start	No Kicks	Str.Rate	Split	Str.Rate	Split	Str.Rate	Split	Lap	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-35	(cycle/min)	35-45	45-50	25-50	25-50
BERKOFF	6.77	11	63	12.48	61	18.34	58	24.21	2.87	27.08	14.60
SMITH	6.77	11	57	12.62	58	18.54	58	24.42	2.83	27.25	14.63
WAN	6.73	12	55	12.37	53	18.28	52	24.31	2.99	27.30	14.93
MASSE	6.77	13	58	12.44	56	18.32	54	24.36	2.97	27.33	14.89
COX	7.12	13	67	12.76	66	18.55	60	24.42	2.94	27.36	14.60
GAIFUTDIN	7.38	10	56	12.88	55	18.56	52	24.54	2.90	27.44	14.56
PIGREE	7.09	14	56	12.78	56	18.62	55	24.61	2.86	27.47	14.69
WILM	7.07	12	53	12.91	52	18.80	50	24.74	2.82	27.56	14.65
Average	6.96	12	58	12.66	57	18.50	55	24.45	2.90	27.35	14.69
min-max	6.73-7.38	10-14	55-66	12.37-12.91	52-63	18.28-18.8	50-59	24.21-24.74	2.82-2.99	27.08-27.56	14.56-14.93

Race Analysis Comparison 50m Breaststroke Women

Name	Start	No Kicks	Str.Rate	Split	Str.Rate	Split	Str.Rate	Split	Lap	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-35	(cycle/min)	35-45	45-50	25-50	25-50
MEILUTYTE	7.00	1	60	13.42	62	19.88	61	26.20	3.35	29.55	16.13
TANG	7.08	1	61	13.46	58	20.14	58	26.70	3.33	30.03	16.57
PILATO	7.36	1	71	13.74	71	20.28	67	26.76	3.38	30.14	16.40
BOTTAZZO	7.44	1	58	13.94	59	20.50	61	26.96	3.25	30.21	16.27
KING	7.18	1	65	13.58	59	20.24	57	27.08	3.17	30.25	16.67
JEFIMOVA	7.32	1	65	13.76	66	20.48	66	27.00	3.29	30.29	16.53
GORBENKO	6.98	1	55	13.50	60	20.32	60	27.26	3.19	30.45	16.95
KIVIRINTA	7.38	1	65	13.56	63	20.36	59	27.42	3.26	30.68	17.12
Average	7.22	1	62	13.62	62	20.28	61	26.92	3.28	30.20	16.58
min-max	6.98-7.44	1-1	55-66	13.42-13.94	52-63	19.88-20.5	50-59	26.2-27.42	3.17-3.38	29.55-30.68	16.13-17.12

Race Analysis Comparison 50m Freestyle Women

Name	Start	No Kicks	Str.Rate	Split	Str.Rate	Split	Str.Rate	Split	Lap	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-35	(cycle/min)	35-45	45-50	25-50	25-50
HARRIS	6.18	6	62	11.12	61	16.24	61	21.62	2.40	24.02	12.90
WU	6.24	4	59	11.20	58	16.38	54	21.82	2.44	24.26	13.06
CHENG	6.30	4	59	11.46	56	16.72	54	21.84	2.44	24.28	12.82
WALSH	5.98	8	55	11.20	54	16.58	51	21.84	2.56	24.40	13.20
van WIJK	6.44	6	55	11.50	53	16.64	50	22.04	2.43	24.47	12.97
HUSKE	6.24	9	58	11.44	57	16.68	54	22.02	2.48	24.50	13.06
GASPARD	6.20	3	58	11.22	56	16.52	54	22.06	2.57	24.63	13.41
WASICK	6.36	6	63	11.46	62	16.70	59	22.12	2.62	24.74	13.28
Average	6.24	6	59	11.33	57	16.56	54	21.92	2.49	24.41	13.09
min-max	5.98-6.44	3-9	55-66	11.12-11.5	52-63	16.24-16.72	50-59	21.62-22.12	2.4-2.62	24.02-24.74	12.82-13.41

Race Analysis Comparison 50m Butterfly Men

Name	Start	No Kicks	Str.Rate	Split	Str.Rate	Split	Str.Rate	Split	Lap	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-35	(cycle/min)	35-45	45-50	25-50	25-50
GROUSSET	5.26	7	58	10.10	58	15.08	59	20.12	2.36	22.48	12.38
PONTI	5.10	7	68	9.92	70	14.90	68	20.04	2.47	22.51	12.59
CECCON	5.42	6	65	10.18	64	15.08	63	20.26	2.41	22.67	12.49
MATOS RIB	5.54	5	73	10.36	71	15.26	71	20.36	2.41	22.77	12.41
PROUD	5.20	6	65	10.20	63	15.40	63	20.40	2.39	22.79	12.59
KORSTANJE	5.38	8	67	9.98	70	15.08	66	20.40	2.44	22.84	12.86
ARMBRUST	5.52	7	62	10.24	61	15.18	59	20.32	2.52	22.84	12.60
CARIBE	5.16	6	65	10.28	65	15.44	63	20.50	2.42	22.92	12.64
Average	5.32	7	65	10.16	65	15.18	64	20.30	2.43	22.73	12.57
min-max	5.1-5.54	5-8	61-70	9.92-10.36	59-66	14.9-15.44	57-63	20.04-20.5	2.36-2.52	22.48-22.92	12.38-12.86

Race Analysis Comparison 50m Backstroke Men

Name	Start	No Kicks	Str.Rate	Split	Str.Rate	Split	Str.Rate	Split	Lap	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-35	(cycle/min)	35-45	45-50	25-50	25-50
KOLESNIK	5.84	7	59	10.92	58	16.02	55	21.26	2.42	23.68	12.76
COETZE	5.82	8	60	11.12	59	16.34	58	21.66	2.51	24.17	13.05
SAMUSENK	5.94	8	58	11.14	57	16.30	54	21.66	2.51	24.17	13.03
MASIUK	6.22	8	66	11.32	64	16.54	63	22.02	2.49	24.51	13.19
McCARTY	6.10	11	58	11.24	56	16.56	52	22.10	2.48	24.58	13.34
CHRISTOU	6.02	10	56	11.40	54	16.70	51	22.08	2.51	24.59	13.19
COOPER	5.88	11	58	11.06	57	16.46	56	22.06	2.55	24.61	13.55
KOS	5.96	10	61	11.08	58	16.44	57	22.10	2.52	24.62	13.54
Average	5.97	9	59	11.16	58	16.42	56	21.87	2.50	24.37	13.21
min-max	5.82-6.22	7-11	61-70	10.92-11.4	59-66	16.02-16.7	57-63	21.26-22.1	2.42-2.55	23.68-24.62	12.76-13.55

Race Analysis Comparison 50m Breaststroke Men

Name	Start	No Kicks	Str.Rate	Split	Str.Rate	Split	Str.Rate	Split	Lap	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-35	(cycle/min)	35-45	45-50	25-50	25-50
CERASUOLI	6.00	1	69	11.73	71	17.49	71	23.58	2.96	26.54	14.81
PRIGODA	5.77	1	59	11.78	63	17.78	63	23.82	2.80	26.62	14.84
QIN	6.22	1	63	11.91	65	17.84	66	23.72	2.95	26.67	14.76
KOZHAKIN	6.34	1	65	12.10	69	17.89	69	23.88	2.85	26.73	14.63
IMOUDU	6.13	1	58	11.85	59	17.66	60	23.94	2.80	26.74	14.89
SMITH	6.28	1	71	12.09	73	17.91	71	23.77	2.98	26.75	14.66
de GROOT	6.33	1	67	11.96	67	17.82	66	23.99	2.82	26.81	14.85
MLADENOV	6.24	1	65	12.15	66	17.92	64	23.94	2.95	26.89	14.74
Average	6.16	1	64	11.95	67	17.79	66	23.83	2.89	26.72	14.77
min-max	5.77-6.34	1-1	61-70	11.73-12.15	59-66	17.49-17.92	57-63	23.58-23.99	2.8-2.98	26.54-26.89	14.63-14.89

