framed

RACE ANALYSIS SAMPLE · DEMONSTRATION DATA

100 yd Freestyle

Framed example · demonstration data · Heat 2 · Lane 1 · 25 yd pool

Example official finish 1:11.39 **Video finish estimate 1:11.49**

Video timing reference: start signal

The marks and times in this report are illustrative.

What we saw

In this example, the final 25 took 19.75 seconds, 1.84 seconds longer than the third 25. Both lengths had 18 marked strokes. Compare the cadence and surface segment to see where the difference develops.

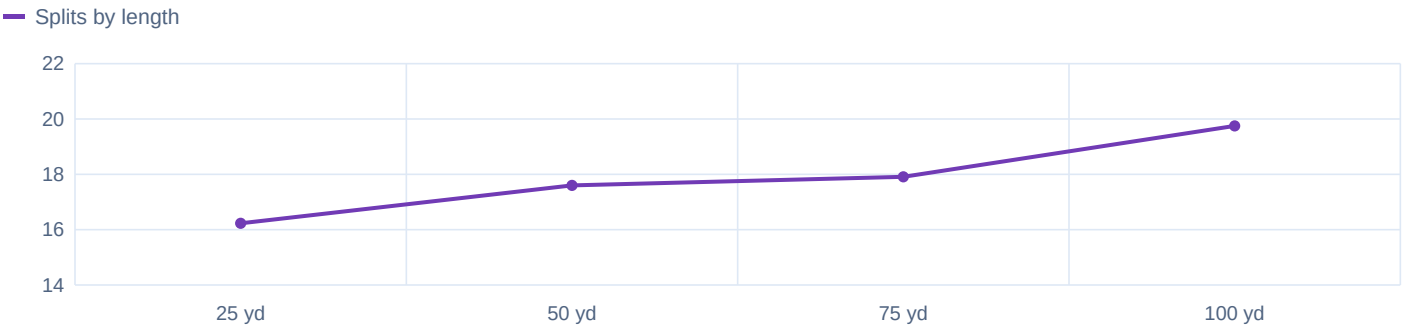
Race cue

Hold your hand-entry rhythm through the last five strokes.

Take it to practice

Swim 4 × 25 yd at 100 race pace. On each rep, target the same stroke count and record the final 5 yd time.

Splits by length (s)



Avg 17.87 · High 19.75 · Low 16.23

Splits and stroke data

Through	Video split	Cumulative	Strokes marked	Avg CPM	Avg SPM
25 yd	16.23	16.23	17	40.2	80.4
50 yd	17.60	33.83	17	37.7	75.5
75 yd	17.91	51.74	18	38.1	75.9
100 yd	19.75	71.49	18	37.2	74.2

Start, turns, and underwater

Through	Start / turn to breakout	Underwater	Surface	To 15 m	Wall to push
25 yd	3.49	2.29	12.74	4.87	—
50 yd	2.49	2.07	15.11	5.33	0.42
75 yd	2.92	2.45	14.99	5.84	0.48
100 yd	2.74	2.29	17.01	5.20	0.46

