TrackStat

HOW-TO GUIDES

Using TrackStat, step by step.

Twelve short guides to the full workflow: video analysis, GPS, the coaching calculators and athlete profiles. Each one shows exactly where to click, on real screens.

Calibration
Calibrate a rep in six clicks

Marking steps
Mark every step with one click

Contact timing
Time every contact in one pass

Splits
Split times in one pass

Results and report
From one rep to a report

GPS
Every GPS run, speed by the metre

Performance calculator
What if the step was 5 cm longer?

Wicket calculator
Wicket spacing from one measurement

Flying 100 m calculator
From a flying time to a 100 m

Lactate calculator
Step test to training zones

Competition insights
Every race result, in context

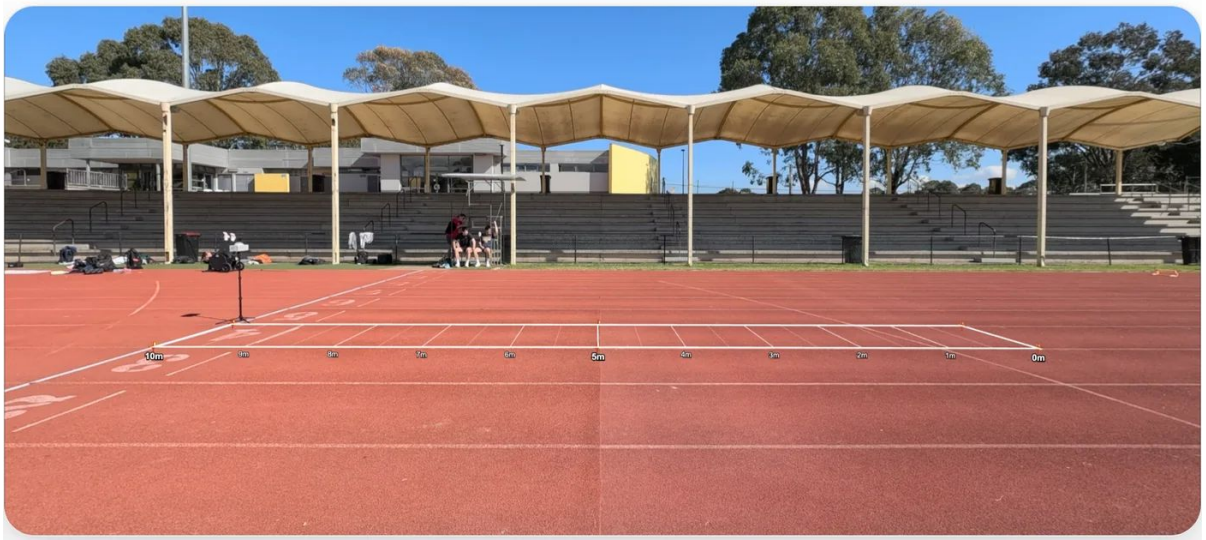
Athlete profile
Everything on one athlete

HOW-TO 01 · CALIBRATION

Calibrate a rep in six clicks

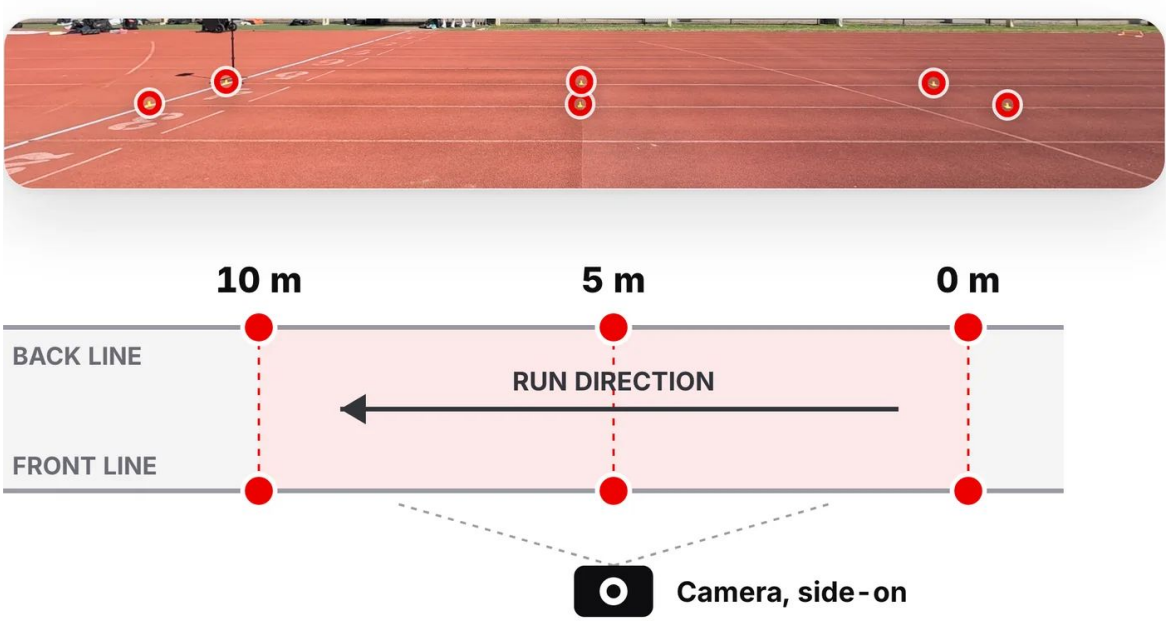
Six cones turn pixels into metres. Exactly where to click, on a real 4K 240 fps rep.

The TrackStat Team · 25 September 2026



Before you film · Six cones: 0, 5 and 10 m on both lines.

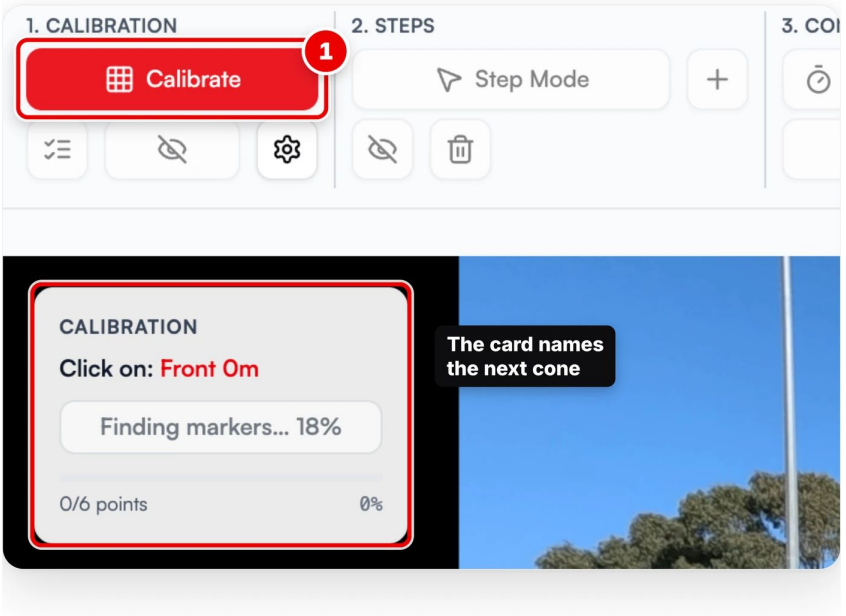
A cone on the front and back lane lines at the start, middle and end of your zone.



Zone length is set in Settings (5 to 100 m). The cones always mark its start, middle and end.

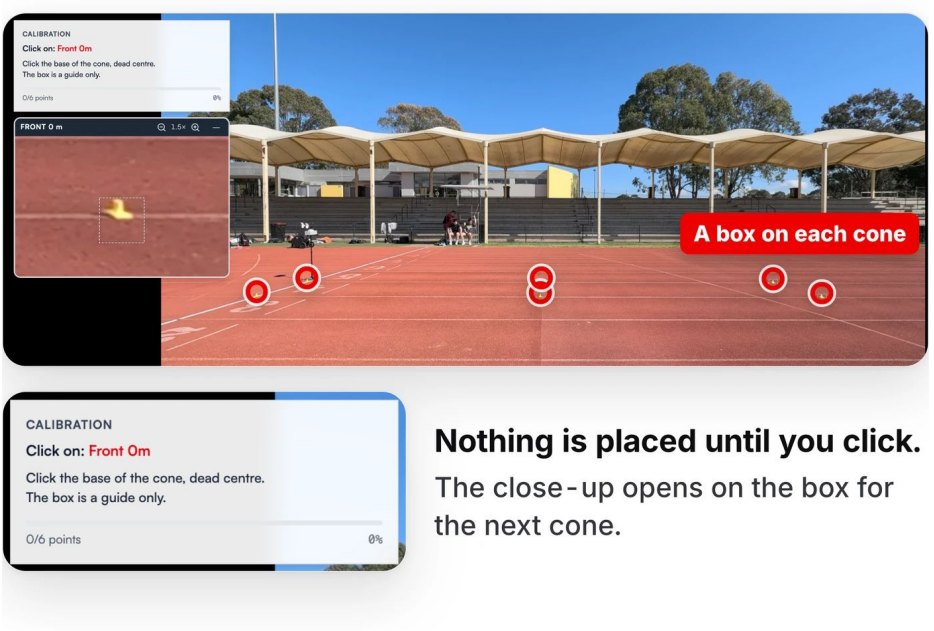
Step 1 · Press Calibrate.

The first button in the toolbar. A card appears on the video: **Click on: Front 0 m**.



Step 2 · A box on each cone.

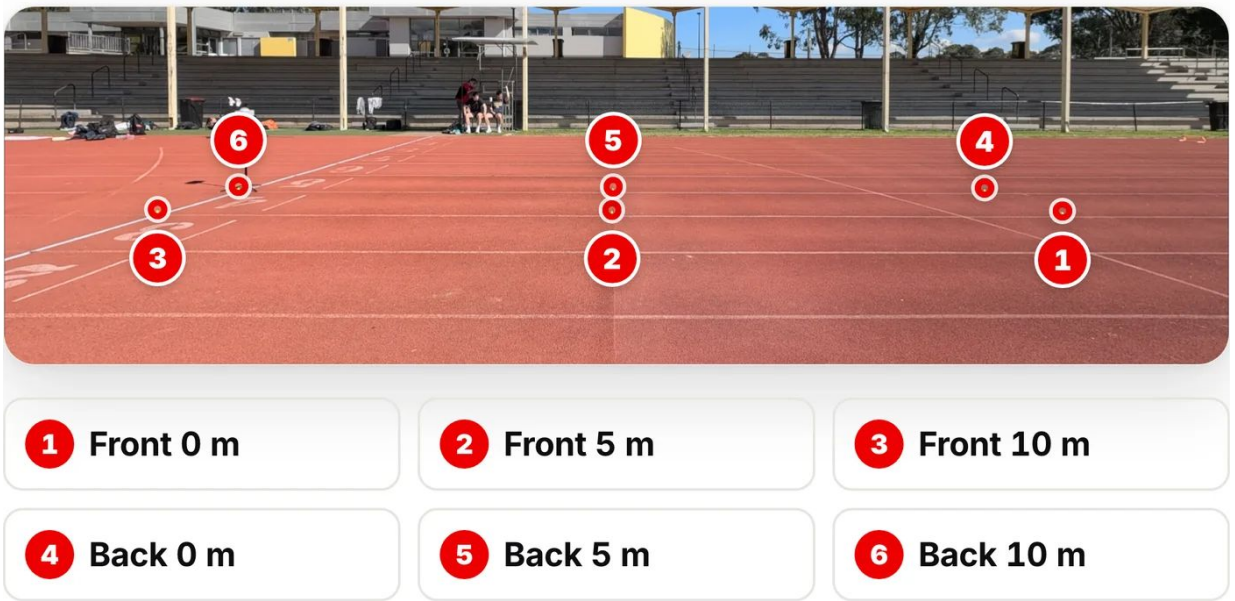
Calibrate looks for your cones by itself and puts a dashed box on each one. The box is a guide only.



No box on a cone? Click it as usual. To look again, press Find markers on the card.

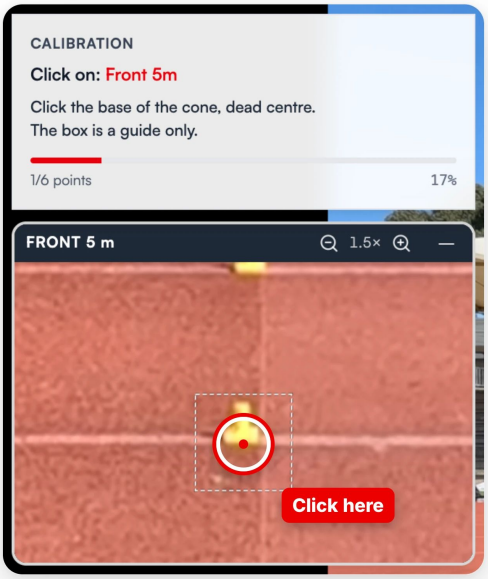
Step 3 · Click the base of each cone.

Front line first, then the back line, always from 0 m. This athlete runs right to left, so 0 m is on the right.



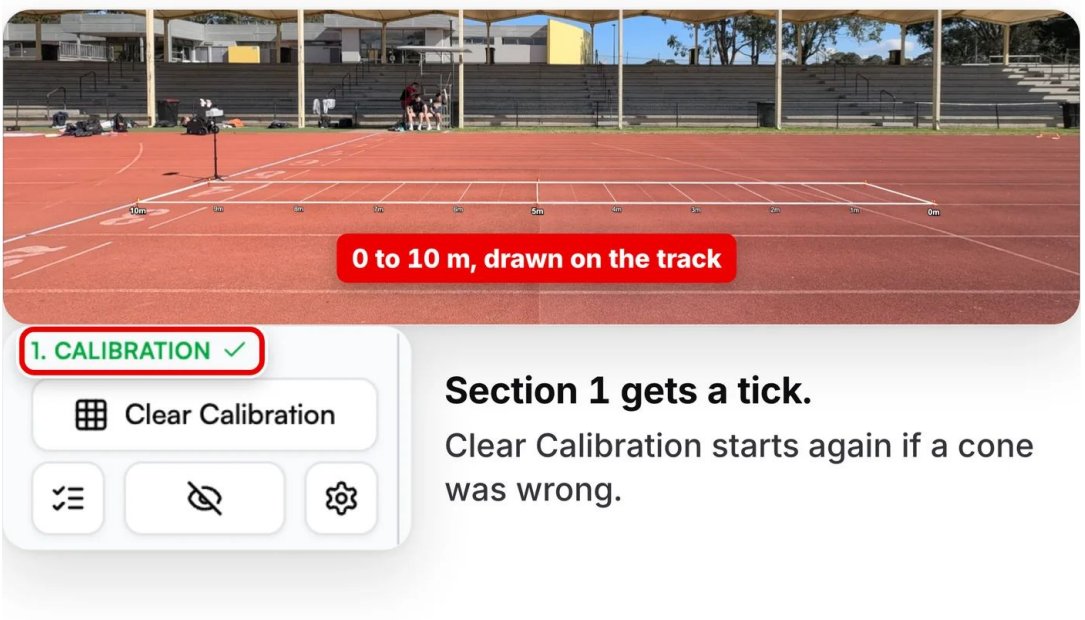
Tip · Use the close-up.

It zooms in on the cone that's up next. Click where the cone meets the track, not its tip. On the video or in the close-up, both work.



Step 4 · Six clicks. The grid appears.

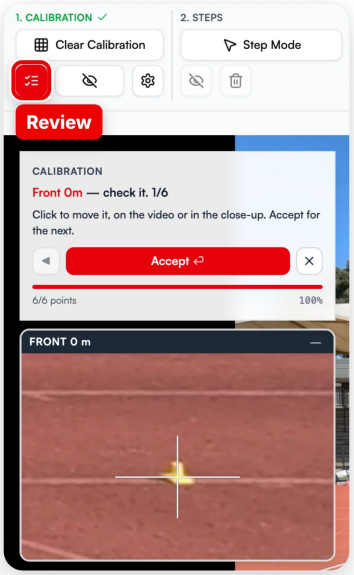
The last click finishes calibration. Every mark you make from here on is measured in metres.