Race Analysis Comparison 50m Freestyle Men

Name	Start	No Kicks	Str.Rate	Split	Str.Rate	Split	Str.Rate	Split	Lap	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-35	(cycle/min)	35-45	45-50	25-50	25-50
McEVOY	5.12	4	63	9.54	62	14.13	60	18.85	2.29	21.14	11.60
PROUD	5.03	6	63	9.46	62	14.12	61	19.03	2.23	21.26	11.80
ALEXY	5.32	5	60	9.77	59	14.48	56	19.25	2.21	21.46	11.69
DEPLANO	5.37	5	71	9.92	67	14.59	63	19.28	2.24	21.52	11.60
KORNEV	5.21	6	54	9.70	53	14.35	51	19.21	2.32	21.53	11.83
BARNA	5.29	5	67	9.86	64	14.56	59	19.28	2.32	21.60	11.74
JI	5.04	7	65	9.52	62	14.33	59	19.30	2.41	21.71	12.19
CONDORE	5.33	8	64	9.84	65	14.51	61	19.35	2.38	21.73	11.89
Average	5.21	6	63	9.70	62	14.38	59	19.19	2.30	21.49	11.79
min-max	5.03-5.37	4-8	61-70	9.46-9.92	59-66	14.12-14.59	57-63	18.85-19.35	2.21-2.41	21.14-21.73	11.6-12.19

Race Analysis Comparison 100m Butterfly Women

Name	Start	# Kicks	Str.Rate	Split	Str.Rate	Split	Lap	Turn	# kicks	Str. Rate	Split	Lap	Str. Rate	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-50	25-50	5+15		(cycle/min)	75m	50-75m	(cycle/min)	100m	75-100m
WALSH	6.00	8	57	11.30	54	25.16	13.86	11.06	11	53	39.50	14.34	52	54.73	15.23
VANOTTERDIJK	6.04	10	60	11.54	56	25.68	14.14	11.48	6	57	40.34	14.66	55	55.84	15.50
PERKINS	6.08	10	58	11.80	57	25.87	14.07	11.18	10	57	40.52	14.65	56	56.33	15.81
ZHANG	6.32	9	63	11.74	57	26.35	14.61	11.34	5	55	40.82	14.47	56	56.47	15.65
KLEPIKOVA	6.40	8	64	11.82	59	25.84	14.02	11.64	5	55	40.64	14.80	52	56.53	15.89
KOHLER	6.26	8	56	11.96	55	26.24	14.28	11.48	6	58	40.98	14.74	57	56.57	15.59
HIRAI	6.20	10	58	12.02	58	26.34	14.32	11.40	11	59	41.04	14.70	60	56.83	15.79
YU	6.08	10	62	11.62	58	26.07	14.45	11.62	9	56	40.88	14.81	55	57.36	16.48
Average	6.17	9	60	11.73	57	25.94	14.22	11.40	8	56	40.59	14.65	55	56.33	15.74
min-max	6-6.4	8-10	56-64	11.3-12.02	54-59	25.16-26.35	13.86-14.61	11.06-11.64	5-11	53-59	39.5-41.04	14.34-14.81	52-60	54.73-57.36	15.23-16.48

Race Analysis Comparison 100m Backstroke Women

Name	Start	# Kicks	Str.Rate	Split	Str.Rate	Split	Lap	Turn	No kicks	Str. Rate	Split	Lap	Str. Rate	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-50	25-50			(cycle/min)	75m	50-75m	(cycle/min)	100m	75-100m
McKEOWN	6.64	12	48	12.62	47	27.92	15.30	10.76	13	50	41.62	13.70	47	57.16	15.54
SMITH	6.64	12	54	12.60	52	27.70	15.10	10.82	13	53	41.52	13.82	54	57.35	15.83
BERKOFF	6.80	11	57	12.58	53	28.19	15.61	10.70	11	54	41.88	13.69	52	58.15	16.27
MASSE	7.00	14	53	12.96	49	28.13	15.17	11.18	11	48	42.40	14.27	47	58.42	16.02
PENG	7.14	11	51	13.16	48	29.18	16.02	11.08	10	49	42.94	13.76	48	59.10	16.16
MAHIEU	7.04	12	43	13.06	43	28.83	15.77	11.26	5	42	42.92	14.09	42	59.48	16.56
RUCK	7.20	12	50	13.26	46	28.59	15.33	11.42	8	45	43.30	14.71	44	59.59	16.29
MOLUH	7.16	12	48	13.30	46	28.73	15.43	11.54	9	43	43.50	14.77	45	59.60	16.10
Average	6.95	12	50	12.94	48	28.41	15.47	11.10	10	48	42.51	14.10	47	58.61	16.10
min-max	6.64-7.2	11-14	43-57	12.58-13.3	43-53	27.7-29.18	15.1-16.02	10.7-11.54	5-13	42-54	41.52-43.5	13.69-14.77	42-54	57.16-59.6	15.54-16.56

Race Analysis Comparison 100m Breaststroke Women

Name	Start	# Kicks	Str.Rate	Split	Str.Rate	Split	Lap	Turn	# kicks	Str. Rate	Split	Lap	Str. Rate	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-50	25-50	5+15		(cycle/min)	75m	50-75m	(cycle/min)	100m	75-100m
ELENDT	7.30	*	42	14.06	42	30.32	16.26	13.28	*	43	47.64	17.32	44	01:05.19	17.55
DOUGLASS	7.18	*	44	14.04	44	30.64	16.60	12.70	*	45	47.54	16.90	45	01:05.27	17.73
TANG	7.30	*	54	13.68	50	29.84	16.16	13.18	*	52	46.94	17.10	52	01:05.64	18.70
SUZUKI	7.54	*	57	14.08	56	30.87	16.79	13.38	*	52	47.86	16.99	52	01:05.78	17.92
CHIKUNOVA	7.50	*	44	14.26	42	31.45	17.19	13.30	*	42	48.16	16.71	42	01:06.04	17.88
BOTTAZZO	7.46	*	47	14.06	49	30.50	16.44	13.32	*	51	47.58	17.08	53	01:06.06	18.48
ZMUSHKA	7.90	*	48	14.46	43	31.06	16.60	13.62	*	50	48.58	17.52	52	01:06.38	17.80
TETEREVKO	7.42	*	42	14.12	42	31.51	17.39	12.90	*	45	48.20	16.69	47	01:06.61	18.41
Average	7.45		47	14.10	46	30.77	16.68	13.21		48	47.81	17.04	48	01:05.87	18.06
min-max	7.18-7.9		42-57	13.68-14.46	42-56	29.84-31.51	16.16-17.39	12.7-13.62		42-52	46.94-48.58	16.69-17.52	42-53	1:05.19-1:06.61	17.55-18.7

Race Analysis Comparison 100m Freestyle Women

Name	Start	# Kicks	Str.Rate	Split	Str.Rate	Split	Lap	Turn	# kicks	Str. Rate	Split	Lap	Str. Rate	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-50	25-50	5+15		(cycle/min)	75m	50-75m	(cycle/min)	100m	75-100m
STEENBERG	6.38	9	50	11.60	49	25.34	13.74	10.34	7	51	38.18	12.84	51	52.55	14.37
O'CALLAGH	6.28	10	57	11.40	49	25.34	13.94	10.28	9	49	38.46	13.12	47	52.67	14.21
HUSKE	6.24	8	54	11.30	52	25.16	13.86	10.58	6	52	38.24	13.08	51	52.89	14.65
van WIJK	6.28	6	52	11.44	46	25.35	13.91	10.52	4	46	38.26	12.91	45	52.91	14.65
KLEPIKOVA	6.50	8	52	11.78	50	25.38	13.60	10.80	3	47	38.84	13.46	47	52.98	14.14
GASTALDEL	6.32	9	53	11.62	50	25.73	14.11	10.36	6	51	38.82	13.09	51	53.30	14.48
CHENG	6.50	5	53	11.80	50	25.57	13.77	10.80	2	46	39.20	13.63	45	53.34	14.14
CURTIS	6.32	9	59	11.50	54	25.28	13.78	10.68	6	53	38.64	13.36	50	53.41	14.77
Average	6.35	8	54	11.56	50	25.39	13.84	10.55	5	49	38.58	13.19	48	53.01	14.43
min-max	6.24-6.5	5-10	50-59	11.3-11.8	46-54	25.16-25.73	13.6-14.11	10.28-10.8	2-9	46-53	38.18-39.2	12.84-13.63	45-51	52.55-53.41	14.14-14.77