Dive start

Signal to movement 0.33 · Signal to feet off block 0.68 · Flight 0.53

Official results source

Illustrative timing sheet

Official timing

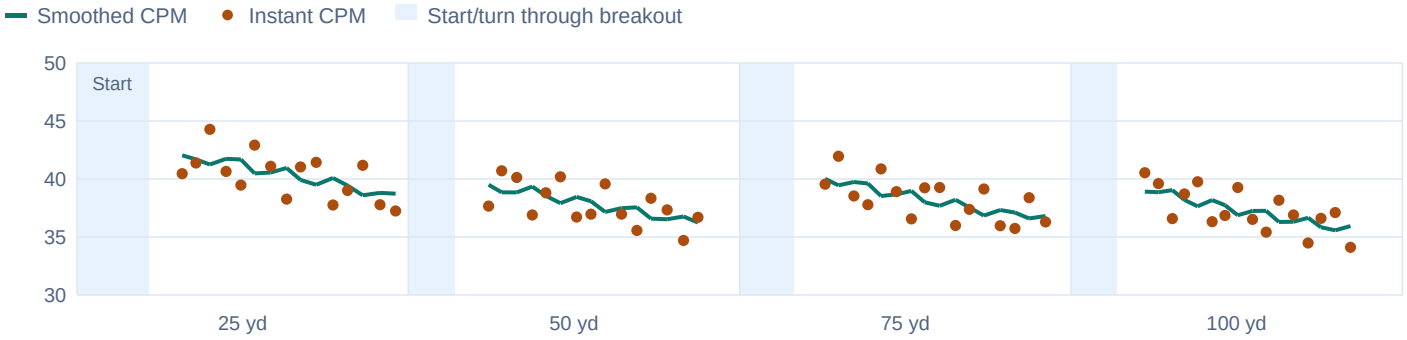
Interval	Official split	Official cumulative	Video estimate
0–50 yd	33.81	33.81	33.83
50–100 yd	37.58	71.39	37.66

Reading the numbers

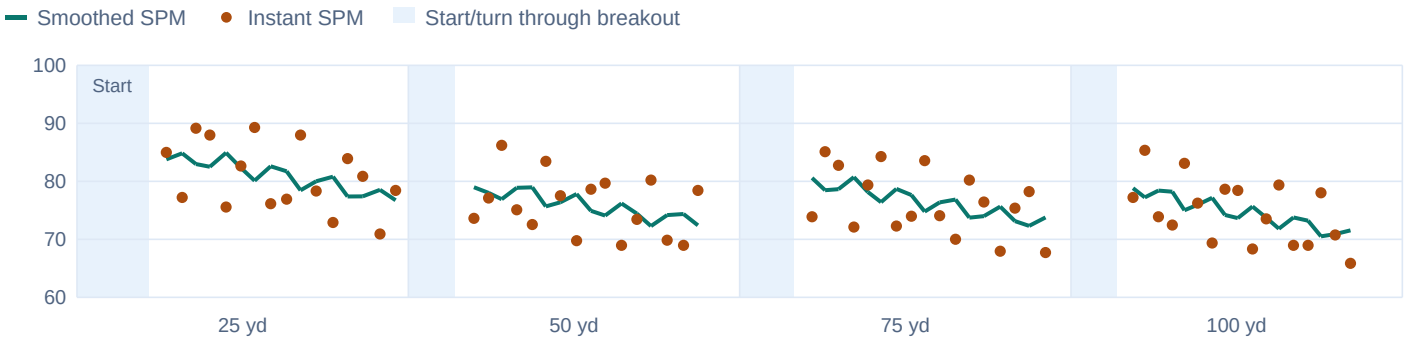
Times are in seconds. A dash means a required mark was unavailable. Underwater begins at water entry or when the feet leave the wall. The breakout split starts at the start reference or previous touch. Stroke counts reflect the recorded marks.

Stroke rhythm

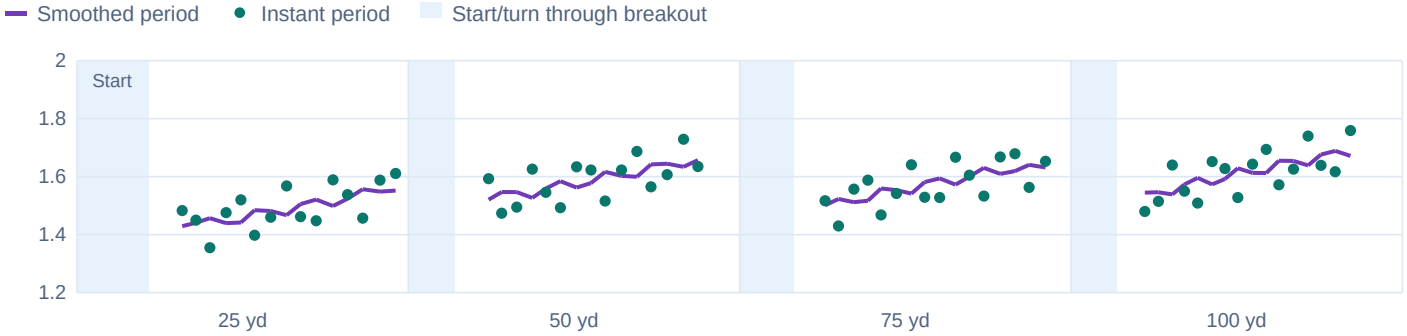
Cycle rate (CPM)