Same tripod for the next rep? Settings → Copy Calibration, then Paste Calibration in the next analysis.

Check it · Review any point, any time.

Press **Review**, under Clear Calibration. Each point opens in the close-up: click to move it, Accept for the next.

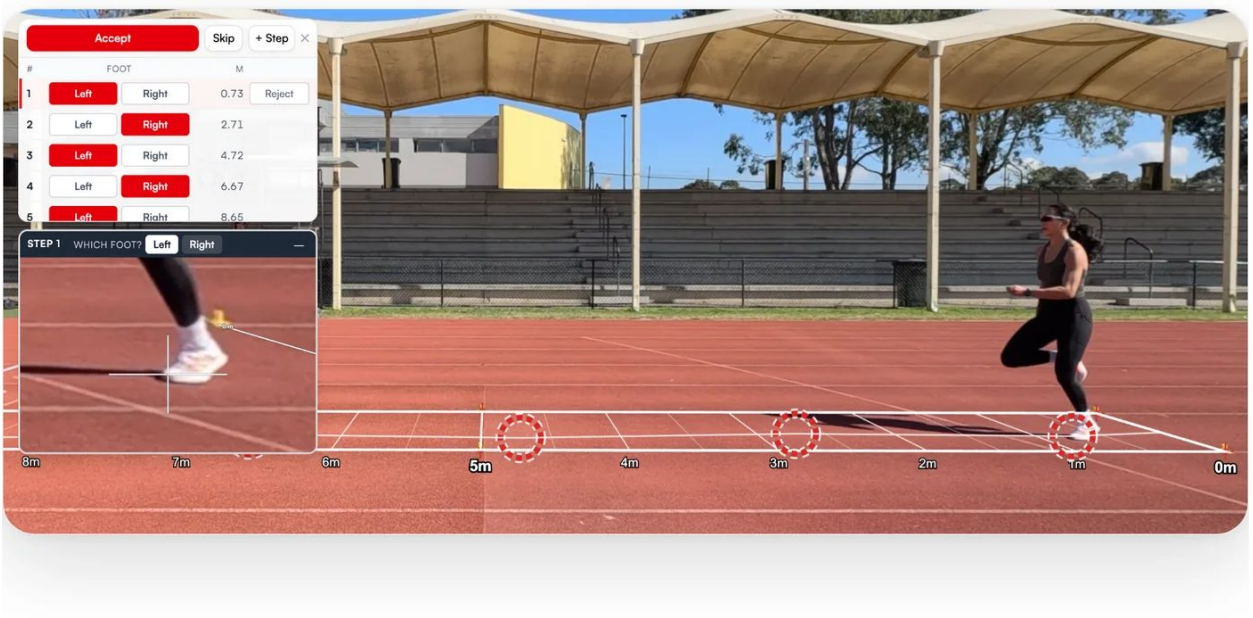


HOW-TO 02 · MARKING STEPS

Mark every step with one click

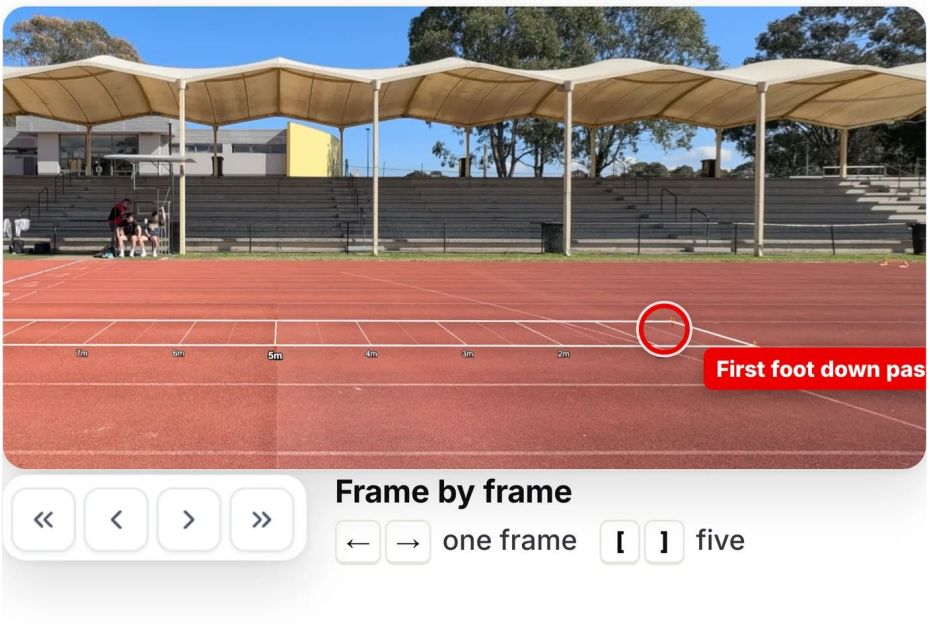
Click the toe, the app measures the step. Exactly where to click, on a real 4K 240 fps rep.

The TrackStat Team · 25 September 2026



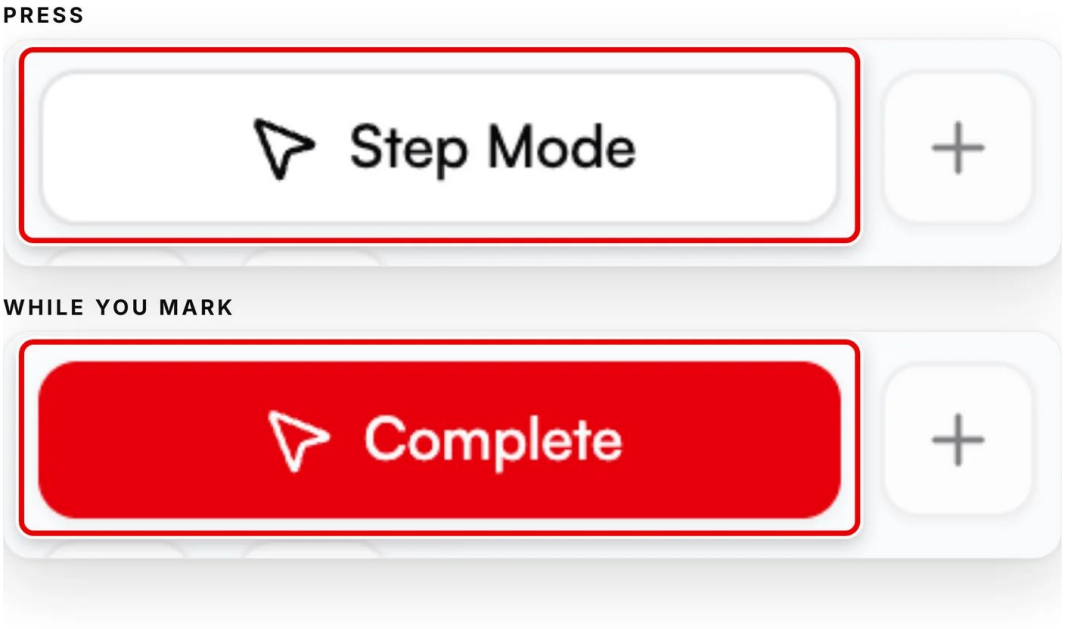
Step 1 · Find the first foot on the ground.

Scrub to the first contact past the 0 m line. Stop on a frame where the foot is flat on the track.



Step 2 · Press Step Mode.

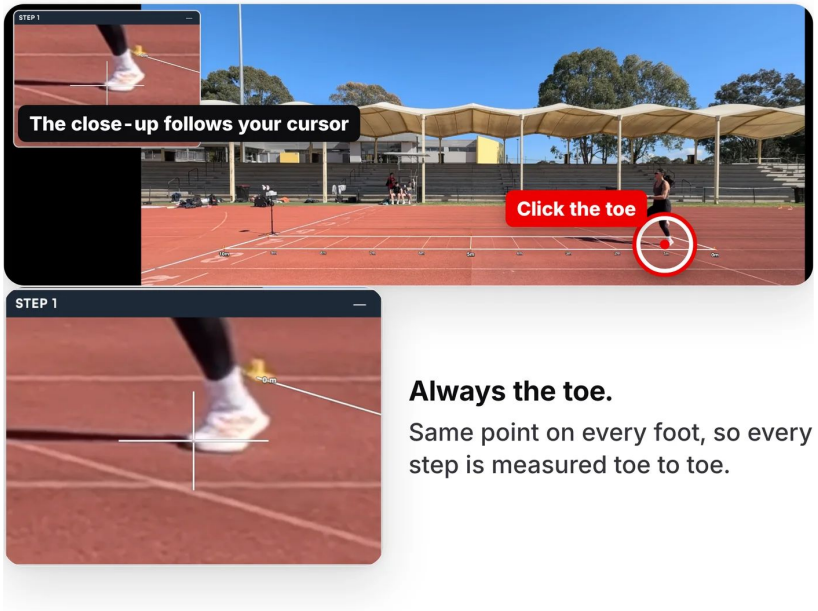
It’s in section 2 of the toolbar. While you mark, the button turns red and reads **Complete**.



Wrong click? Press Backspace to take the last step off, or Undo in the toolbar.

Step 3 · Click the toe.

Put the crosshair on the toe of the foot that’s on the ground, and click.

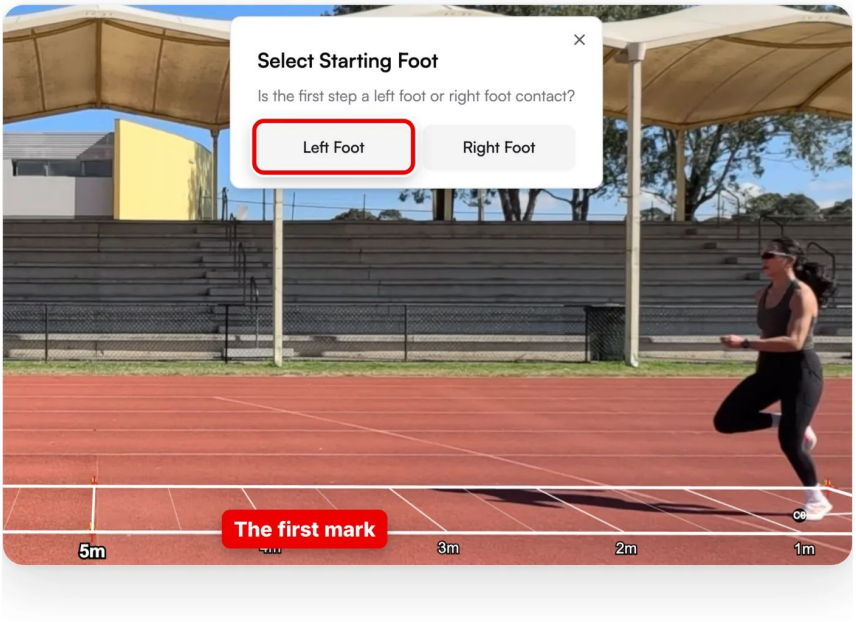


Always the toe.

Same point on every foot, so every step is measured toe to toe.

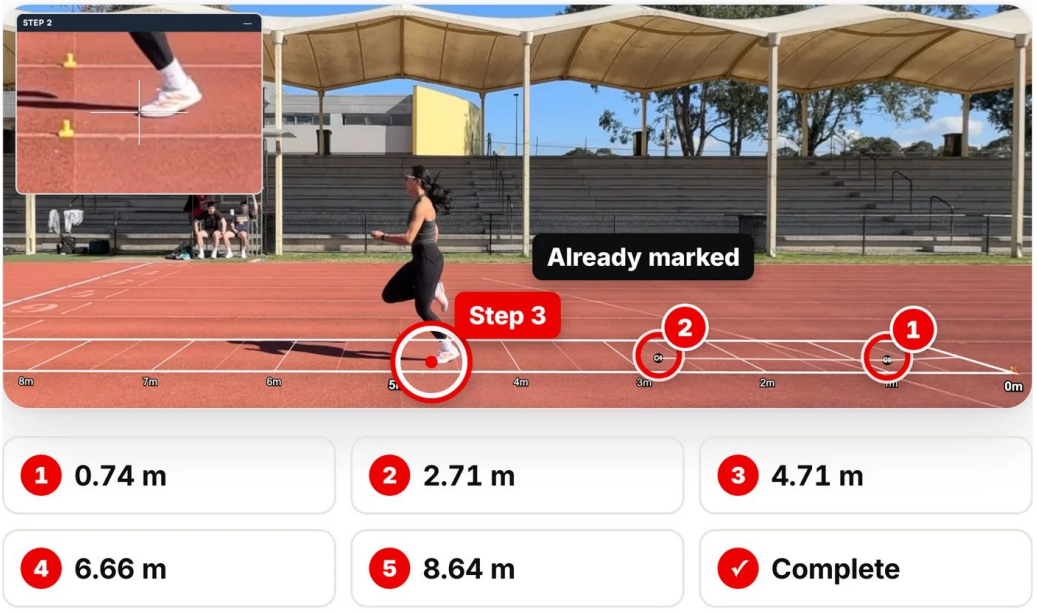
Step 4 · First step only: pick the foot.

Left or right? Answer once. After that the app alternates the feet for you.



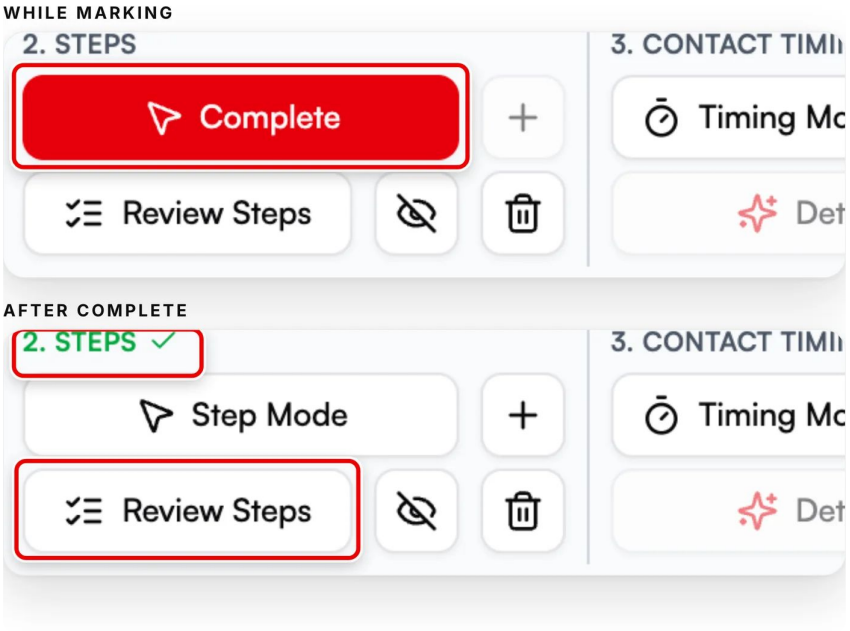
Step 5 · Next foot down, next click.

Scrub on to the next contact and click the toe. The view zooms in and follows the athlete down the track.



Step 6 · Press Complete.

Section 2 gets a tick and **Review Steps** appears, so you can come back to any step later.