Race Analysis Comparison 100m Butterfly Men

Name	Start	# Kicks	Str.Rate	Split	Str.Rate	Split	Lap	Turn	# kicks	Str. Rate	Split	Lap	Str. Rate	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-50	25-50	5+15		(cycle/min)	75m	50-75m	(cycle/min)	100m	75-100m
GROUSSET	5.26	7	56	10.27	53	22.80	12.53	10.04	9	54	35.80	13.00	53	49.62	13.82
PONTI	5.21	8	58	10.28	56	23.15	12.87	9.57	10	60	35.85	12.70	59	49.83	13.98
KHARUN	5.52	9	60	10.45	58	23.60	13.15	9.70	9	59	36.21	12.61	58	50.07	13.86
LIENDO	5.32	6	58	10.52	57	23.51	12.99	9.96	9	58	36.23	12.72	56	50.09	13.86
TEMPLE	5.36	8	54	10.62	54	23.67	13.05	9.86	9	53	36.30	12.63	52	50.57	14.27
MINAKOV	5.68	7	57	10.74	52	23.82	13.08	10.15	7	56	36.95	13.13	54	50.90	13.95
BUCHER	5.32	8	55	10.46	56	23.67	13.21	9.96	10	55	36.46	12.79	59	50.92	14.46
CECCON	5.38	7	56	10.43	55	23.11	12.68	10.35	6	54	36.69	13.58	52	51.12	14.43
Average	5.38	8	57	10.47	55	23.42	12.95	9.95	9	56	36.31	12.90	55	50.39	14.08
min-max	5.21-5.68	6-9	54-60	10.27-10.74	52-58	22.8-23.82	12.53-13.21	9.57-10.35	6-10	53-60	35.8-36.95	12.61-13.58	52-59	49.62-51.12	13.82-14.46

Race Analysis Comparison 100m Backstroke Men

Name	Start	# Kicks	Str.Rate	Split	Str.Rate	Split	Lap	Turn	# kicks	Str. Rate	Split	Lap	Str. Rate	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-50	25-50	5+15		(cycle/min)	75m	50-75m	(cycle/min)	100m	75-100m
COETZE	6.06	9	54	11.32	52	24.95	13.63	10.06	9	49	37.68	12.73	49	51.85	14.17
CECCON	5.96	8	46	11.28	43	25.39	14.11	9.84	8	44	37.88	12.49	46	51.90	14.02
NDOYE-BR	6.06	10	49	11.50	48	25.37	13.87	9.92	10	49	37.96	12.59	50	51.92	13.96
KOS	5.96	9	53	11.18	51	24.99	13.81	9.70	11	52	37.54	12.55	50	52.20	14.66
MORGAN	6.16	10	52	11.44	51	24.92	13.48	10.08	9	50	37.94	13.02	49	52.37	14.43
KOLESNIK	5.98	9	54	11.16	51	24.90	13.74	9.82	9	50	37.42	12.52	47	52.38	14.96
LIFINTSEV	5.88	10	58	11.04	53	25.10	14.06	9.94	9	49	37.64	12.54	47	52.51	14.87
CHRISTOU	6.06	11	51	11.40	48	25.19	13.79	9.80	8	48	37.80	12.61	46	52.62	14.82
Average	6.02	10	52	11.29	49	25.10	13.81	9.90	9	49	37.73	12.63	48	52.22	14.49
min-max	5.88-6.16	8-11	46-58	11.04-11.5	43-53	24.9-25.39	13.48-14.11	9.7-10.08	8-11	44-52	37.42-37.96	12.49-13.02	46-50	51.85-52.62	13.96-14.96

Race Analysis Comparison 100m Breaststroke Men

Name	Start	# Kicks	Str.Rate	Split	Str.Rate	Split	Lap	Turn	# kicks	Str. Rate	Split	Lap	Str. Rate	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-50	25-50	5+15		(cycle/min)	75m	50-75m	(cycle/min)	100m	75-100m
QIN	6.32	*	47	12.14	46	27.07	14.93	11.92	*	52	42.28	15.21	53	58.23	15.95
MARTINEN	6.16	*	57	11.96	52	26.90	14.94	12.24	*	59	42.16	15.26	59	58.58	16.42
PETRASHO	6.34	*	51	12.46	49	27.27	14.81	11.64	*	57	42.60	15.33	56	58.88	16.28
CORBEAU	5.90	*	44	12.12	43	27.82	15.70	11.74	*	41	42.88	15.06	43	59.06	16.18
VIBERTI	6.50	*	53	12.28	49	27.16	14.88	12.16	*	50	42.78	15.62	52	59.08	16.30
MATZERATH	6.62	*	58	12.50	58	27.39	14.89	11.76	*	57	42.82	15.43	58	59.14	16.32
MATHENY	6.60	*	63	12.70	60	27.68	14.98	12.20	*	61	43.20	15.52	61	59.26	16.06
SEMIANINC	6.04	*	48	12.28	44	27.47	15.19	11.82	*	54	42.94	15.47	55	59.55	16.61
Average	6.31	*	53	12.31	50	27.35	15.04	11.94	*	54	42.71	15.36	55	58.97	16.27
min-max	5.9-6.62	*	44-63	11.96-12.7	43-60	26.9-27.82	14.81-15.7	11.64-12.24	*	41-61	42.16-43.2	15.06-15.62	43-61	58.23-59.55	15.95-16.61

Race Analysis Comparison 100m Freestyle Men

Name	Start	No Kicks	Str.Rate	Split	Str.Rate	Split	Lap	Turn	No kicks	Str. Rate	Split	Lap	Str. Rate	Split	Lap
	0-15		(cycle/min)	0-25m	(cycle/min)	25-50	25-50			(cycle/min)	75m	50-75m	(cycle/min)	100m	75-100m
POPOVICI	5.38	6	54	10.10	50	22.49	12.39	9.10	4	51	33.98	11.49	50	46.51	12.53
ALEXY	5.60	5	46	10.34	43	22.48	12.14	9.38	3	45	34.36	11.88	48	46.92	12.56
CHALMERS	5.38	7	54	10.18	52	22.64	12.46	9.38	5	53	34.28	11.64	52	47.17	12.89
CARIBE	5.20	6	54	9.88	52	22.43	12.55	9.34	4	50	34.06	11.63	47	47.35	13.29
KORNEV	5.30	5	47	10.06	45	22.38	12.32	9.34	4	44	34.32	11.94	43	47.51	13.19
SAMMON	5.54	5	54	10.32	53	22.75	12.43	9.50	3	55	34.66	11.91	54	47.58	12.92
GROUSSET	5.42	7	52	10.18	51	22.72	12.54	9.46	6	50	34.64	11.92	50	47.59	12.95
RICHARDS	5.44	6	50	10.30	51	23.05	12.75	9.26	5	50	34.74	11.69	50	47.74	13.00
Average	5.41	6	51	10.17	49	22.62	12.45	9.35	4	50	34.38	11.76	49	47.30	12.92
min-max	5.2-5.6	5-7	46-54	9.88-10.34	43-53	22.38-23.05	12.14-12.75	9.1-9.5	3-6	44-55	33.98-34.74	11.49-11.94	43-54	46.51-47.74	12.53-13.29

Race Analysis Comparison 200m Butterfly Women

Name	Start 0-15	# Kicks	Str.Rate (cycle/min)	Split 0-50m	Str.Rate (cycle/min)	Split 50-100	Lap 50-100	Str.Rate (cycle/min)	Split 150m	Lap 100-150m	Str.Rate (cycle/min)	Split 200m	Lap 150-200m	Turn 1 5+15	# kicks	Turn 2 5+15	# kicks	Turn 3 5+15	# kicks
McINTOSH	6.66	7	55	27.22	53	00:58.41	31.19	53	01:30.00	31.59	53	02:01.99	31.99	12.20	5	12.44	5	12.46	6
SMITH	6.42	9	55	27.90	53	00:59.97	32.07	52	01:32.80	32.83	54	02:04.99	32.19	12.48	8	12.46	8	12.54	9
DEKKERS	6.74	7	51	28.21	49	01:00.00	31.79	50	01:32.19	32.19	52	02:06.12	33.93	12.24	6	12.54	6	13.04	6
YU	6.56	7	52	28.66	51	01:01.23	32.57	52	01:33.65	32.42	54	02:06.43	32.78	12.36	4	12.48	4	12.64	3
BACH	7.04	10	53	28.30	51	01:00.37	32.07	51	01:33.54	33.17	51	02:07.47	33.93	12.34	6	12.84	6	13.26	6
BRICKER	6.96	5	55	28.33	52	01:00.84	32.51	53	01:34.35	33.51	55	02:07.59	33.24	12.50	5	13.26	5	13.20	5
RICHARDS	7.02	8	53	28.17	51	01:00.74	32.57	52	01:33.74	33.00	52	02:07.99	34.25	12.48	5	12.92	5	13.32	5
WALSHE	6.82	9	54	28.47	51	01:00.77	32.30	52	01:34.04	33.27	52	02:08.34	34.30	12.20	10	12.76	10	13.24	9
Average	6.78	8	54	28.16	51	01:00.29	32.13	52	01:33.04	32.75	53	02:06.37	33.33	12.35	6	12.71	6	12.96	6
min-max	6.42-7.04	5-10	51-55	27.22-28.66	49-53	58.41-1:01.23	31.19-32.57	50-53	1:30.0-1:34.35	31.59-33.51	51-55	2:01.99-2:08.34	31.99-34.3	12.2-12.5	4-10	12.44-13.26	4-10	12.46-13.32	3-9