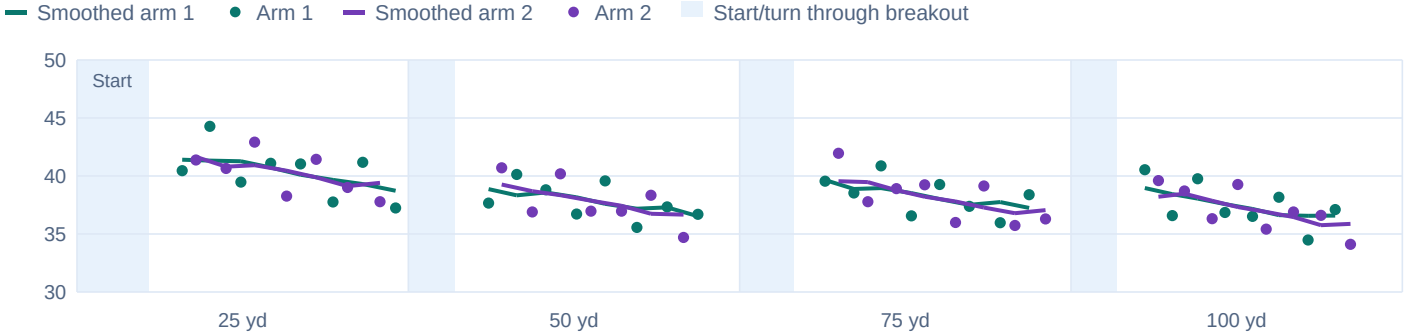
Stroke rate (SPM)



Cycle period (s/cycle)



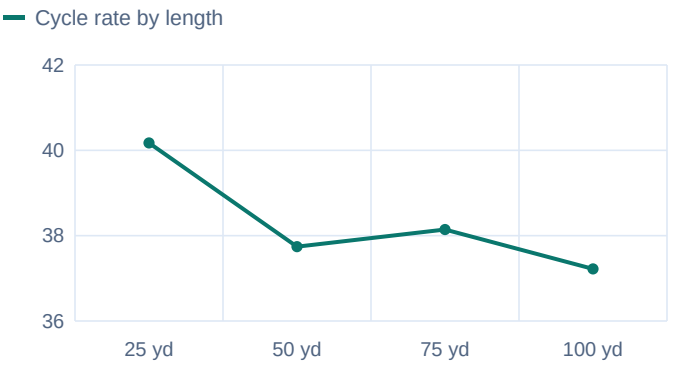
Cycle rate by arm (CPM)



Arm labels follow alternating stroke marks within each length. Lines stop at turns.

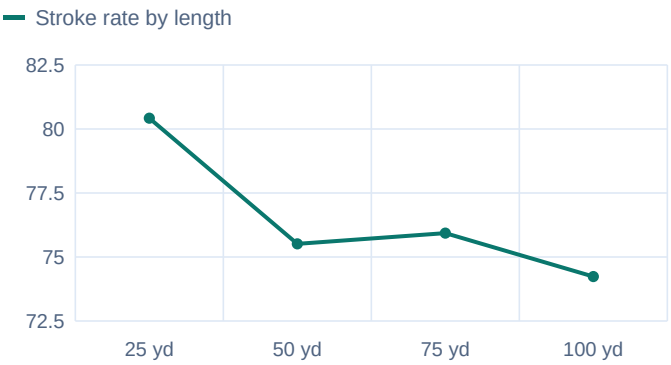
By length

Cycle rate by length (CPM)