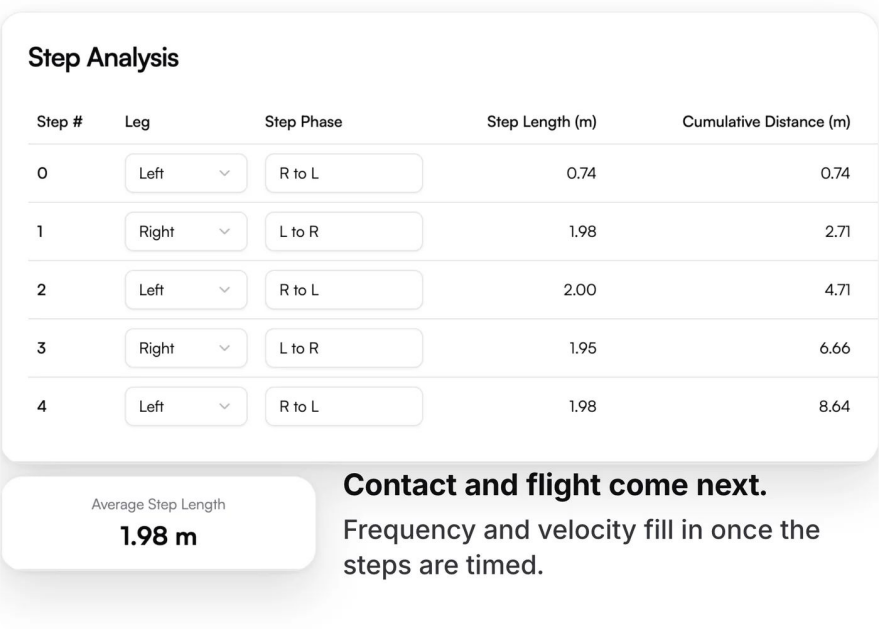
Check it · Review Steps.

Each step opens in the close-up. Click the toe to move the mark, switch Left or Right, then Accept for the next.



The result · Step lengths, straight away.

Open the **Analysis** tab: every step, left or right, its length and the running distance.

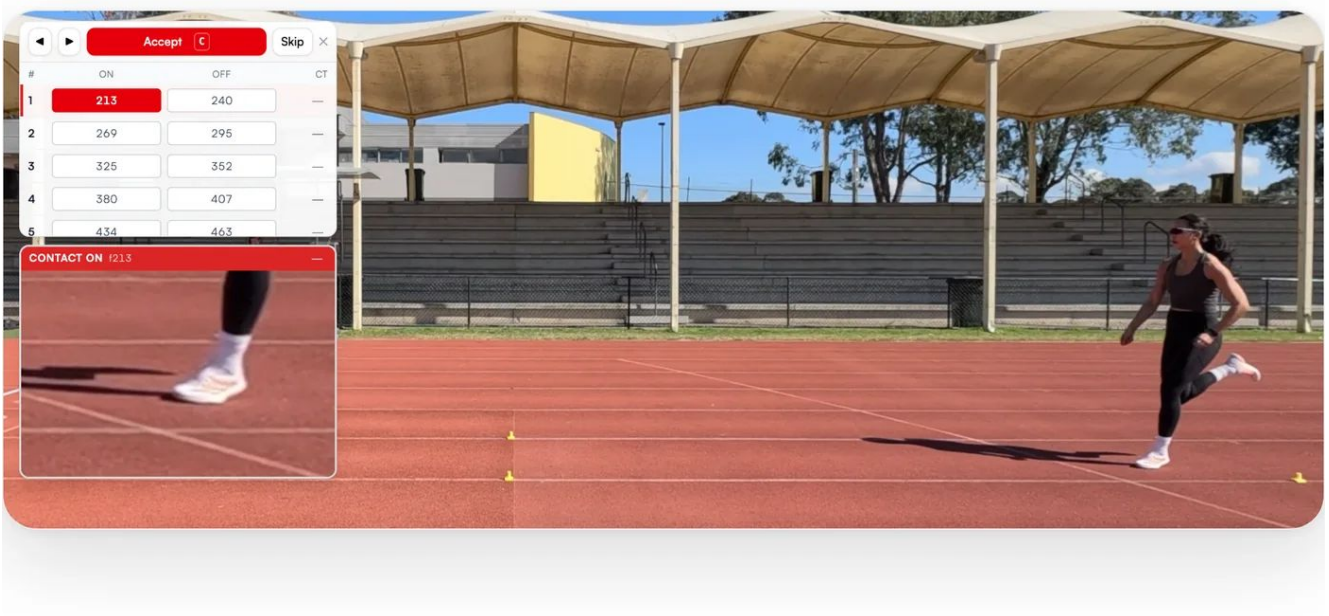


HOW-TO 03 · CONTACT TIMING

Time every contact in one pass

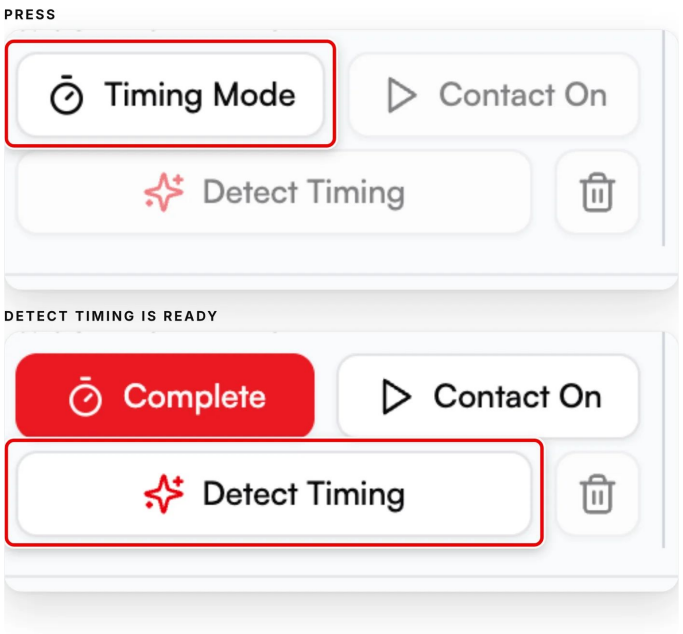
Detect Timing finds when each foot lands and leaves. You check each read with one key.

The TrackStat Team · 25 September 2026



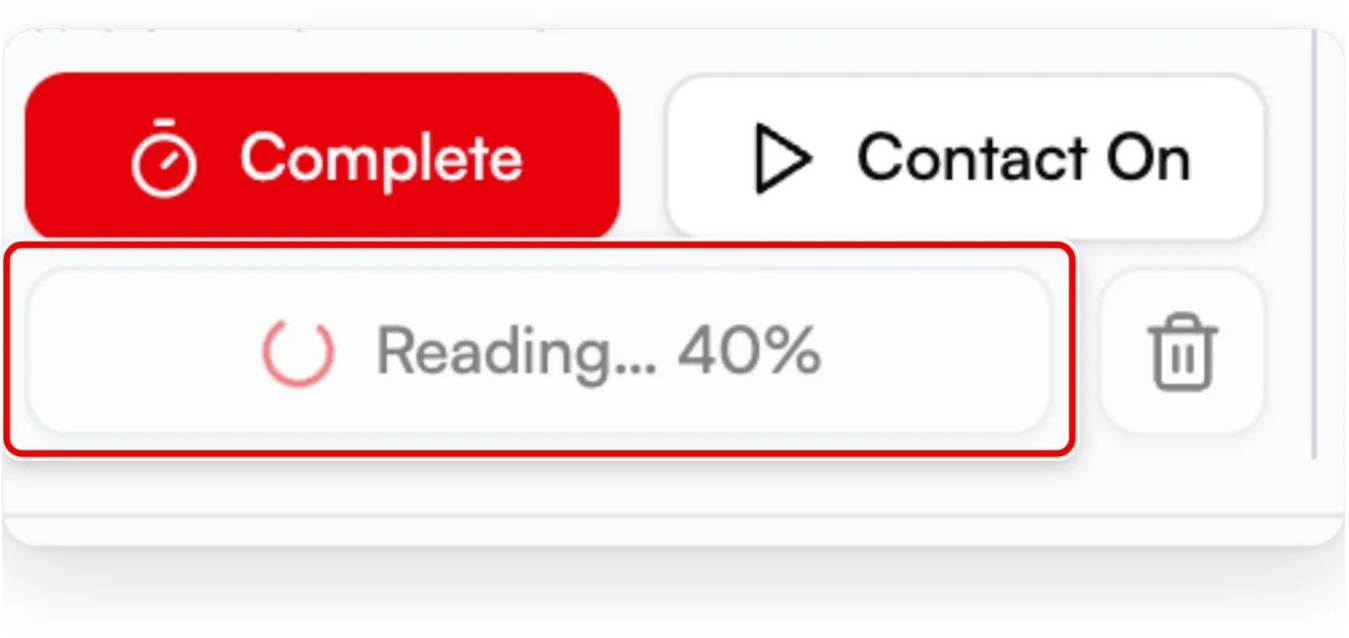
Step 1 · Press Timing Mode.

With the steps marked (Guide 02), press **Timing Mode** in section 3. Detect Timing lights up.



Step 2 · Press Detect Timing.

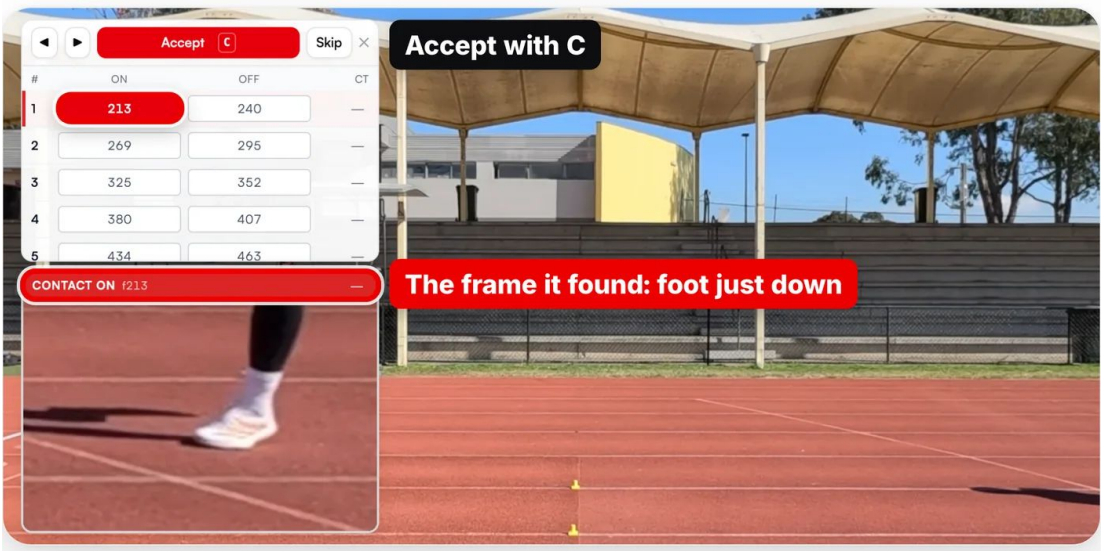
It finds the ON and OFF frame for every step you marked, then opens the first one for you to check.



This 4K rep: all five contacts found in about two seconds.

Step 3 · Check the ON frame.

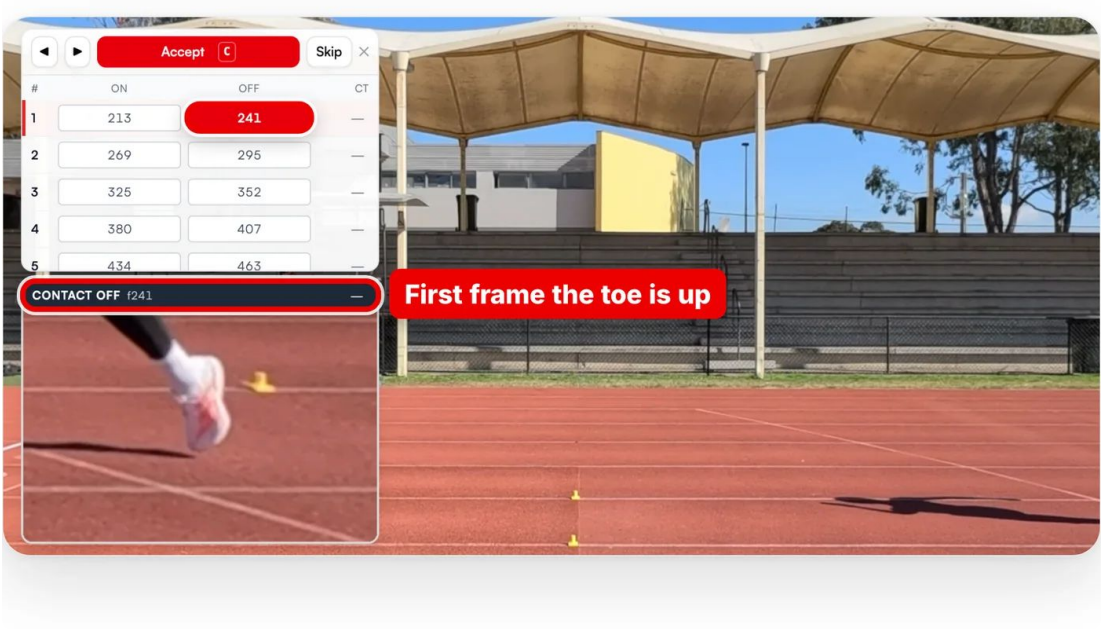
The close-up opens on the first frame the foot is down. Right? Press C. A frame out? Move it, then C.



C accept ← → one frame **Skip** leaves a read out

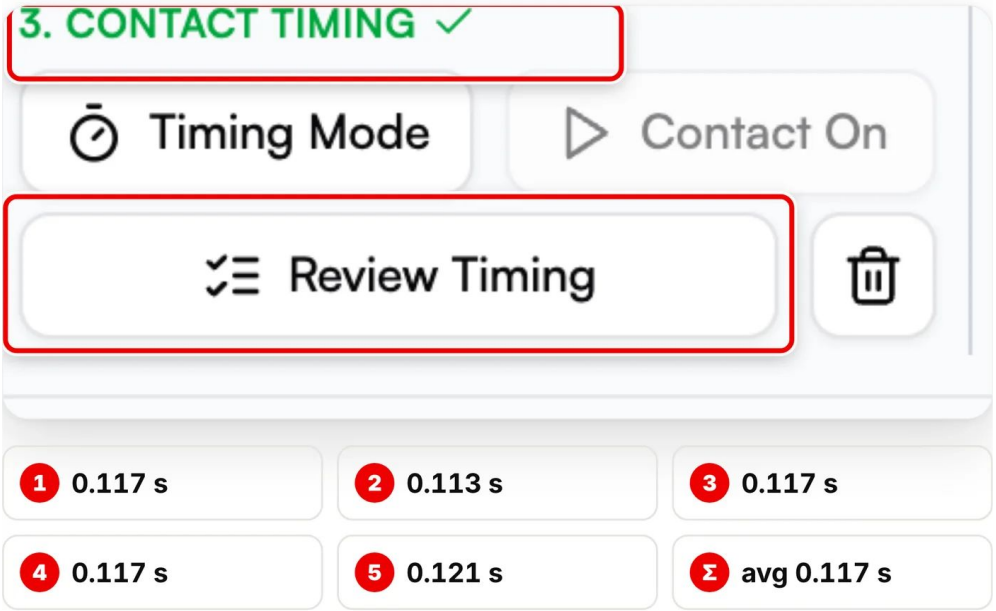
Step 4 · Then its OFF frame.

Same again for toe-off. C accepts it and the next contact's ON comes up. Ten presses for this rep.



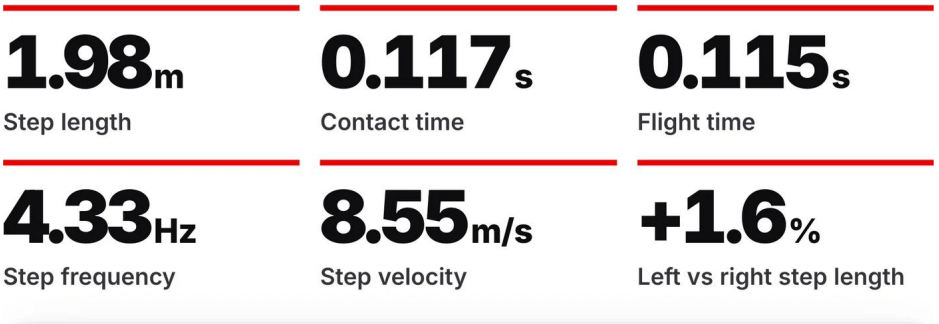
Step 5 · The last OFF ticks the section.