Race Analysis Comparison 200m Backstroke Women

Name	Start 0-15	# Kicks	Str.Rate (cycle/min)	Split 0-50m	Str.Rate (cycle/min)	Split 50-100	Lap 50-100	Str.Rate (cycle/min)	Split 150m	Lap 100-150m	Str.Rate (cycle/min)	Split 200m	Lap 150-200m	Turn 1 5+15	# kicks	Turn 2 5+15	# kicks	Turn 3 5+15	# kicks
McKEOWN	6.70	14	43	29.22	39	01:01.34	32.12	42	01:32.50	31.16	44	02:03.33	30.83	11.68	8	11.74	8	11.64	6
SMITH	7.12	12	50	28.95	48	01:00.61	31.66	47	01:32.47	31.86	48	02:04.29	31.82	11.82	7	12.02	8	11.92	8
CURZAN	7.02	11	44	29.28	41	01:01.07	31.79	41	01:33.07	32.00	41	02:06.04	32.97	11.62	10	11.82	10	12.32	9
PENG	7.38	12	45	29.88	42	01:01.90	32.02	43	01:34.34	32.44	44	02:07.22	32.88	11.64	11	12.40	10	12.50	8
SHKURDAI	7.06	11	38	30.14	37	01:02.20	32.06	38	01:34.70	32.50	43	02:08.09	33.39	11.52	10	11.66	9	12.00	10
LIU	7.74	11	43	30.82	39	01:03.75	32.93	40	01:36.70	32.95	39	02:09.71	33.01	12.58	4	12.70	3	12.78	3
MOLNAR	7.54	9	42	30.83	39	01:03.37	32.54	41	01:36.89	33.52	43	02:09.74	32.85	11.94	7	12.52	6	12.42	8
SEIDEL	7.86	10	44	30.91	41	01:03.74	32.83	40	01:37.35	33.61	42	02:10.01	32.66	12.40	5	12.48	4	12.52	5
Average	7.30	11	44	30.00	41	01:02.25	32.24	42	01:34.75	32.51	43	02:07.30	32.55	11.90	8	12.17	7	12.26	7
min-max	6.7-7.86	9-14	38-50	28.95-30.91	37-48	1:00.61-1:03.75	31.66-32.93	38-47	1:32.47-1:37.35	31.16-33.61	39-48	2:03.33-2:10.01	30.83-33.39	11.52-12.58	4-11	11.66-12.7	3-10	11.64-12.78	3-10

Race Analysis Comparison 200m Breaststroke Women

Name	Start 0-15	# Kicks	Str.Rate (cycle/min)	Split 0-50m	Str.Rate (cycle/min)	Split 50-100	Lap 50-100	Str.Rate (cycle/min)	Split 150m	Lap 100-150m	Str.Rate (cycle/min)	Split 200m	Lap 150-200m	Turn 1 5+15	# kicks	Turn 2 5+15	# kicks	Turn 3 5+15	# kicks
DOUGLASS	7.24	*	35	31.51	34	01:06.54	35.03	37	01:42.15	35.61	40	02:18.50	36.35	12.82	*	13.54	*	13.80	*
CHIKUNOVA	7.56	*	31	31.85	29	01:07.84	35.99	31	01:43.33	35.49	33	02:19.96	36.63	13.60	*	13.82	*	14.00	*
CORBETT	7.76	*	40	32.44	38	01:08.69	36.25	40	01:45.65	36.96	43	02:23.52	37.87	13.84	*	14.32	*	14.88	*
ZMUSHKA	7.64	*	34	32.37	31	01:08.92	36.55	34	01:46.12	37.20	40	02:23.52	37.40	14.42	*	14.02	*	14.76	*
EVANS	7.60	*	29	32.79	31	01:08.53	35.74	33	01:45.46	36.93	36	02:24.21	38.75	13.28	*	14.24	*	14.06	*
TETEREVKOVA	7.44	*	34	32.43	32	01:09.26	36.83	33	01:46.26	37.00	41	02:24.25	37.99	14.02	*	14.30	*	14.34	*
Mc CARTNEY	7.78	*	34	33.26	30	01:09.89	36.63	31	01:47.31	37.42	33	02:25.22	37.91	13.88	*	13.88	*	13.98	*
RYBAK-ANDERSEN	7.30	*	29	33.50	29	01:10.50	37.00	30	01:47.76	37.26	31	02:25.36	37.60	13.58	*	14.04	*	13.98	*
Average	7.54	*	33	32.52	32	01:08.77	36.25	33	01:45.51	36.73	37	02:23.07	37.56	13.68	*	14.02	*	14.23	*
min-max	7.24-7.78	*	29-40	31.51-33.5	29-38	1:06.54-1:10.5	35.03-37	30-40	1:42.15-1:47.76	35.49-37.42	31-43	2:18.5-2:25.36	36.35-38.75	12.82-14.42	*	13.54-14.32	*	13.8-14.88	*

Race Analysis Comparison 200m Freestyle Women

Name	Start 0-15	# Kicks	Str.Rate (cycle/min)	Split 0-50m	Str.Rate (cycle/min)	Split 50-100	Lap 50-100	Str.Rate (cycle/min)	Split 150m	Lap 100-150m	Str.Rate (cycle/min)	Split 200m	Lap 150-200m	Turn 1 5+15	# kicks	Turn 2 5+15	# kicks	Turn 3 5+15	# kicks
O'CALLAGHAN	6.28	10	43	26.73	39	55.93	29.20	41	01:25.07	29.14	44	01:53.48	28.41	10.76	7	10.82	7	11.08	6
LI	6.68	6	48	27.23	46	56.69	29.46	47	01:25.68	28.99	48	01:54.52	28.84	11.32	2	11.24	2	11.42	2
WEINSTEIN	6.66	7	46	26.80	43	55.90	29.10	44	01:25.29	29.39	45	01:54.67	29.38	11.14	3	11.38	2	11.54	2
COLBERT	6.74	9	45	27.21	45	56.06	28.85	44	01:25.63	29.57	44	01:55.06	29.43	10.94	5	11.08	5	11.32	4
SEEMANOVA	6.56	7	44	27.23	42	56.42	29.19	41	01:26.30	29.88	45	01:55.20	28.90	11.08	5	11.28	5	11.34	4
FAIRWEATHER	6.94	6	49	26.97	46	56.21	29.24	45	01:25.76	29.55	46	01:55.61	29.85	11.20	2	11.52	1	11.82	2
PERKINS	6.74	6	47	27.08	44	56.54	29.46	44	01:26.45	29.91	42	01:56.55	30.10	11.22	3	11.58	2	11.90	1
GEMMELL	6.72	5	51	27.68	45	58.27	30.59	45	01:29.39	31.12	45	02:00.16	30.77	11.56	2	11.72	1	11.90	1
Average	6.67	7	47	27.12	44	56.50	29.39	44	01:26.20	29.69	45	01:55.66	29.46	11.15	4	11.33	3	11.54	3
min-max	6.28-6.94	5-10	43-51	26.73-27.68	39-46	55.9-58.27	28.85-30.59	41-47	1:25.07-1:29.39	28.99-31.12	42-48	1:53.48-2:00.16	28.41-30.77	10.76-11.56	2-7	10.82-11.72	1-7	11.08-11.9	1-6