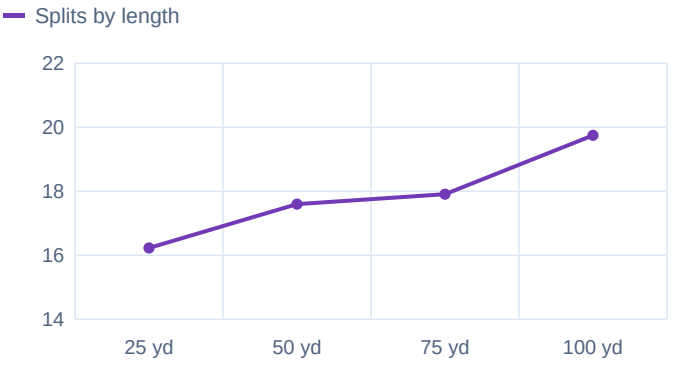
Avg 38.32 · High 40.17 · Low 37.22

Stroke rate by length (SPM)



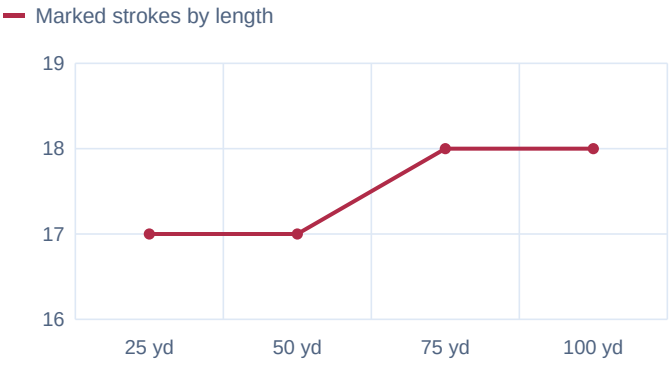
Avg 76.53 · High 80.42 · Low 74.24

Splits by length (s)



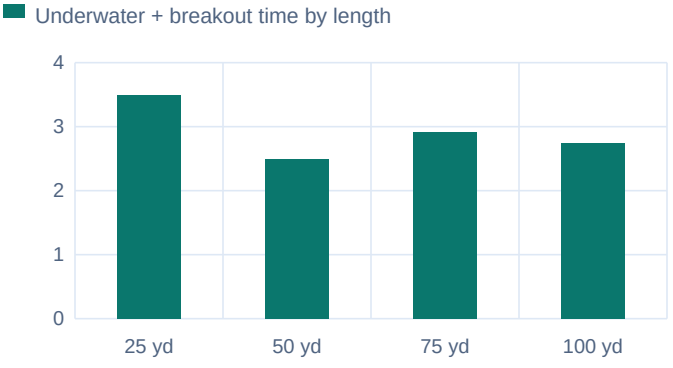
Avg 17.87 · High 19.75 · Low 16.23

Marked strokes by length (strokes)



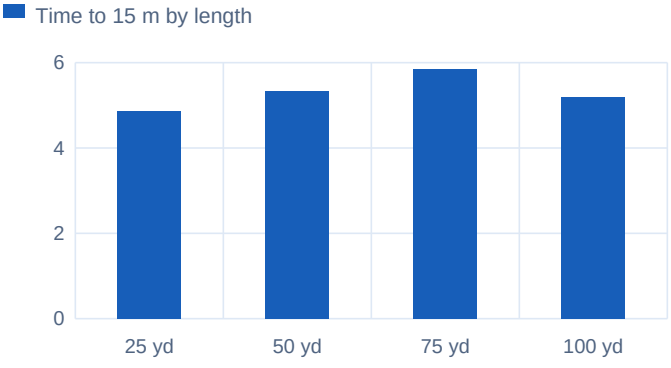
Avg 17.5 · High 18 · Low 17

Underwater + breakout time by length (s)



Avg 2.91 · High 3.49 · Low 2.49

Time to 15 m by length (s)



Avg 5.31 · High 5.84 · Low 4.87