Contact time for every step is filled in. **Review Timing** opens the same check again whenever you need it.



The result · Contact, flight, frequency, velocity.

Once the steps are timed, the Analysis tab fills in every column. This rep, averaged:



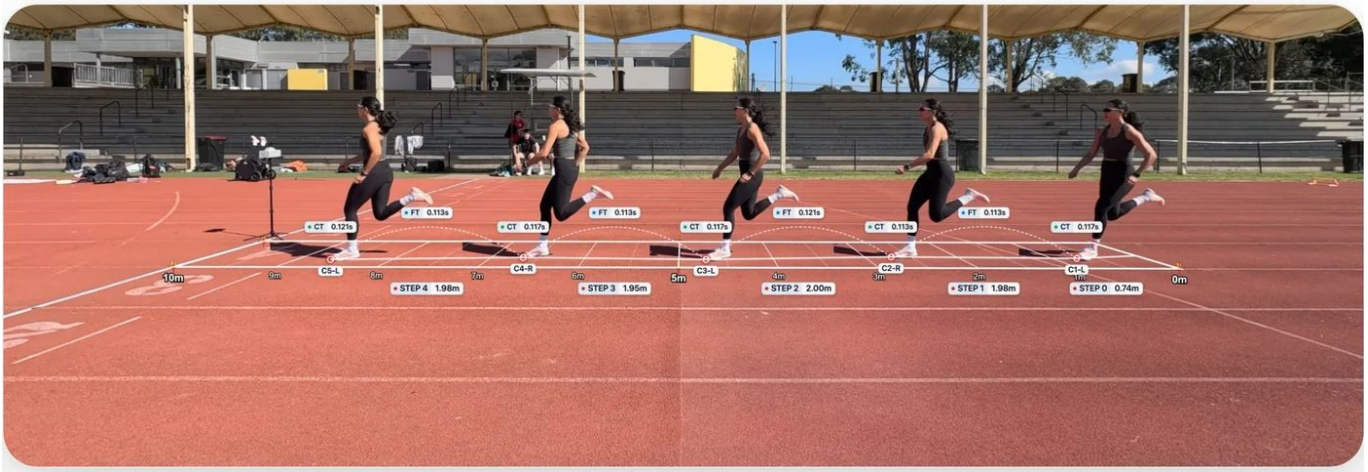
Step Analysis — Exclude Step 0 — Export Steps CSV

Step #	Leg	Step Phase	Step Length (m)	Cumulative Distance (m)	Contact Time (s)	Flight Time (s)	Step Frequency (Hz)	Step Velocity (m/s)	View
0	Left	R to L	0.74	0.74	0.117	-	-	-	N/A
1	Right	L to R	1.98	2.71	0.113	0.113	4.44	8.78	N/A
2	Left	R to L	2.00	4.71	0.117	0.121	4.21	8.44	N/A
3	Right	L to R	1.95	6.66	0.117	0.113	4.36	8.49	N/A
4	Left	R to L	1.98	8.64	0.121	0.113	4.29	8.49	N/A

The Step Analysis table for this rep, as the app shows it.

The result · Every touchdown in one picture.

When timing is complete the app builds a Summary Snapshot: each touchdown on one frame, with contact, flight and step length.



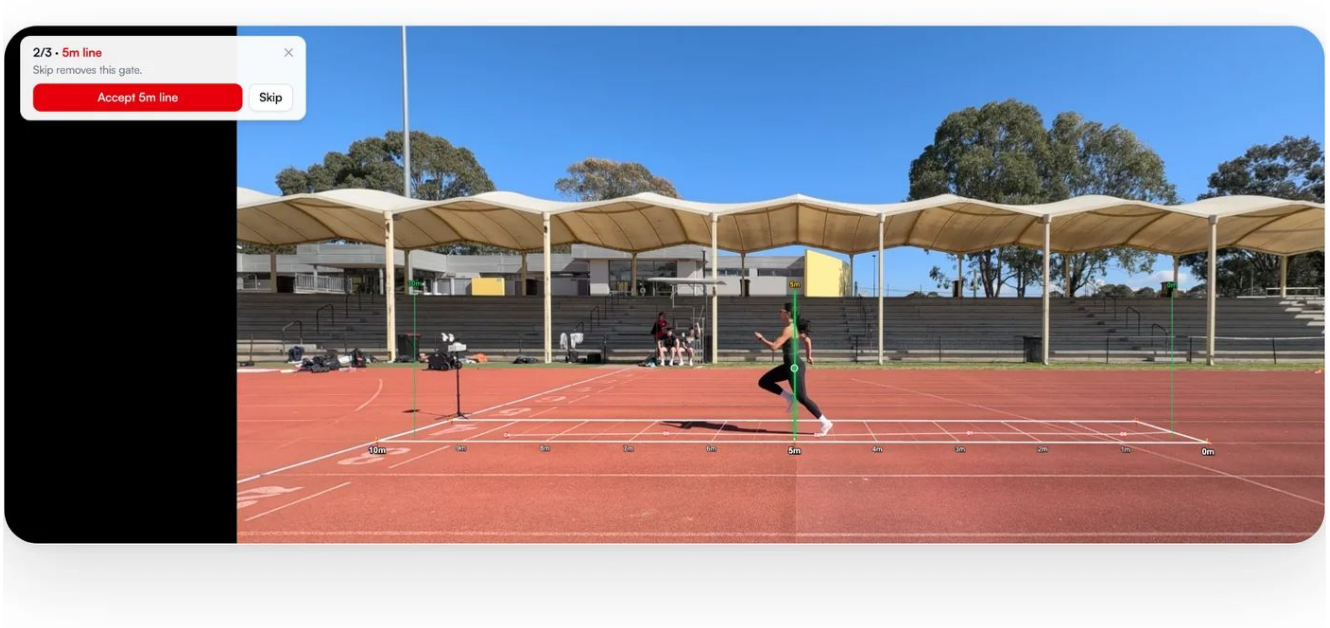
Touchdowns, Toe-offs or Single above the picture switch the view. It goes straight into the PDF report.

HOW-TO 04 · SPLITS

Split times in one pass

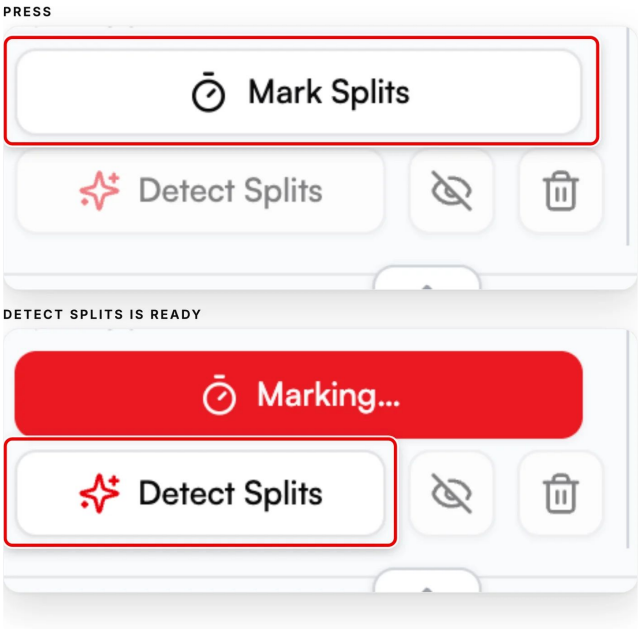
Detect Splits finds the moment the athlete crosses each line. You accept each one with Enter.

The TrackStat Team · 25 September 2026



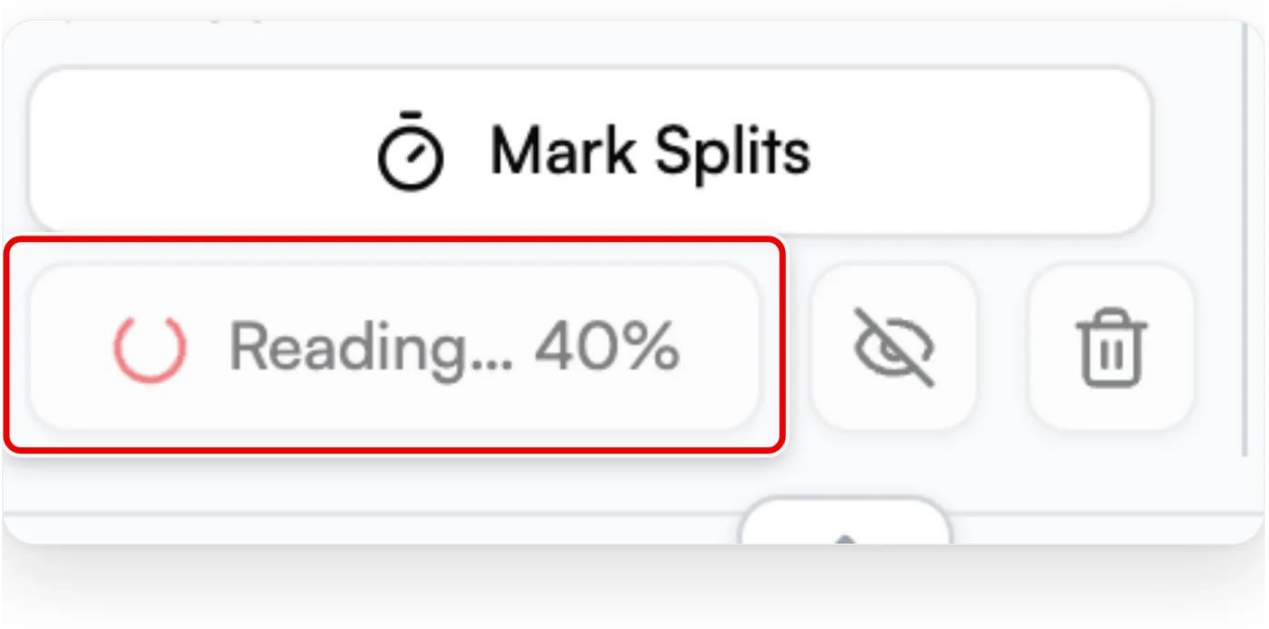
Step 1 · Press Mark Splits.

With the steps marked, press **Mark Splits** in section 4. Detect Splits lights up underneath.



Step 2 · Press Detect Splits.

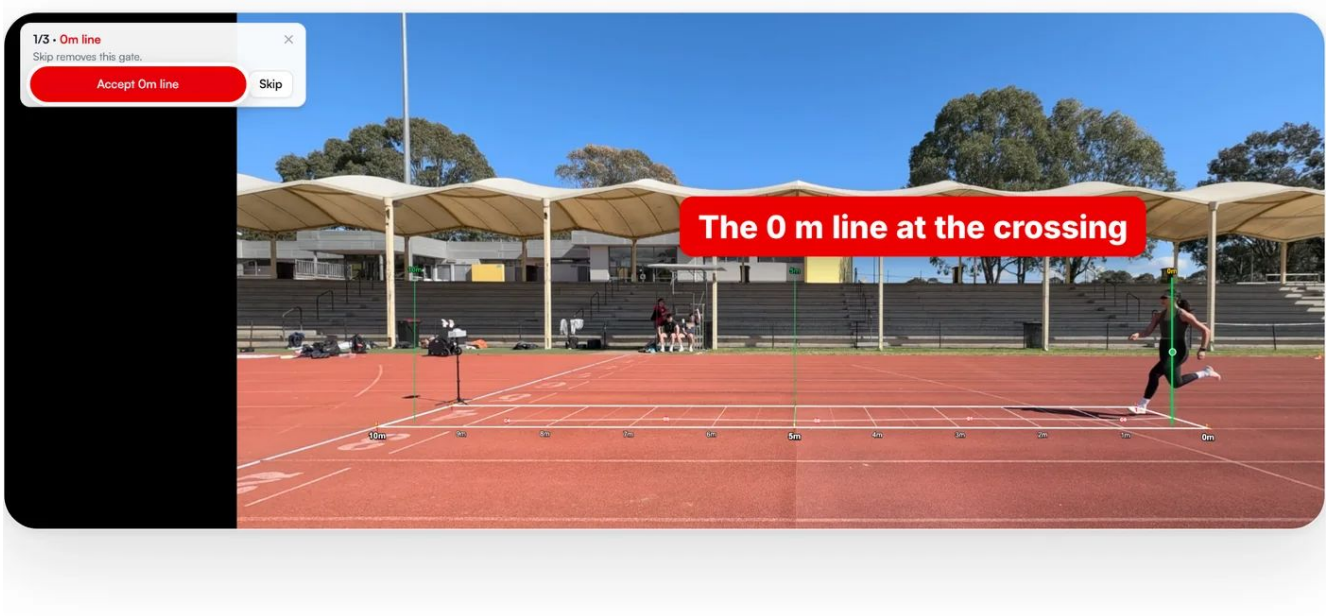
It finds the crossing at every line in your zone, then takes you to the first one.



This 4K rep: 0, 5 and 10 m found in about two seconds.

Step 3 · Check each line.

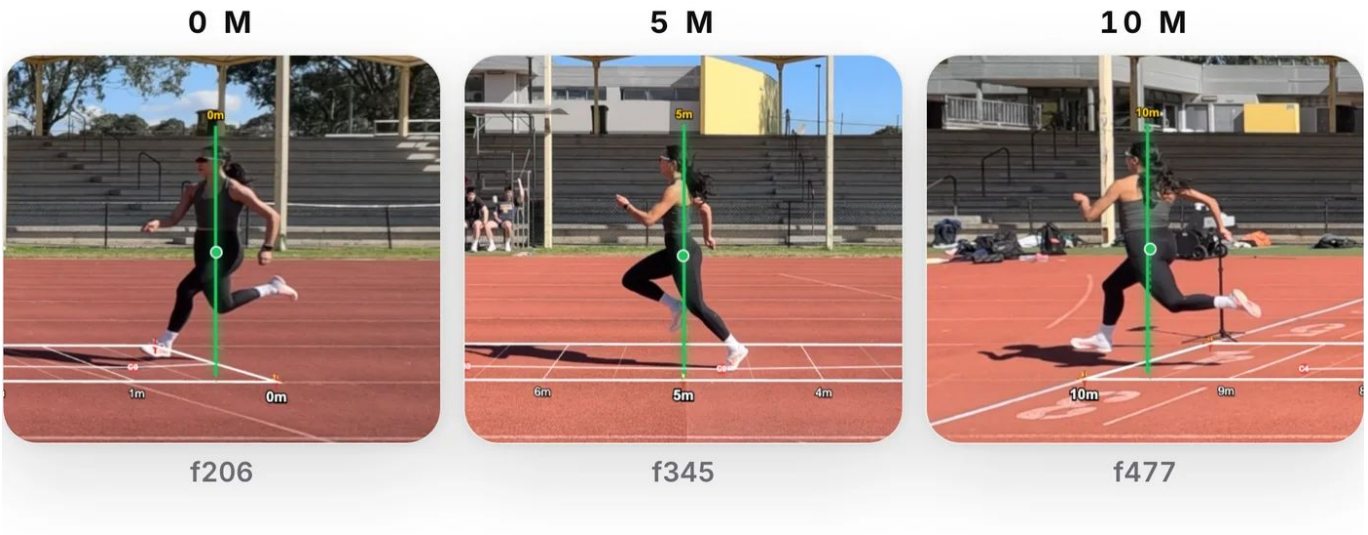
The video stops on the crossing, with the line drawn through the athlete. Right? Press Enter.



Enter accept ← → one frame **Skip** removes that line

Step 4 · 0 m, 5 m, 10 m.