Race Analysis Comparison 200m Butterfly Men

Name	Start	# Kicks	Str.Rate	Split	Str.Rate	Split	Lap	Str.Rate	Split	Lap	Str.Rate	Split	Lap	Turn 1	# kicks	Turn 2	# kicks	Turn 3	# kicks
	0-15		(cycle/min)	0-50m	(cycle/min)	50-100	50-100	(cycle/min)	150m	100-150m	(cycle/min)	200m	150-200m	5+15		5+15		5+15	
URLANDO	5.86	7	53	25.01	51	53.35	28.34	50	01:21.87	28.52	50	01:51.87	30.00	10.66	7	10.76	7	11.04	7
CHMIELEWSKI	5.76	8	52	25.28	49	53.94	28.66	51	01:22.95	29.01	52	01:52.64	29.69	10.82	6	11.18	6	11.38	5
TURNER	5.46	7	50	25.22	50	53.79	28.57	52	01:22.99	29.20	53	01:54.17	31.18	10.88	5	11.16	4	11.30	7
KHARUN	5.70	7	54	24.46	51	53.81	29.35	50	01:23.59	29.78	51	01:54.34	30.75	11.16	7	11.56	6	11.84	7
FOSTER	5.72	7	50	25.60	49	54.34	28.74	51	01:23.98	29.64	52	01:54.62	30.64	10.78	6	11.46	7	11.52	6
RAZZETTI	5.88	6	48	25.41	46	54.42	29.01	47	01:24.40	29.98	49	01:54.85	30.45	10.94	7	11.70	7	11.68	7
CHEN	5.56	7	50	24.96	48	53.90	28.94	48	01:23.52	29.62	48	01:55.25	31.73	11.32	6	11.36	5	11.98	4
BURDISO	5.90	6	54	24.90	52	53.64	28.74	52	01:23.65	30.01	53	01:55.27	31.62	11.08	5	11.74	4	12.14	5
Average	5.73	7	52	25.11	50	53.90	28.79	50	01:23.37	29.47	51	01:54.13	30.76	10.96	6	11.36	6	11.61	6
min-max	5.46-5.9	6-8	48-54	24.46-25.6	46-52	53.35-54.42	28.34-29.35	47-52	1:21.87-1:24.4	28.52-30.01	48-53	1:51.87-1:55.27	29.69-31.73	10.66-11.32	5-7	10.759999-11.74	4-7	11.04-12.14	4-7

Race Analysis Comparison 200m Backstroke Men

Name	Start	# Kicks	Str.Rate	Split	Str.Rate	Split	Lap	Str.Rate	Split	Lap	Str.Rate	Split	Lap	Turn 1	# kicks	Turn 2	# kicks	Turn 3	# kicks
	0-15		(cycle/min)	0-50m	(cycle/min)	50-100	50-100	(cycle/min)	150m	100-150m	(cycle/min)	200m	150-200m	5+15		5+15		5+15	
KOS	6.12	9	43	26.17	42	54.64	28.47	44	01:23.24	28.60	45	01:53.19	29.95	10.14	10	10.50	10	10.90	10
COETZE	6.24	9	46	25.88	41	54.48	28.60	39	01:23.74	29.26	42	01:53.36	29.62	10.34	8	10.72	7	10.90	8
NDOYE-BROUARD	6.18	10	46	26.52	43	55.56	29.04	41	01:24.90	29.34	44	01:54.62	29.72	10.28	9	10.50	8	10.94	8
TIERNEY	6.42	9	47	26.55	43	55.36	28.81	44	01:25.14	29.78	46	01:55.09	29.95	10.38	9	10.70	9	11.26	9
SISKOS	6.40	11	46	26.85	41	55.98	29.13	43	01:25.87	29.89	46	01:55.13	29.26	10.58	6	11.16	6	10.82	8
CEJKA	6.50	9	46	26.98	41	56.45	29.47	41	01:26.07	29.62	42	01:55.37	29.30	10.84	8	10.94	8	11.14	9
MITYUKOV	6.36	9	46	26.76	42	56.03	29.27	43	01:25.58	29.55	45	01:55.57	29.99	10.60	7	11.16	5	11.12	4
GREENBANK	6.32	8	46	27.33	44	56.10	28.77	45	01:25.98	29.88	45	01:56.26	30.28	10.48	9	10.96	9	11.02	9
Average	6.32	9	46	26.63	42	55.58	28.95	43	01:25.07	29.49	44	01:54.82	29.76	10.46	8	10.83	8	11.01	8
min-max	6.12-6.5	8-11	43-47	25.88-27.33	41-44	54.48-56.45	28.47-29.47	39-45	1:24.24-1:26.07	28.6-29.890001	42-46	1:53.19-1:56.26	29.26-30.28	10.14-10.84	6-10	10.5-11.16	5-10	10.82-11.26	4-10

Race Analysis Comparison 200m Breststroke

Name	Start 0-15	# Kicks	Str.Rate (cycle/min)	Split 0-50m	Str.Rate (cycle/min)	Split 50-100	Lap 50-100	Str.Rate (cycle/min)	Split 150m	Lap 100-150m	Str.Rate (cycle/min)	Split 200m	Lap 150-200m	Turn 1 5+15	# kicks	Turn 2 5+15	# kicks	Turn 3 5+15	# kicks
QIN	6.02	*	36	28.58	35	01:00.92	32.34	35	01:34.06	33.14	43	02:07.41	33.35	12.00	*	12.38	*	12.74	*
WATANABE	6.30	*	34	28.56	31	01:01.60	33.04	33	01:33.85	32.25	42	02:07.70	33.85	11.88	*	12.26	*	12.46	*
CORBEAU	6.00	*	32	28.55	32	01:01.06	32.51	31	01:34.27	33.21	39	02:07.73	33.46	12.54	*	12.48	*	12.86	*
PRIGODA	5.54	*	33	28.77	30	01:00.78	32.01	32	01:34.14	33.36	39	02:07.99	33.85	11.50	*	12.58	*	12.68	*
POUCH	6.82	*	36	28.55	36	01:00.79	32.24	36	01:33.60	32.81	38	02:09.13	35.53	11.78	*	12.54	*	12.86	*
FUKASAWA	6.60	*	42	28.92	37	01:01.29	32.37	39	01:34.54	33.25	51	02:09.21	34.67	11.96	*	12.24	*	12.88	*
COLL MARTI	5.70	*	38	28.35	35	01:00.68	32.33	37	01:34.40	33.72	42	02:09.44	35.04	12.14	*	12.72	*	12.86	*
ZHIGALOV (DSQ)																			
Average	6.14	*	36	28.61	34	01:01.02	32.41	35	01:34.12	33.11	42	02:08.37	34.25	11.97	*	12.46	*	12.76	*
min-max	5.54-6.82	*	32-42	28.35-28.92	30-37	1:00.68-1:01.6	32.01-33.04	31-39	1:33.6-1:34.54	32.25-33.72	38-51	2:07.41-2:09.44	33.35-35.53	11.5-12.54	*	12.24-12.72	*	12.46-12.88	*

Race Analysis Comparison 200m Freestyle

Name	Start 0-15	# Kicks	Str.Rate (cycle/min)	Split 0-50m	Str.Rate (cycle/min)	Split 50-100	Lap 50-100	Str.Rate (cycle/min)	Split 150m	Lap 100-150m	Str.Rate (cycle/min)	Split 200m	Lap 150-200m	Turn 1 5+15	# kicks	Turn 2 5+15	# kicks	Turn 3 5+15	# kicks
POPOVICI	5.50	6	43	24.03	40	50.58	26.55	43	01:17.10	26.52	45	01:43.53	26.43	9.82	3	9.84	3	9.92	3
HOBSON	5.74	5	41	23.98	40	50.07	26.09	41	01:16.45	26.38	42	01:43.84	27.39	9.78	2	9.92	3	10.30	3
MURASA	5.68	7	44	24.51	41	51.07	26.56	43	01:17.88	26.81	43	01:44.54	26.66	9.86	4	10.18	5	10.24	3
HWANG	5.60	6	44	23.96	41	50.76	26.80	41	01:17.89	27.13	43	01:44.72	26.83	10.04	3	10.52	2	10.50	2
SIERADZKI	5.70	7	43	24.21	41	50.57	26.36	41	01:17.49	26.92	44	01:45.22	27.73	9.84	4	9.98	3	10.46	3
D'AMBROSIO	5.76	6	44	24.47	43	51.31	26.84	45	01:18.07	26.76	46	01:45.27	27.20	10.08	2	10.08	2	10.38	2
GUY	5.84	7	40	24.46	40	51.27	26.81	41	01:18.19	26.92	44	01:45.28	27.09	10.14	3	10.36	2	10.50	2
JETT	5.71	7	50	24.16	49	50.28	26.12	48	01:17.68	27.40	49	01:45.92	28.24	9.74	7	9.80	7	10.20	8
Average	5.69	6	44	24.22	42	50.74	26.52	43	01:17.59	26.86	44	01:44.79	27.20	9.91	4	10.08	3	10.31	3
min-max	5.5-5.84	5-7	40-50	23.96-24.51	40-49	50.07-51.31	26.09-26.84	41-48	1:16.45-1:18.19	26.38-27.4	42-49	1:43.53-1:45.92	26.43-28.24	9.74-10.14	2-7	9.8-10.52	2-7	9.92-10.5	2-8