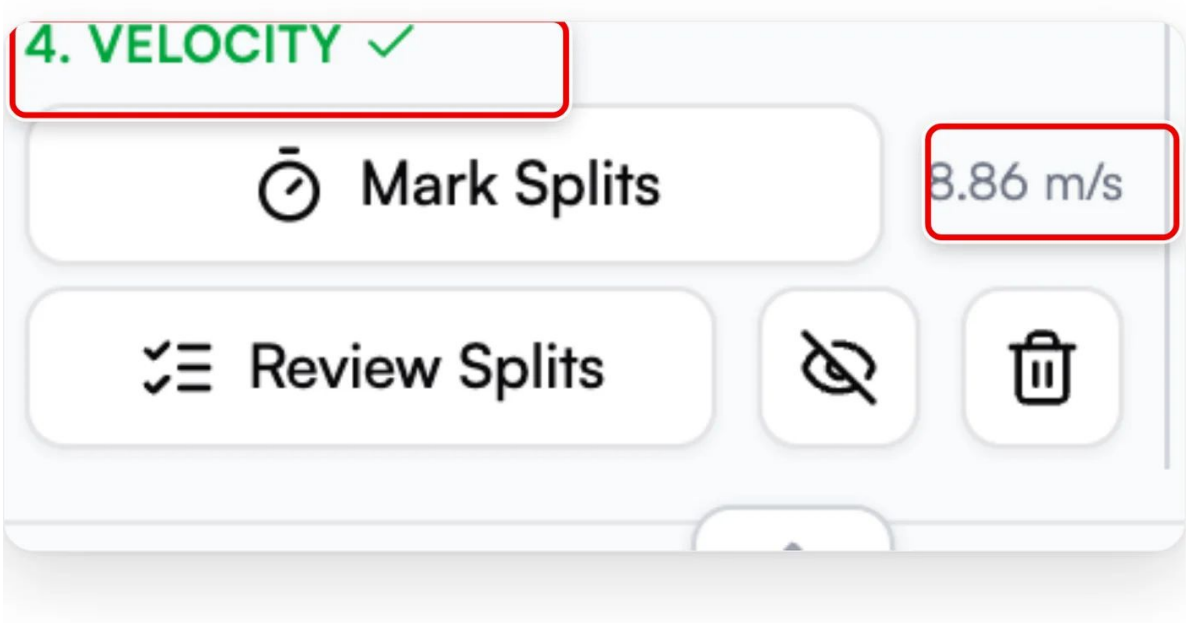
One Enter per line. The line you're checking is drawn in orange.



No crossing found? Scrub to the line and press Mark, or Skip it.

Step 5 · Section 4 ticks. Speed appears.

The last Enter finishes the splits. The zone speed shows right beside Mark Splits.



Review Splits opens the same check again whenever you need it.

The result · Split times and speed, per section.

The Analysis tab shows each section’s time and speed. This rep:

8.63 m/s
0 to 5 m · 0.58 s

9.09 m/s
5 to 10 m · 0.55 s

8.86 m/s
0 to 10 m · 1.13 s



Velocity & Splits auto

0—5m: 0.58 s · 8.63 m/s 5—10m: 0.55 s · 9.09 m/s 0—10m: 1.13 s · 8.86 m/s

Gate	Cumulative	Segment	Speed
5m	0.58 s	0.58 s	8.63 m/s
10m	1.13 s	0.55 s	9.09 m/s

Timed from 0m crossing · hips crossing the middle line · 240fps (±2 ms)

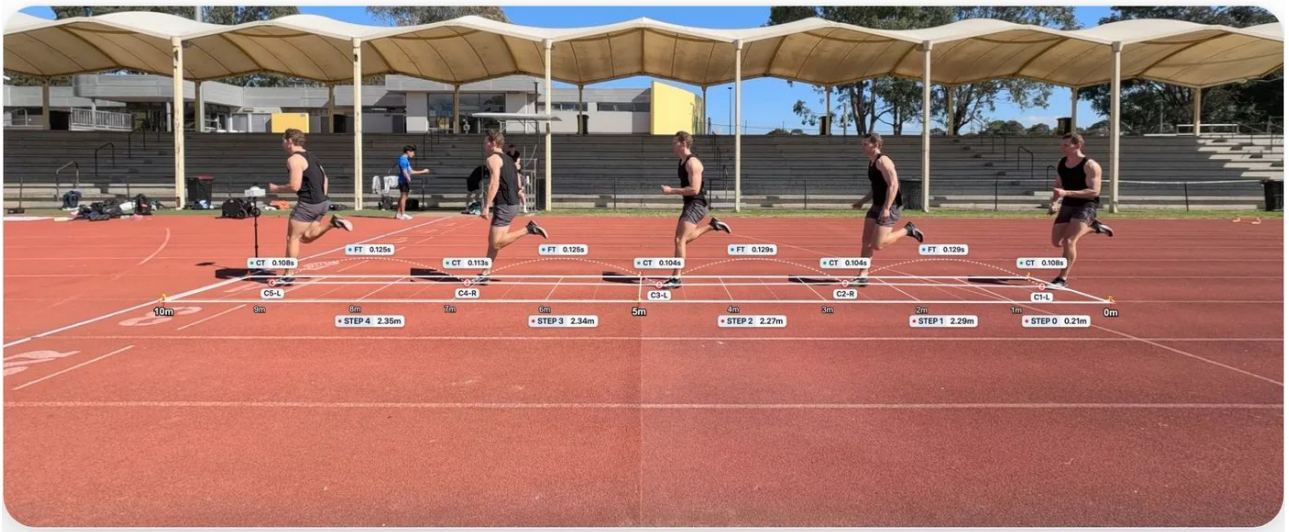
The Velocity & Splits card for this rep, as the app shows it.

HOW-TO 05 · RESULTS AND REPORT

From one rep to a report

Everything the app measured, in one place and ready to send.

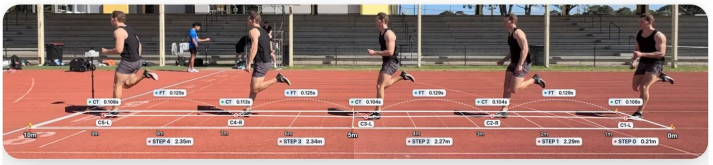
The TrackStat Team · 25 September 2026



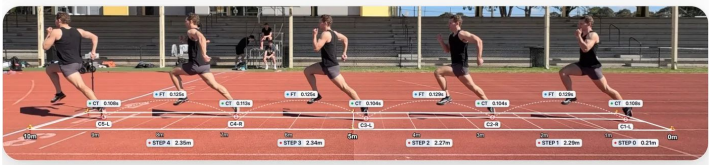
Step 1 · Open the Analysis tab.

The Summary Snapshot puts the whole rep on one frame. Switch between three views above it.

TOUCHDOWNS



TOE-OFFS

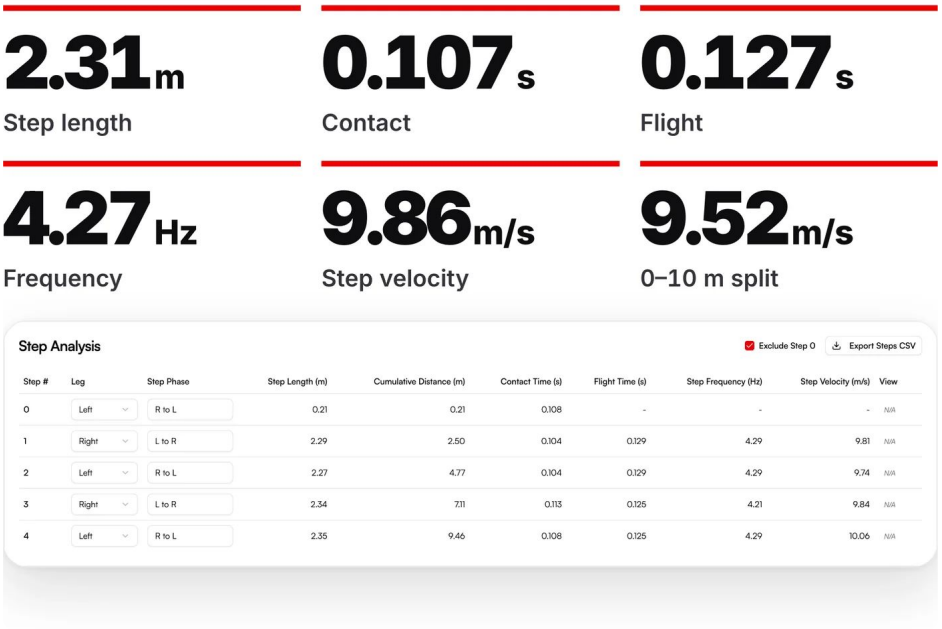


SINGLE



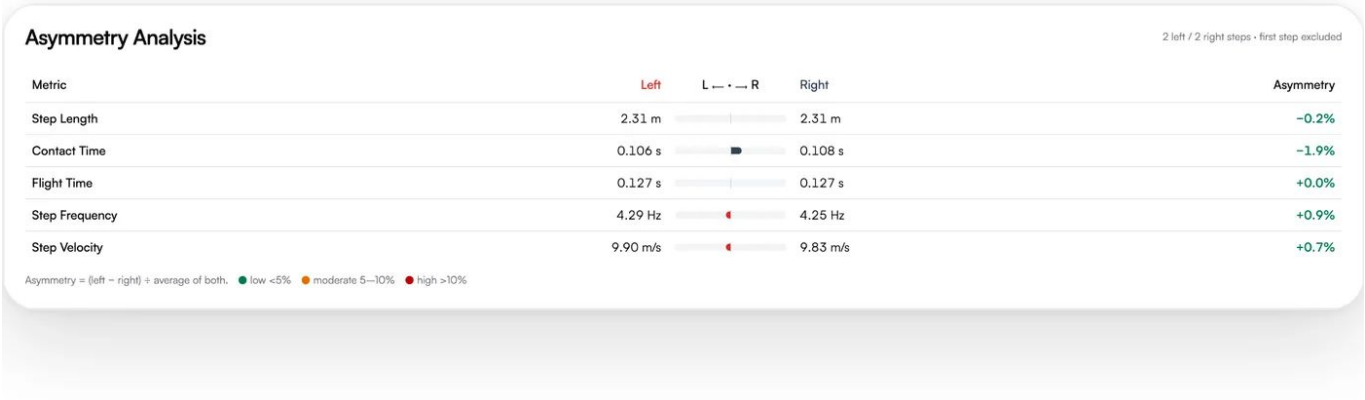
Step 2 · Every step, every number.

Averages up top, then the full step table. Export Steps CSV sends it to a spreadsheet.



Step 3 · Left against right.

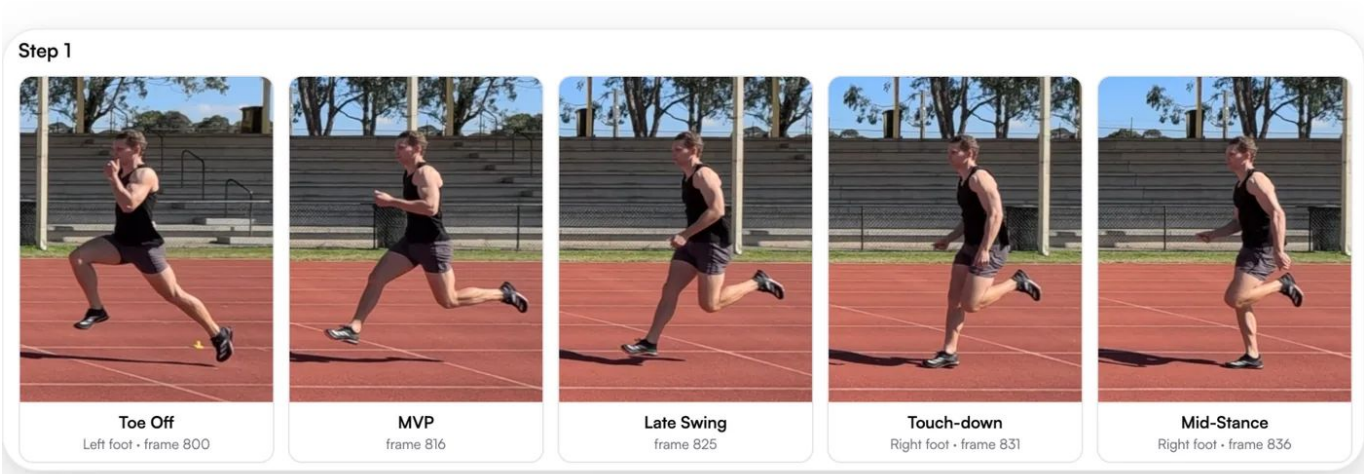
Asymmetry compares each leg on every measure and flags the gap: under 5 %, 5 to 10 %, over 10 %.



This rep: left and right steps both 2.31 m, a 0.2 % difference.

Step 4 · Key Frames for every step.

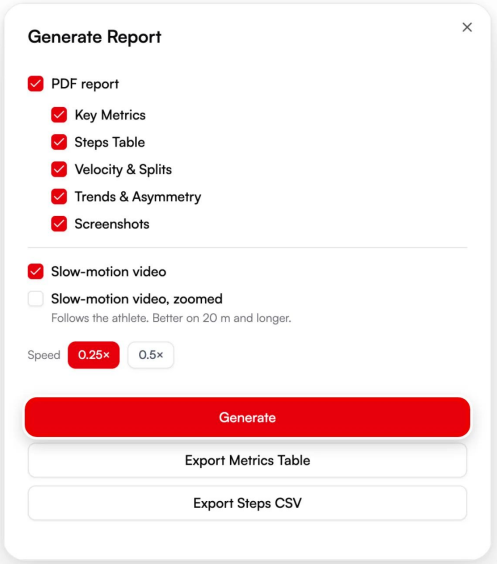
Press **Generate Key Frames**: Toe Off, MVP, Late Swing, Touch-down and Mid-Stance, pulled from your marks.



Step 1 of this rep.

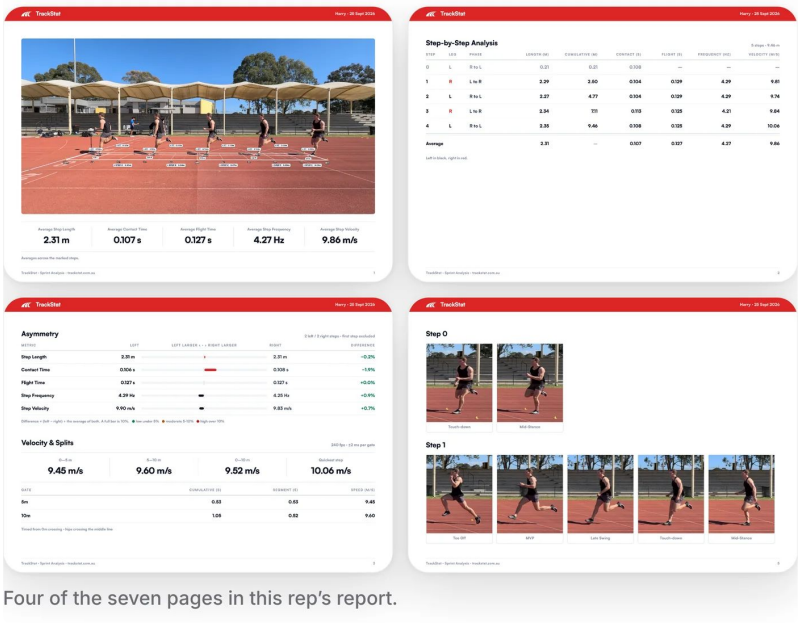
Step 5 · Press Generate Report.

Pick what goes in: key metrics, the steps table, velocity and splits, trends, key frames, and a slow-motion video if you want one.



The result · A PDF, ready to send.

The snapshot, the numbers, the splits and the key frames, in a branded PDF. Seven pages for this rep.



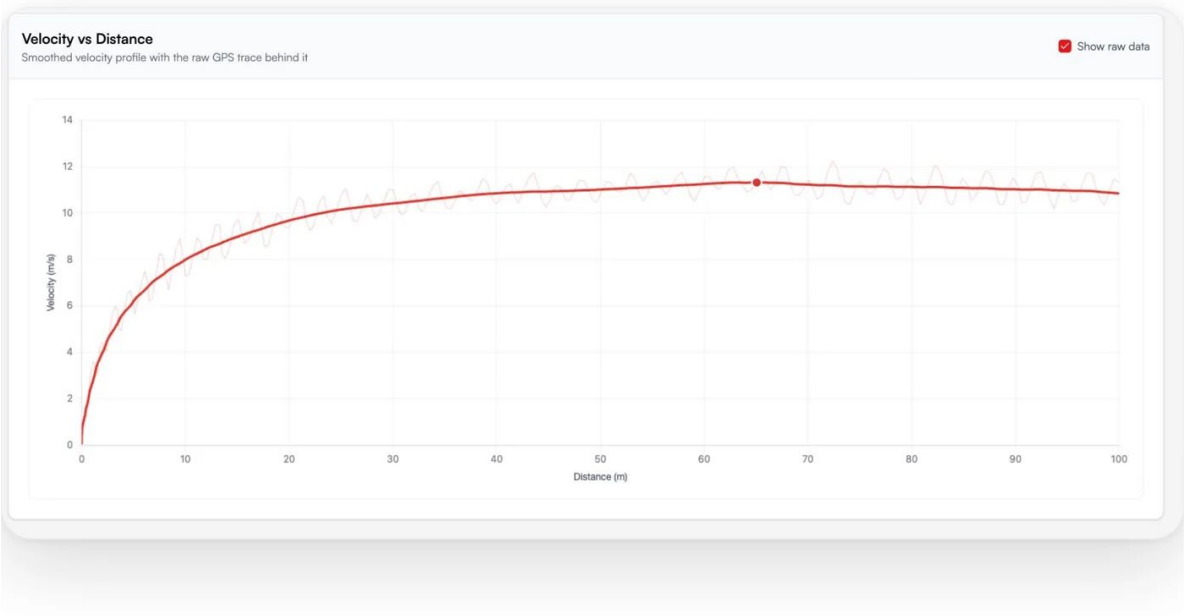
Four of the seven pages in this rep's report.

HOW-TO 06 · GPS

Every GPS run, speed by the metre

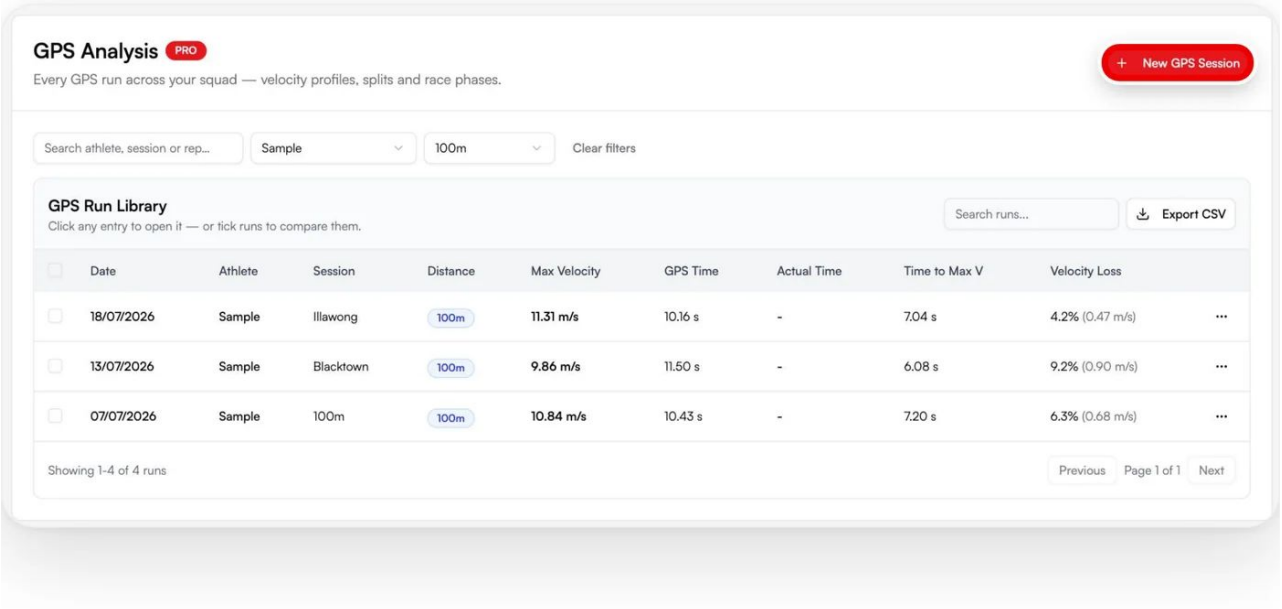
Paste the export from your GPS unit. Get the velocity curve, splits and race phases.

The TrackStat Team · 25 September 2026



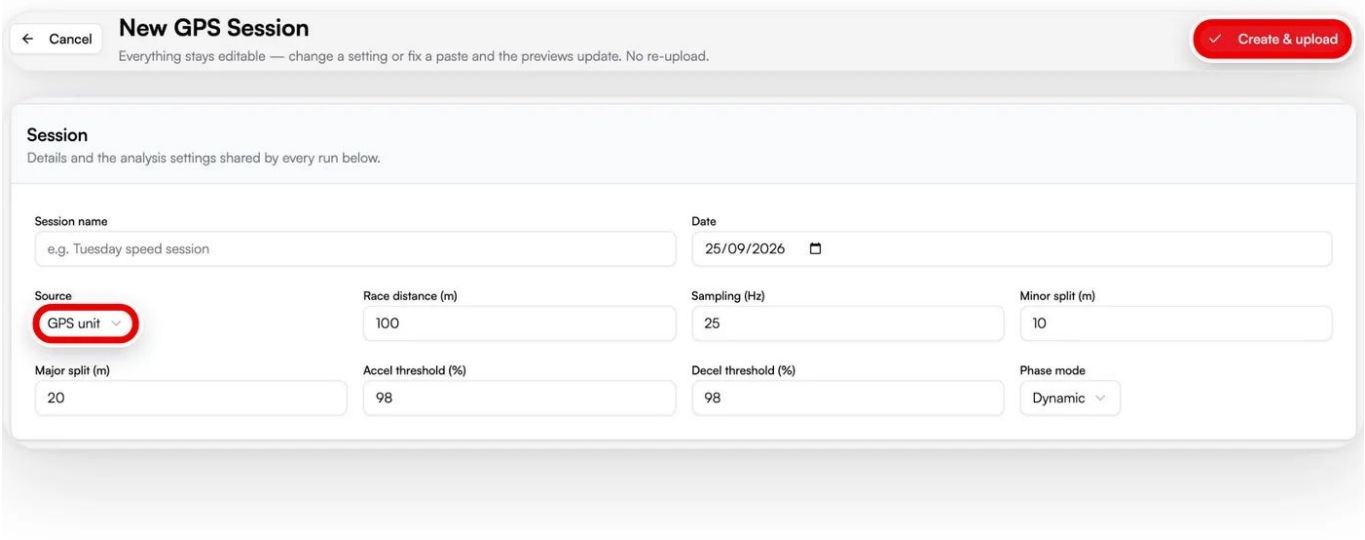
Step 1 · Open GPS Analysis.

Every GPS run across your squad, in one library. Press **New GPS Session** to add one.



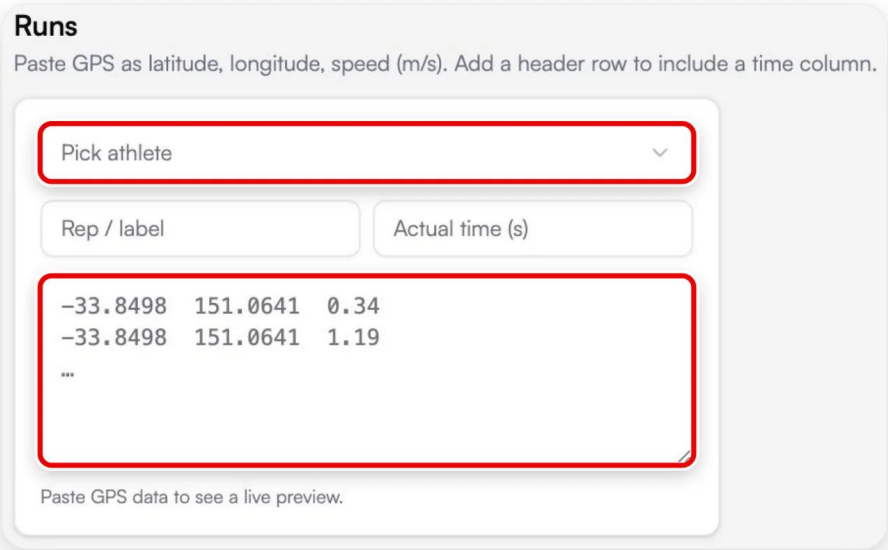
Step 2 · Set up the session.

Name and date, the source (GPS unit or laser), race distance and split lengths. Every run in the session shares these.



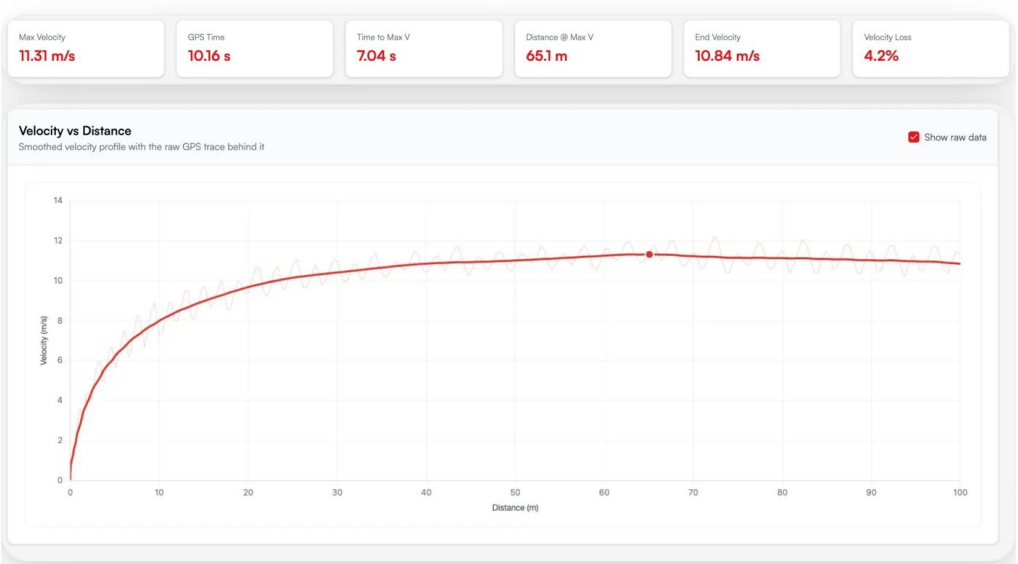
Step 3 · Add the run, then upload.

Pick the athlete, label the rep, add the timed result if you have one, and paste the GPS export. A live preview appears as you paste. Then **Create & upload**.



The result · The run at a glance.

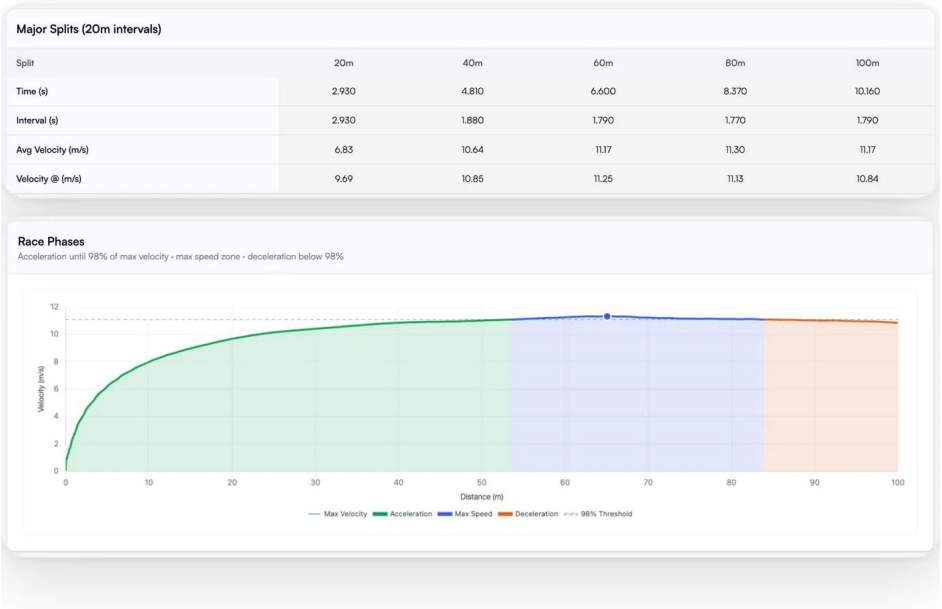
Top speed, when and where it happened, and how much speed was held to the line.



A 100 m run from the sample athlete's library.

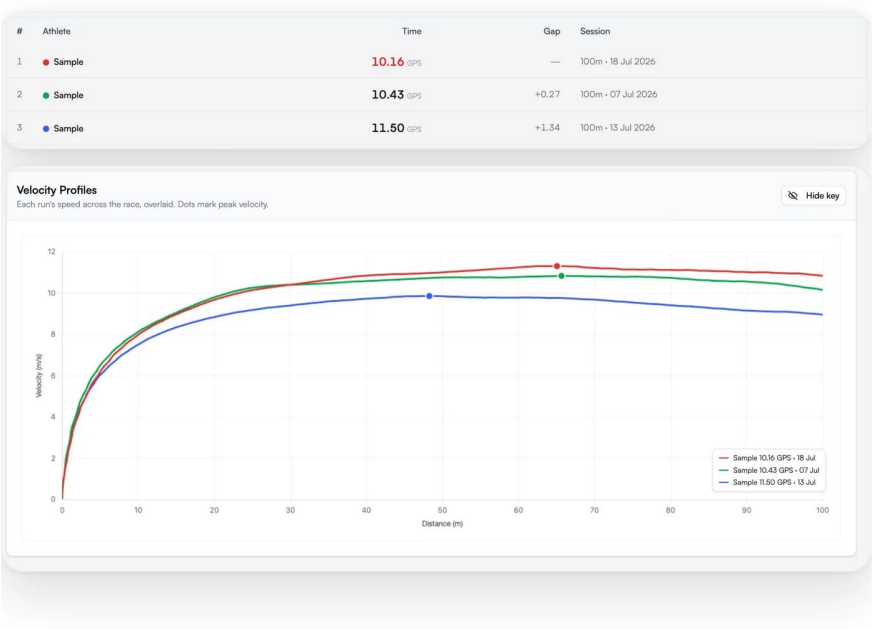
The result · Splits and race phases.

Every split as time, interval and speed, and the race broken into acceleration, top speed and deceleration.



Compare · Tick runs. Press Compare.

Head to Head ranks the runs with the gap between them and overlays their velocity profiles.

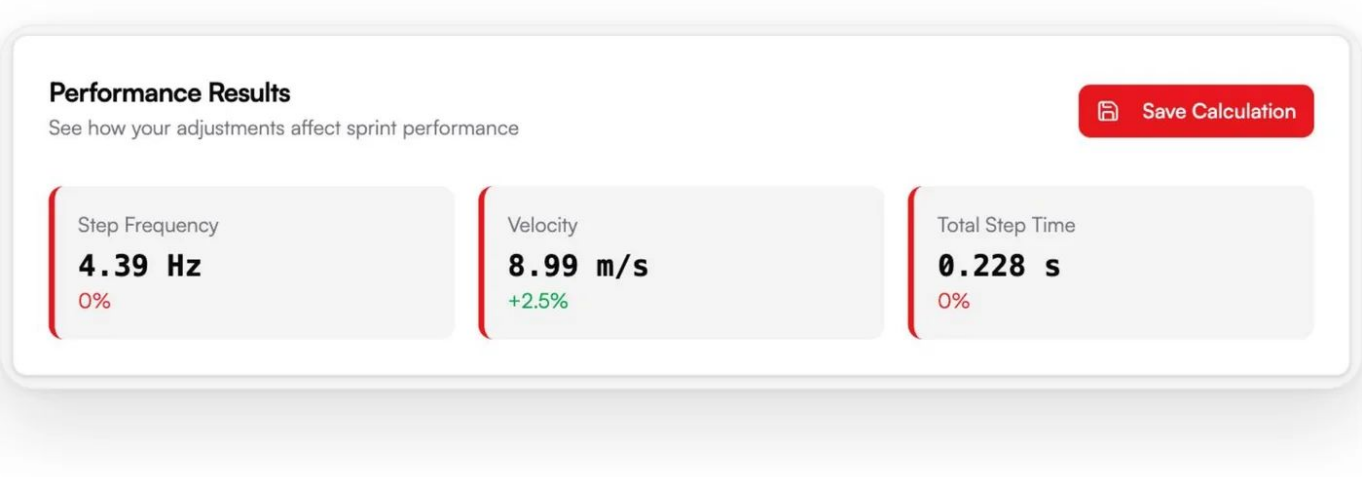


HOW-TO 07 · PERFORMANCE CALCULATOR

What if the step was 5 cm longer?