Race Analysis Comparison 200m IM Women

Name	Start 0-15	# Kicks	Str.Rate (cycle/min)	Split 0-50m	Str.Rate (cycle/min)	Split 50-100	Lap 50-100	Str.Rate (cycle/min)	Split 150m	Lap 100-150m	Str.Rate (cycle/min)	Split 200m	Lap 150-200m	Turn 1 5+15	# kicks	Turn 2 5+15	# kicks	Turn 3 5+15	# kicks
McINTOSH	6.54	7	57	26.71	44	16:48.00	31.76	43	01:36.53	38.06	45	02:06.69	30.16	12.00	5	14.00	1	13.18	5
WALSH	6.60	9	52	27.16	40	55:12.00	32.67	32	01:36.86	37.03	43	02:08.58	31.72	12.12	7	13.62	1	12.82	4
HARVEY	6.64	7	54	28.21	40	55:12.00	32.87	36	01:38.29	37.21	43	02:09.15	30.86	12.34	7	13.60	1	12.60	6
YU	6.44	9	57	27.43	47	24:00.00	32.92	44	01:39.04	38.69	49	02:09.21	30.17	12.34	7	14.58	1	12.94	2
NARITA	7.02	9	55	28.07	39	31:12.00	33.91	36	01:38.98	37.00	45	02:09.56	30.58	12.58	6	13.86	1	12.94	3
WOOD	6.66	10	54	27.90	40	55:12.00	33.18	36	01:38.51	37.43	47	02:09.92	31.41	11.82	12	13.86	1	12.76	11
GORBENKO	6.62	7	50	27.91	39	61.27	33.36	37	01:38.49	37.22	43	02:10.26	31.77	12.64	8	13.98	1	13.22	3
WALSHE	6.68	9	55	28.12	37	61.58	33.46	40	01:40.41	38.83	42	02:11.57	31.16	12.22	6	13.94	1	12.70	10
Average	6.65	8	54	27.69	41	55:12.00	33.02	38	01:38.39	37.68	45	02:09.37	30.98	12.26	7	13.93	1	12.90	6
min-max	6.44-7.02	7-10	50-57	26.71-28.21	37-47	58.47-61.98	31.76-33.91	32-44	1:36.53-1:40.41	37-38.83	42-49	2:06.69-2:11.57	30.16-31.77	11.82-12.64	5-12	13.6-14.58	1-1	12.6-13.22	2-11

Race Analysis Comparison 400m IM Women

Name	Start 0-15	Str.Rate (cycle/min)	Lap 0-100m	Str.Rate (cycle/min)	Lap 100-200	Split 200m	Str. Rate (cycle/min)	Lap 200-300	Str. Rate (cycle/min)	Lap 300-400	Split 400	Turn 1 5+15	Turn 2 5+15	Turn 3 5+15	Turn 4 5+15	Turn 5 5+15	Turn 6 5+15	Turn 7 5+15
S McINTOSH	6.62	53	00:59.31	40	01:06.18	02:05.49	40	01:19.28	44	01:01.01	04:25.78	12.38	12.90	12.30	14.24	14.98	13.44	11.76
J FORRESTER	6.80	52	01:01.84	39	01:08.27	02:10.11	36	01:19.18	40	01:03.97	04:33.26	12.56	12.86	12.42	14.48	15.52	13.98	12.16
M NARITA	7.00	52	01:02.54	36	01:11.48	02:14.02	31	01:16.21	42	01:03.03	04:33.26	12.68	13.56	13.04	13.96	14.28	12.64	12.18
Z YU	6.80	53	01:01.67	43	01:10.19	02:11.86	40	01:20.00	48	01:01.90	04:33.76	12.84	13.60	13.20	15.06	15.52	13.36	12.04
E WEYANT	7.50	54	01:02.71	40	01:10.66	02:13.37	35	01:18.61	43	01:02.03	04:34.01	13.00	13.22	13.20	14.40	15.16	13.18	12.14
K GRIMES	6.90	52	01:01.43	40	01:08.40	02:09.83	34	01:23.81	42	01:02.88	04:36.52	12.76	12.88	12.50	14.28	15.22	13.18	12.10
W KOBORI	6.98	49	01:04.51	37	01:10.84	02:15.35	36	01:20.12	46	01:02.58	04:38.05	13.00	13.26	12.98	14.34	14.82	13.24	11.80
F COLBERT	6.88	51	01:02.97	39	01:09.02	02:11.99	32	01:22.47	40	01:05.75	04:40.21	12.66	13.26	13.20	14.70	15.58	13.68	12.60
Average	6.94	52	01:02.12	39	01:09.38	02:11.50	35	01:19.96	43	01:02.89	04:34.36	12.74	13.19	12.86	14.43	15.14	13.34	12.10
min-max	6.62-7.5	49-54	59.31-1:04.51	36-43	1:06.18-1:11.48	2:05.49-2:15.35	31-40	1:16.21-1:23.81	40-48	1:01.01-1:05.75	4:25.78-4:40.21	12.38-13	12.86-13.6	12.3-13.2	13.96-15.06	14.28-15.58	12.64-13.98	11.76-12.6

Race Analysis Comparison 200m IM Men

Name	Start 0-15	# Kicks	Str.Rate (cycle/min)	Split 0-50m	Str.Rate (cycle/min)	Split 50-100	Lap 50-100	Str.Rate (cycle/min)	Split 150m	Lap 100-150m	Str.Rate (cycle/min)	Split 200m	Lap 150-200m	Turn 1 5+15	# kicks	Turn 2 5+15	# kicks	Turn 3 5+15	# kicks
MARCHAND	5.42	8	58	24.11	45	52.57	28.46	36	01:25.53	32.96	43	01:53.68	28.15	10.14	11	12.06	*	11.84	7
CASAS	5.42	8	53	24.16	43	53.04	28.88	40	01:26.33	33.29	45	01:54.30	27.97	10.54	9	11.84	*	11.50	7
KOS	5.40	8	51	24.21	42	52.89	28.68	39	01:26.91	34.02	44	01:55.34	28.43	10.84	9	12.28	*	12.04	6
SCOTT	5.94	8	53	24.76	42	54.08	29.32	44	01:28.24	34.16	47	01:56.32	28.08	10.60	9	12.46	*	11.70	2
CLAREBURT	5.73	7	54	25.13	44	54.93	29.80	40	01:29.04	34.11	45	01:57.06	28.02	11.26	5	12.00	*	11.72	3
MATSUSHITA	5.68	8	54	25.21	43	54.48	29.27	40	01:29.08	34.60	47	01:57.52	28.44	10.98	6	12.10	*	12.06	3
WANG	5.58	7	50	24.80	38	54.55	29.75	38	01:29.36	34.81	39	01:57.92	28.56	11.20	7	12.42	*	11.62	0
MAKINO	5.58	7	53	25.44	42	56.15	30.71	36	01:30.78	34.63	44	01:59.25	28.47	11.30	8	12.36	*	11.48	6
Average	5.59	8	53	24.73	42	54.09	29.36	39	01:28.16	34.07	44	01:56.42	28.27	10.86	8	12.19	*	11.75	4
min-max	5.4-5.94	7-8	50-58	24.11-25.44	38-45	52.57-56.15	28.46-30.71	36-44	1:25.53-1:30.78	32.96-34.81	39-47	1:53.68-1:59.25	27.97-28.56	10.14-11.3	5-11	11.84-12.46	*	11.48-12.06	0-7

Race Analysis Comparison 400m IM Men

Name	Start 0-15	Str.Rate (cycle/min)	Lap 0-100m	Str.Rate (cycle/min)	Lap 100-200	Split 200m	Str. Rate (cycle/min)	Lap 200-300	Str. Rate (cycle/min)	Lap 300-400	Split 400	Turn 1 5+15	Turn 2 5+15	Turn 3 5+15	Turn 4 5+15	Turn 5 5+15	Turn 6 5+15	Turn 7 5+15
L MARCHAND	5.70	52	00:54.92	37	01:02.72	01:57.64	34	01:08.75	41	00:58.34	04:04.73	11.44	11.68	11.34	12.94	13.46	12.04	10.62
T Matsushita	6.06	49	00:56.07	38	01:04.45	02:00.52	36	01:11.11	46	00:56.69	04:08.32	11.28	11.60	11.94	12.72	13.52	11.70	10.72
I BORODIN	6.16	52	00:55.77	39	01:04.85	02:00.62	37	01:09.82	43	00:58.72	04:09.16	11.56	12.18	12.38	13.16	13.50	12.00	11.36
A NISHIKAWA	6.06	52	00:56.94	39	01:04.21	02:01.15	34	01:11.28	45	00:57.78	04:10.21	11.58	11.86	11.90	13.06	13.22	12.10	11.08
M STUPIN	6.14	49	00:56.92	36	01:05.75	02:02.67	32	01:11.04	44	00:58.75	04:12.46	12.02	12.30	12.52	13.34	13.76	12.12	11.52
G ZOMBORI	5.92	47	00:56.87	38	01:05.96	02:02.83	32	01:11.77	39	00:57.91	04:12.51	11.84	12.24	12.18	13.06	13.86	12.54	10.70
M LITCHFIELD	6.00	49	00:56.86	38	01:03.98	02:00.84	34	01:13.14	44	00:58.79	04:12.77	11.40	11.98	11.62	13.40	13.62	12.30	11.08
B SMITH	6.08	50	00:56.15	41	01:05.99	02:02.14	32	01:14.16	44	00:56.98	04:13.28	11.30	12.44	12.20	13.20	13.78	12.44	10.70
Average	6.02	50	00:56.31	38	01:04.74	02:01.05	34	01:11.38	43	00:58.00	04:10.43	11.55	12.04	12.01	13.11	13.59	12.16	10.97
min-max	5.7-6.16	47-52	54.92-56.94	36-41	1:02.72-1:05.99	1:57.64-2:02.83	32-37	1:08.75-1:14.16	39-46	56.69-58.79	4:04.73-4:13.28	11.28-12.02	11.6-12.44	11.34-12.52	12.72-13.4	13.22-13.86	11.7-12.54	10.62-11.52

Race Analysis Comparison 400m Freestyle Women

Name	Start	Str.Rate	Lap	Str.Rate	Lap	Split	Str. Rate	Lap	Str. Rate	Lap	Split	Turn 1	Turn 2	Turn 3	Turn 4	Turn 5	Turn 6	Turn 7
	0-15	(cycle/min)	0-100m	(cycle/min)	100-200	200m	(cycle/min)	200-300	(cycle/min)	300-400	400	5+15	5+15	5+15	5+15	5+15	5+15	5+15
S McINTOSH	6.64	45	00:57.17	42	01:00.14	01:57.31	43	00:59.98	44	00:58.97	03:56.26	11.36	11.40	11.58	11.56	11.54	11.42	11.58
B LI	6.80	41	00:58.32	40	01:00.77	01:59.09	40	01:00.85	46	00:58.27	03:58.21	11.60	11.54	11.66	11.68	11.70	11.62	11.46
K LEDECKY	6.94	48	00:57.44	45	01:00.46	01:57.90	46	01:00.66	48	00:59.93	03:58.49	11.64	11.62	11.98	11.72	11.84	11.72	11.76
L PALLISTER	6.58	48	00:57.22	48	01:00.48	01:57.70	48	01:01.07	48	01:00.10	03:58.87	11.36	11.50	11.52	11.66	11.80	11.74	11.62
I GOSE	7.18	49	00:58.79	48	01:01.07	01:59.86	47	01:01.65	48	01:01.39	04:02.90	11.70	11.68	11.84	11.78	11.98	11.92	12.18
J PERKINS	6.68	43	00:58.33	41	01:01.35	01:59.68	40	01:02.36	41	01:01.16	04:03.20	11.46	11.54	11.72	11.72	11.86	11.74	11.78
P YANG	6.94	41	00:58.78	37	01:01.78	02:00.56	37	01:02.48	37	01:03.43	04:06.47	11.82	11.60	12.04	11.82	12.28	11.92	12.44
M WERNER	6.92	44	00:59.46	45	01:02.48	02:01.94	45	01:04.04	45	01:03.40	04:09.38	11.58	11.54	11.90	12.12	12.18	12.14	12.04
Average	6.84	45	00:58.19	43	01:01.07	01:59.26	43	01:01.64	45	01:00.83	04:01.72	11.57	11.55	11.78	11.76	11.90	11.78	11.86
min-max	6.58-7.18	41-49	57.17-59.46	37-48	1:00.14-1:02.48	1:57.31-2:01.94	37-48	59.98-1:04.14	37-48	58.27-1:03.43	3:56.26-4:09.38	11.36-11.82	11.4-11.68	11.52-12.04	11.56-12.12	11.54-12.28	11.42-12.14	11.46-12.44

Race Analysis Comparison 400m Freestyle Men

Name	Start	Str.Rate	Lap	Str.Rate	Lap	Split	Str. Rate	Lap	Str. Rate	Lap	Split	Turn 1	Turn 2	Turn 3	Turn 4	Turn 5	Turn 6	Turn 7
	0-15	(cycle/min)	0-100m	(cycle/min)	100-200	200m	(cycle/min)	200-300	(cycle/min)	300-400	400	5+15	5+15	5+15	5+15	5+15	5+15	5+15
L MARTENS	5.96	42	00:51.95	40	00:56.39	01:48.34	40	00:57.33	42	00:56.68	03:42.35	10.16	10.52	10.64	10.90	10.98	10.92	11.10
S SHORT	6.24	44	00:52.46	44	00:56.07	01:48.53	44	00:56.90	45	00:56.94	03:42.37	10.32	10.40	10.86	11.02	11.10	11.08	11.16
W KIM	6.02	39	00:52.77	38	00:56.52	01:49.29	39	00:57.14	41	00:56.17	03:42.60	10.34	10.70	10.82	11.14	11.26	10.78	11.12
V JOHANSSON	6.36	42	00:54.17	41	00:56.82	01:50.99	41	00:57.28	42	00:56.41	03:44.68	10.32	10.68	10.72	10.80	10.68	10.90	10.66
Z ZHANG	6.08	38	00:53.78	34	00:57.50	01:51.28	35	00:58.09	37	00:55.45	03:44.82	10.58	10.70	10.98	10.94	11.16	10.96	10.78
M de TULLIO	6.26	43	00:53.49	40	00:57.21	01:50.70	41	00:57.39	41	00:56.83	03:44.92	10.58	10.58	10.96	10.86	10.90	11.04	11.04
P MITSIN	6.06	45	00:52.65	43	00:56.19	01:48.84	43	00:57.91	44	00:58.53	03:45.28	10.50	10.60	10.68	10.72	11.02	11.10	11.04
O KLEMET	6.40	46	00:53.41	44	00:56.44	01:49.85	44	00:58.59	44	00:58.42	03:46.86	10.64	10.42	10.78	10.94	11.50	11.28	11.30
Average	6.17	42	00:53.09	40	00:56.64	01:49.73	41	00:57.58	42	00:56.93	03:44.24	10.43	10.58	10.81	10.92	11.08	11.01	11.03
min-max	5.96-6.4	38-46	51.95-54.17	34-44	56.07-57.50	1:48.34-1:51.28	35-44	56.90-58.59	37-45	55.45-58.53	3:42.35-3:46.86	10.16-10.64	10.4-10.7	10.64-10.98	10.72-11.14	10.68-11.5	10.78-11.28	10.66-11.3

Race Analysis Comparison 800m Freestyle Women

Name	Lap 1	Lap 2	Lap 3	Lap 4	Lap 5	Lap 6	Lap 7	Lap 8	Split	Str. Rate	Str. Rate	Str. Rate	Str. Rate	Str. Rate	Str. Rate	Str. Rate	Str. Rate	Turn	Turn	Turn	Turn	Turn	Turn	Turn	Turn
	0-100	100-200	200-300	300-400	400-500	500-600	600-700	700-800	0-800	0-100	100-200	200-300	300-400	400-500	500-600	600-700	700-800	50-100	150-200	250-300	350-400	450-500	550-600	650-700	750
Katie	57.54	60.88	61.35	61.38	61.46	61.69	61.55	59.77	08:05.62	49	46	45	46	46	45	45	47	11.57	11.82	11.83	11.85	11.81	11.79	11.92	11.64
Lani	57.88	61.04	61.34	61.07	61.53	61.66	61.62	59.84	08:05.98	45	44	44	44	45	46	47	49	11.56	11.75	11.73	11.64	11.69	11.67	11.72	11.58
Summer	57.70	60.84	61.56	61.23	61.42	61.59	61.37	61.58	08:07.29	44	42	41	42	43	42	43	43	11.67	11.86	11.82	11.82	11.83	11.92	11.87	11.98
Simona	58.98	61.07	61.40	61.99	62.22	62.49	62.77	61.89	08:12.81	51	50	50	50	50	49	49	49	11.87	11.95	12.06	12.10	12.15	12.18	12.32	12.36
Bingjie	59.60	61.65	62.54	62.69	62.41	62.70	62.77	61.23	08:15.59	40	39	39	38	38	38	38	39	11.72	11.95	11.93	11.97	11.94	11.97	12.03	11.90
Isabel	59.02	61.84	62.46	62.93	63.10	63.15	63.17	62.56	08:18.23	48	46	46	46	45	46	46	47	11.66	11.88	11.94	12.05	11.94	12.03	12.11	11.96
Erika	59.29	62.12	62.82	63.17	63.62	63.85	64.68	61.24	08:20.79	43	41	41	40	40	40	40	41	11.76	12.00	12.17	12.21	12.36	12.36	12.36	11.78
Ichika	60.71	63.52	63.78	63.94	64.10	64.18	63.95	62.67	08:26.85	45	43	42	43	43	42	43	45	11.91	12.11	12.20	12.22	12.37	12.28	12.30	12.12
Average	58.84	61.62	62.16	62.30	62.48	62.66	62.74	61.35	08:14.15	46	44	43	44	44	44	44	45	11.72	11.92	11.96	11.98	12.01	12.03	12.08	11.92
min-max	57.54-60.71	60.84-63.52	61.34-63.78	61.07-63.94	61.42-64.1	61.59-64.18	61.37-64.68	59.77-62.67	8:05.62-8:26.85	40-51	39-50	39-50	38-50	38-50	38-49	38-49	39-49	11.56-11.91	11.75-12.11	11.73-12.2	11.64-12.22	11.69-12.37	11.67-12.36	11.72-12.36	11.58-12.36