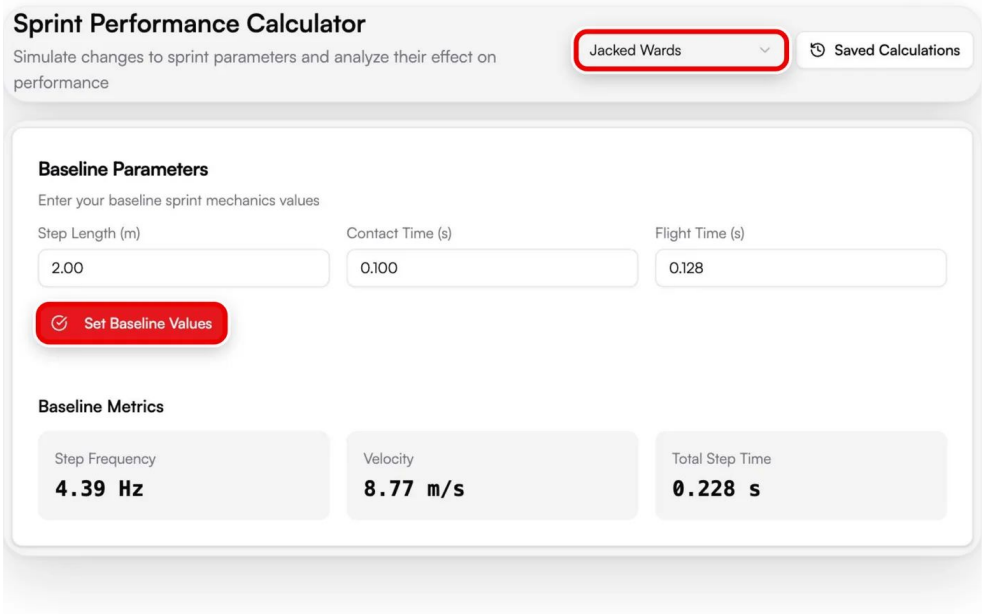
Change step length, contact or flight and see what it does to speed.

The TrackStat Team · 25 September 2026



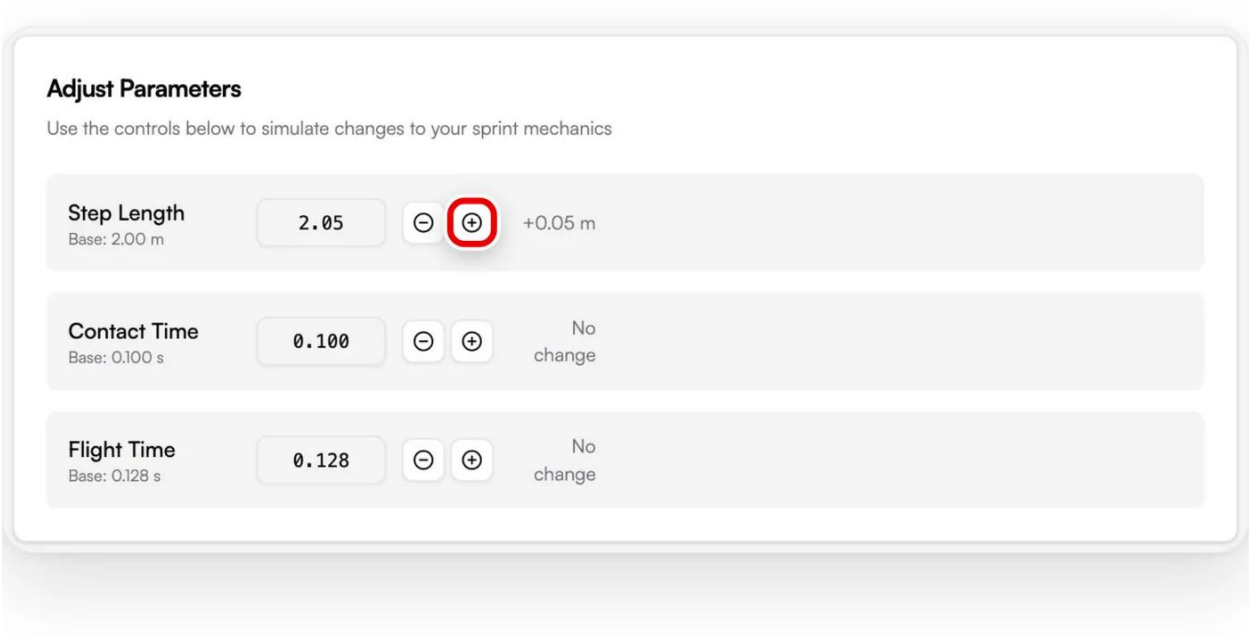
Step 1 · Pick the athlete, enter the baseline.

Step length, contact time and flight time, then **Set Baseline Values**.



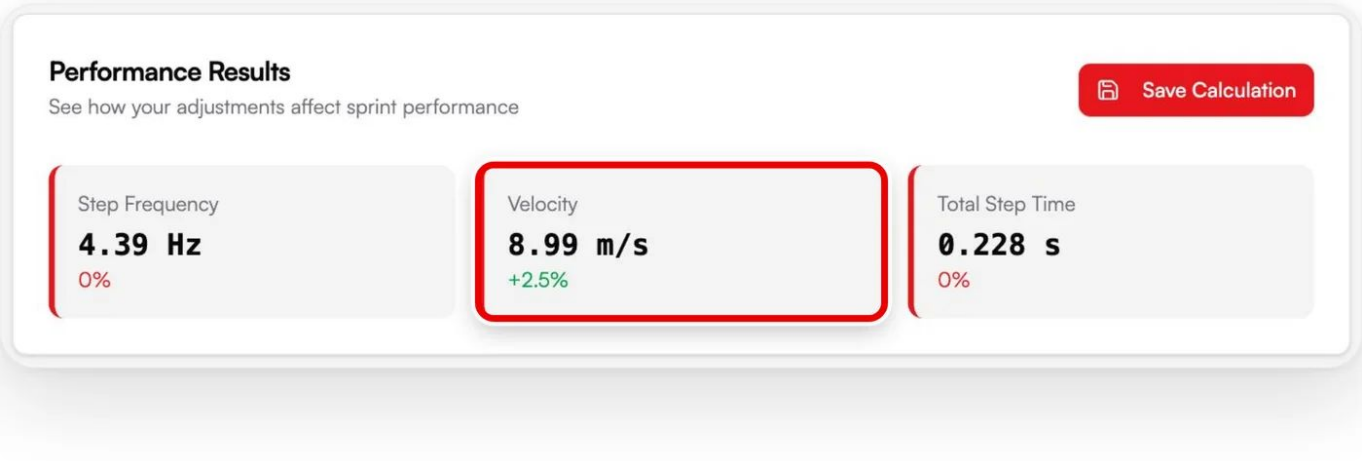
Step 2 · Adjust one thing at a time.

Press + or − to nudge step length, contact time or flight time. Step length moves a centimetre a press.



The result · See the effect on speed.

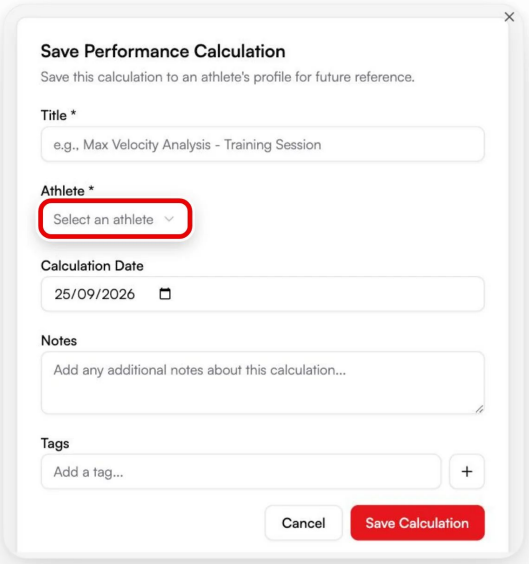
Every change updates frequency, velocity and step time against the baseline.



This example: 5 cm more step length, same contact and flight: 8.77 → 8.99 m/s, +2.5 %.

Save it · Save it to the athlete.

Save Calculation, give it a title and pick the athlete.



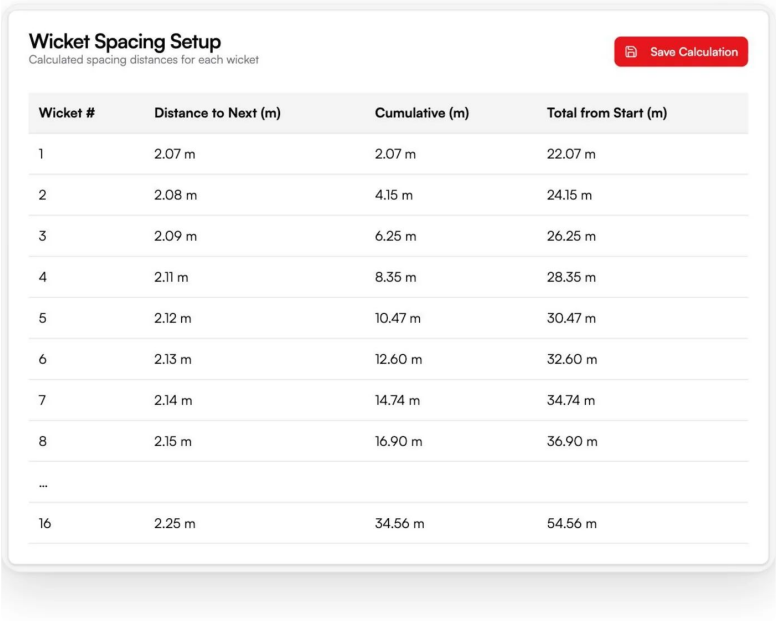
Linked to the athlete. Saved calculations appear on the athlete's profile under **Saved Calculators**.

HOW-TO 08 · WICKET CALCULATOR

Wicket spacing from one measurement

Measure trochanter length, pick the zone, get every wicket’s position.

The TrackStat Team · 25 September 2026



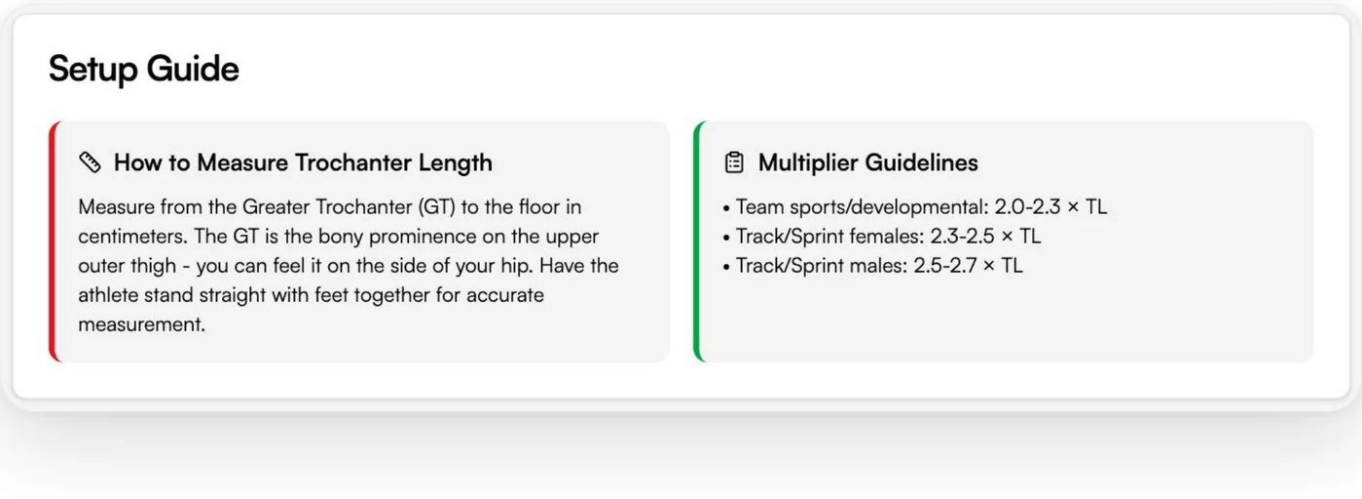
Wicket Spacing Setup
Calculated spacing distances for each wicket

Save Calculation

Wicket #	Distance to Next (m)	Cumulative (m)	Total from Start (m)
1	2.07 m	2.07 m	22.07 m
2	2.08 m	4.15 m	24.15 m
3	2.09 m	6.25 m	26.25 m
4	2.11 m	8.35 m	28.35 m
5	2.12 m	10.47 m	30.47 m
6	2.13 m	12.60 m	32.60 m
7	2.14 m	14.74 m	34.74 m
8	2.15 m	16.90 m	36.90 m
...			
16	2.25 m	34.56 m	54.56 m

Step 1 · Measure the athlete.

Trochanter length: from the bony point on the side of the hip to the floor, standing tall, feet together.



Setup Guide

How to Measure Trochanter Length

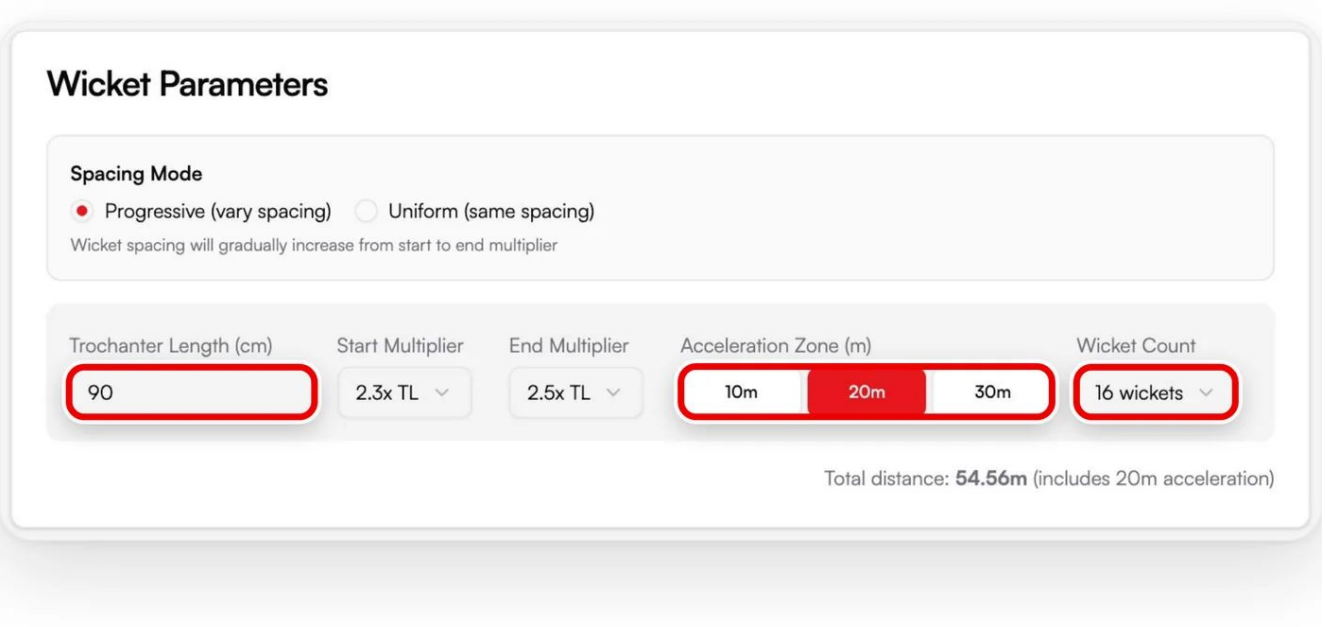
Measure from the Greater Trochanter (GT) to the floor in centimeters. The GT is the bony prominence on the upper outer thigh - you can feel it on the side of your hip. Have the athlete stand straight with feet together for accurate measurement.