Race Analysis Comparison 800m Freestyle Men

Name	Lap 1	Lap 2	Lap 3	Lap 4	Lap 5	Lap 6	Lap 7	Lap 8	Split	Str. Rate	Str. Rate	Str. Rate	Str. Rate	Str. Rate	Str. Rate	Str. Rate	Str. Rate	Turn	Turn	Turn	Turn	Turn	Turn	Turn	Turn
	0-100	100-200	200-300	300-400	400-500	500-600	600-700	700-800	0-800	0-100	100-200	200-300	300-400	400-500	500-600	600-700	700-800	50-100	150-200	250-300	350-400	450-500	550-600	650-700	750
Ahmed	54.68	58.11	58.31	57.82	57.80	57.58	57.08	55.50	07:36.88	40	38	38	38	39	39	39	41	10.82	10.90	10.94	10.90	10.97	10.83	10.89	10.70
Sven	54.79	58.05	58.26	58.17	58.09	58.26	58.13	56.21	07:39.96	44	41	41	41	42	42	43	44	10.80	11.08	10.96	10.98	10.96	10.91	10.97	10.76
Lukas	54.51	58.03	58.68	58.29	58.14	58.49	58.04	56.01	07:40.19	37	36	36	37	37	37	38	41	10.75	11.14	10.94	11.06	11.05	11.10	11.29	10.92
Bobby	54.75	57.84	58.57	58.49	58.57	59.51	60.03	58.66	07:46.42	41	39	39	39	39	39	39	40	10.76	11.10	11.18	11.13	11.20	11.24	11.46	11.24
Victor	55.55	58.22	58.88	59.18	59.44	59.15	59.02	57.56	07:47.00	41	40	40	40	40	40	40	42	10.92	11.24	11.17	11.17	11.21	11.17	11.10	11.02
Kuzey	55.30	58.52	59.01	58.69	59.29	59.29	59.92	59.07	07:49.09	48	45	44	45	44	44	43	44	11.21	11.23	11.43	11.38	11.57	11.60	11.58	11.64
Benjamin	56.15	59.44	59.62	59.91	59.78	59.62	59.38	56.82	07:50.72	45	43	45	45	45	47	48	49	10.92	11.04	11.05	11.12	11.24	11.18	11.06	10.82
Daniel	54.52	57.63	58.68	60.06	61.85	62.10	61.98	61.74	07:58.56	41	39	38	38	34	34	34	33	10.65	10.87	11.14	11.40	11.66	11.64	11.80	11.80
Average	55.03	58.23	58.75	58.83	59.12	59.25	59.20	57.70	07:46.10	42	40	40	40	40	40	41	42	10.85	11.08	11.10	11.14	11.23	11.21	11.27	11.11
min-max	54.51-56.15	57.63-59.44	58.26-59.62	57.82-60.06	57.8-61.85	57.58-62.1	57.08-61.98	55.5-61.74	7:36.88-7:58.56	37-48	36-45	36-45	37-45	34-45	34-47	34-48	33-49	10.65-11.21	10.87-11.24	10.94-11.43	10.9-11.4	10.96-11.66	10.83-11.64	10.89-11.8	10.7-11.8

Race Analysis Comparison 1500m Freestyle Women

Name	Lap 1 0-100	Lap 5 0-500	Lap 10 500-1000	Lap 15 1000-1500	Lap 14-15 1400-1500	Split 0-1500	SR 1 (c/min)	SR 5 (c/min)	SR 10 (c/min)	SR 15 (c/min)	SR 14-15 (c/min)	Turn 50-100	Turn 50-500	Turn 550-1000	Turn 1050-1400	Turn 1450
Katie	57.55	05:03.79	05:10.61	05:12.04	61.44	15:26.44	48	46	45	44	44	11.53	11.80	11.98	12.00	12.02
Simona	59.33	05:07.60	05:11.81	05:12.38	61.28	15:31.79	50	49	50	49	49	11.84	12.03	12.09	12.18	12.14
Lani	57.93	05:05.12	05:16.50	05:19.56	63.17	15:41.18	45	44	46	44	45	11.46	11.76	12.10	12.22	12.14
Bingjie	60.75	05:15.39	05:17.51	05:16.64	62.45	15:49.54	39	38	40	38	38	11.96	12.01	12.06	12.12	12.16
Anastasiia	60.73	05:15.37	05:18.95	05:23.08	64.35	15:57.40	46	45	47	45	44	12.06	12.13	12.21	12.30	12.32
Moesha	60.98	05:17.28	05:22.93	05:22.24	62.99	16:02.45	46	45	47	46	47	12.11	12.21	12.33	12.31	12.08
Ching Hwee	60.66	05:17.20	05:22.86	05:23.45	63.70	16:03.51	42	41	42	40	40	11.96	12.10	12.26	12.25	12.04
Peiqi	60.73	05:17.24	05:23.00	05:24.69	63.23	16:04.93	38	36	38	35	37	11.98	11.95	12.09	12.31	12.04
Average	59.83	05:12.37	05:18.02	05:19.26	62.83	15:49.66	44	43	45	43	43	11.86	12.00	12.14	12.21	12.12
min-max	57.55-60.98	5.03.79-5.17.28	5:10.61-5:23.0	5:12.04-5:24.69	61.28-64.35	15:26.44-16:04.93	38-50	36-49	38-50	35-49	37-49	11.46-12.11	11.76-12.21	11.98-12.33	12.00-12.31	12.02-12.32

Race Analysis Comparison 1500m Freestyle Men

Name	Lap 1 0-100	Lap 0-500	Lap 500-1000	Lap 1000-1500	Last 100	Split 0-1500	SR 1 (c/min)	SR 5 (c/min)	SR 10 (c/min)	SR 15 (c/min)	SR 14-15 (c/min)	Turn 50-100	Turn 50-500	Turn 550-1000	Turn 1050-1400	Turn 1450
Ahmed	56.20	04:52.61	04:53.49	04:48.31	54.49	14:34.41	37	37	40	39	41	11.07	11.18	11.13	11.09	10.50
Sven	56.24	04:52.35	04:53.89	04:49.45	55.47	14:35.69	40	38	41	41	45	10.95	11.01	10.97	10.94	10.70
Bobby	55.55	04:51.70	04:54.53	04:50.37	55.56	14:36.60	39	37	39	38	41	10.96	11.04	11.11	11.14	10.30
Samuel	56.53	04:53.16	04:56.20	04:53.72	56.34	14:43.08	38	37	40	40	43	11.18	11.19	11.26	11.36	10.82
Florian	55.96	04:52.01	04:56.28	04:56.00	57.02	14:44.29	35	34	36	34	37	11.08	11.21	11.29	11.37	10.94
Kuzey	55.32	04:52.01	04:56.69	05:03.74	60.71	14:52.44	47	44	45	42	42	11.24	11.43	11.54	11.83	11.82
Zalan	55.82	04:52.28	05:00.12	05:02.77	59.18	14:55.17	45	44	46	44	45	11.23	11.29	11.44	11.59	11.44
Damien	57.72	05:01.66	05:08.37	05:09.03	60.86	15:19.06	39	38	39	37	37	11.26	11.41	11.65	11.68	11.54
Average	56.17	04:53.47	04:57.45	04:56.67	57.45	14:47.59	40	39	41	39	42	11.12	11.22	11.30	11.37	11.01
min-max	55.32-57.72	4.51.7-5.01.66	4:53.49-5:08.37	4:48.31-5:09.03	54.49-60.86	14:34.41-15:19.06	35-47	34-44	36-46	34-44	37-45	10.95-11.26	11.01-11.43	10.97-11.65	10.94-11.83	10.3-11.82