Multiplier Guidelines

- Team sports/developmental: 2.0-2.3 × TL
- Track/Sprint females: 2.3-2.5 × TL
- Track/Sprint males: 2.5-2.7 × TL

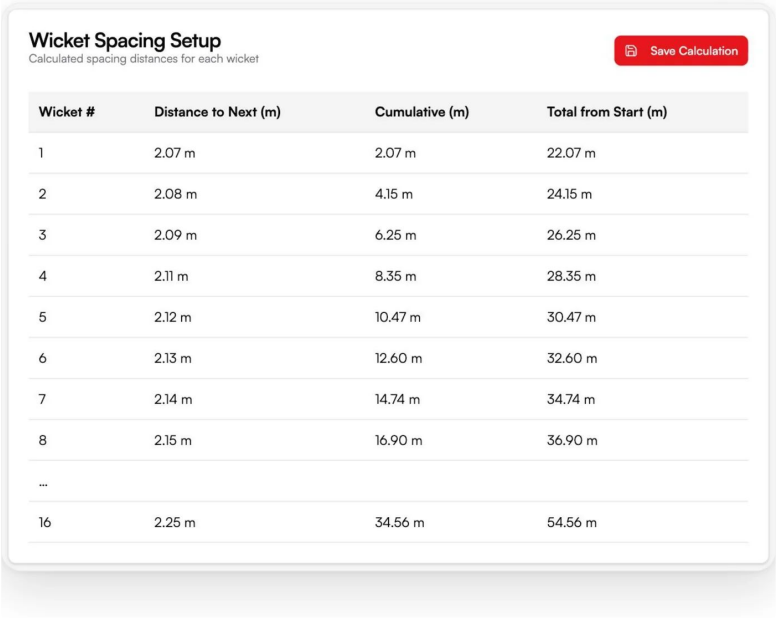
Step 2 · Set the parameters.

Progressive or uniform spacing, trochanter length, start and end multipliers, the run-in and the number of wickets.



The result · Every wicket, measured out.

Distance to the next wicket, the running total, and the position from the start line. This set: 16 wickets from 22.07 to 54.56 m.



Wicket Spacing Setup

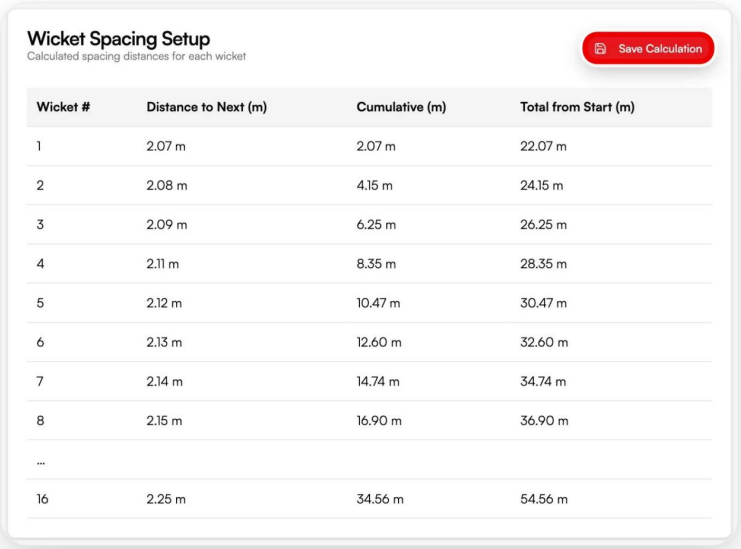
Calculated spacing distances for each wicket

Save Calculation

Wicket #	Distance to Next (m)	Cumulative (m)	Total from Start (m)
1	2.07 m	2.07 m	22.07 m
2	2.08 m	4.15 m	24.15 m
3	2.09 m	6.25 m	26.25 m
4	2.11 m	8.35 m	28.35 m
5	2.12 m	10.47 m	30.47 m
6	2.13 m	12.60 m	32.60 m
7	2.14 m	14.74 m	34.74 m
8	2.15 m	16.90 m	36.90 m
…			
16	2.25 m	34.56 m	54.56 m

Save it · Save the set-up to the athlete.

Save Calculation puts it on their profile, ready for next session.



Wicket #	Distance to Next (m)	Cumulative (m)	Total from Start (m)
1	2.07 m	2.07 m	22.07 m
2	2.08 m	4.15 m	24.15 m
3	2.09 m	6.25 m	26.25 m
4	2.11 m	8.35 m	28.35 m
5	2.12 m	10.47 m	30.47 m
6	2.13 m	12.60 m	32.60 m
7	2.14 m	14.74 m	34.74 m
8	2.15 m	16.90 m	36.90 m
...			
16	2.25 m	34.56 m	54.56 m

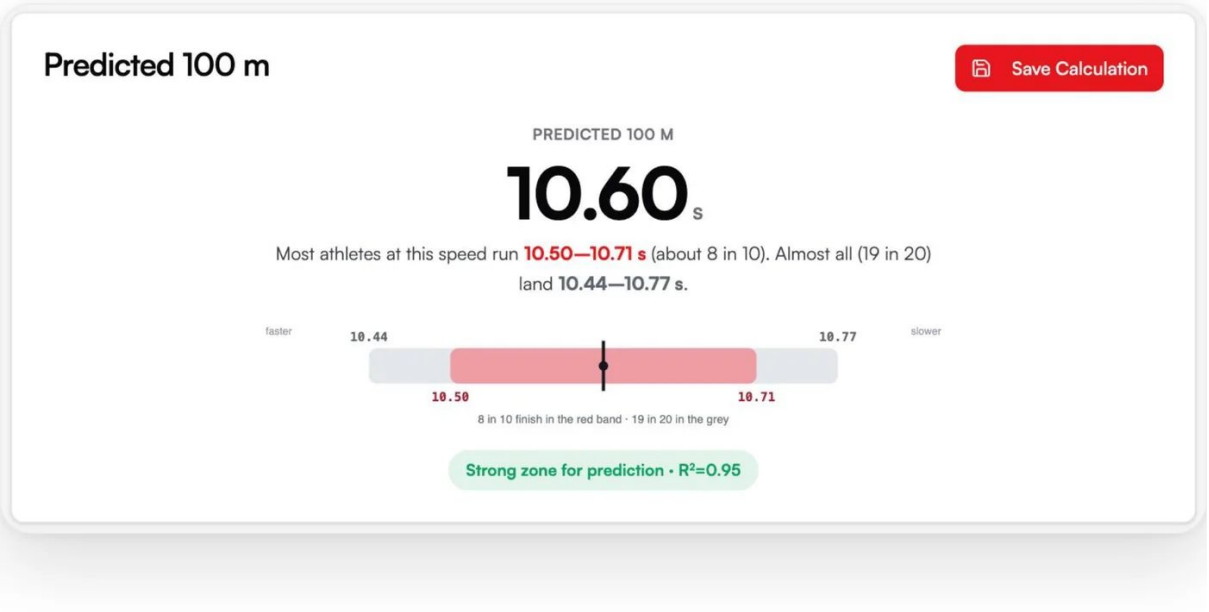
Linked to the athlete. Saved calculations appear on the athlete's profile under **Saved Calculators**.

HOW-TO 09 · FLYING 100M CALCULATOR

From a flying time to a 100 m

Time a flying zone. See the 100 m it points to, and what a goal time would need.

The TrackStat Team · 25 September 2026



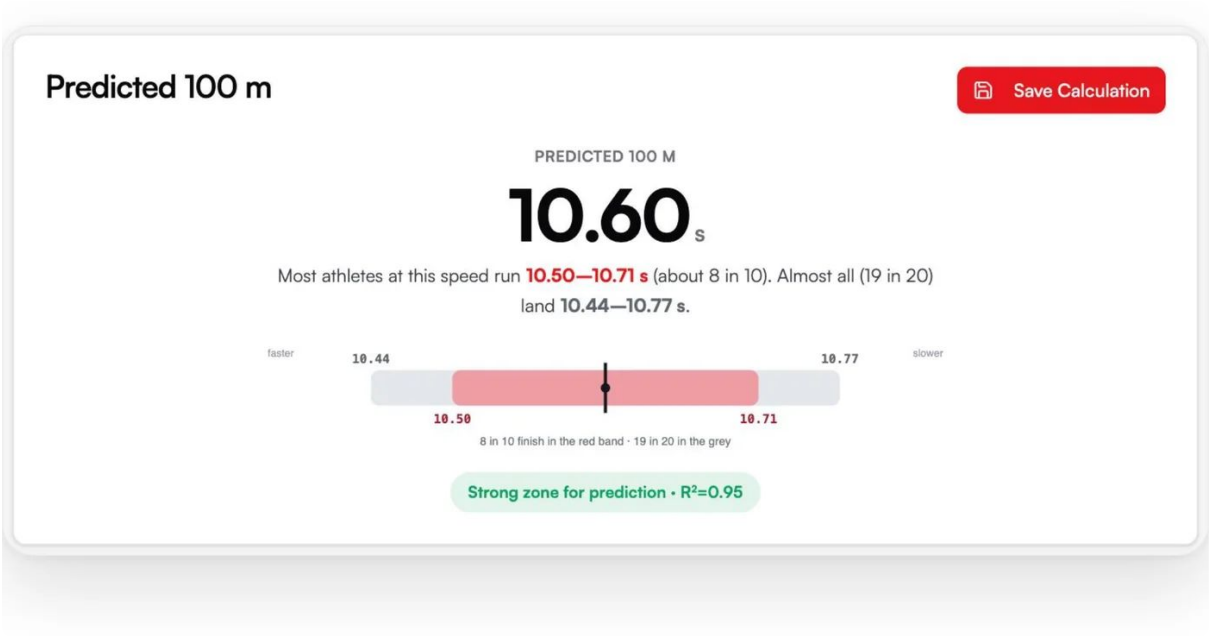
Step 1 · Which zone did you time?

Pick Men or Women, the start and end of the zone, and enter the fly time. The average speed fills in.



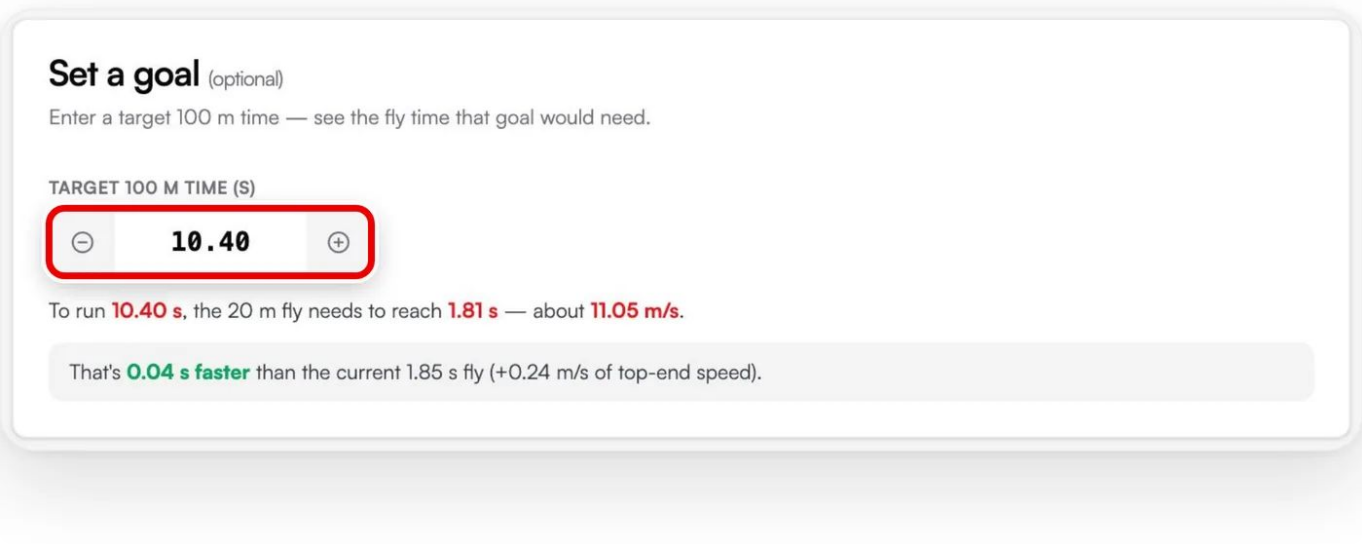
The result · The predicted 100 m.

With the range most athletes at that speed actually run. This example: 1.85 s over 40–60 m points to 10.60 s.



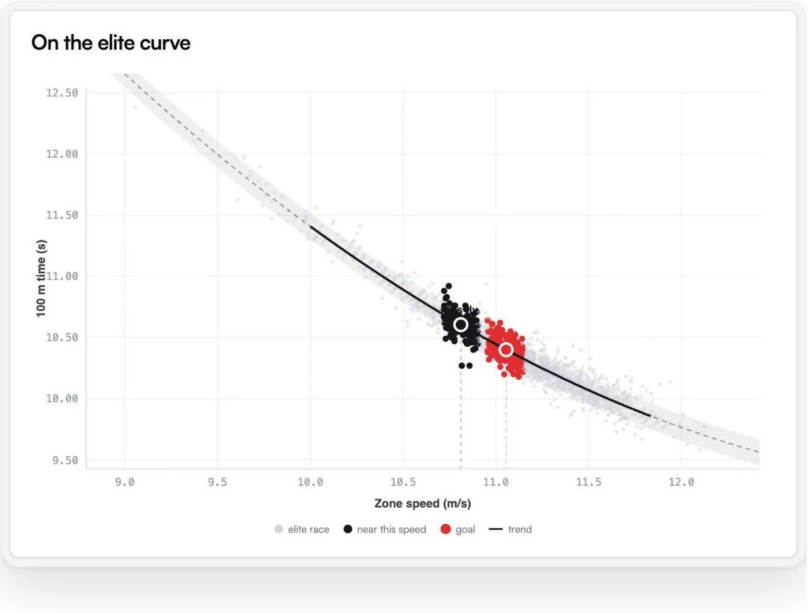
Step 2 · Set a goal (optional).

Enter a target 100 m. It shows the fly time that goal would need, and the gap from today.



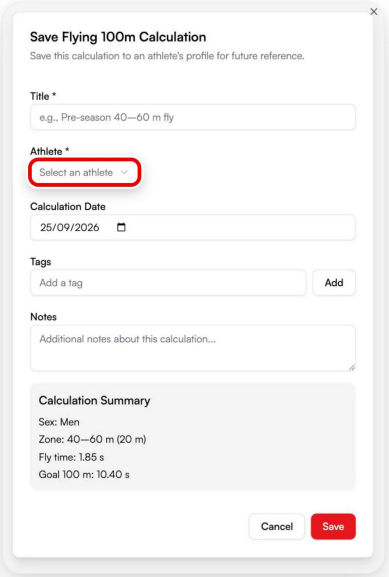
The result · Where the athlete sits.

Today’s fly and the goal, plotted side by side.



Save it · Save it to the athlete.

Save Calculation, give it a title and pick the athlete. The goal goes with it.



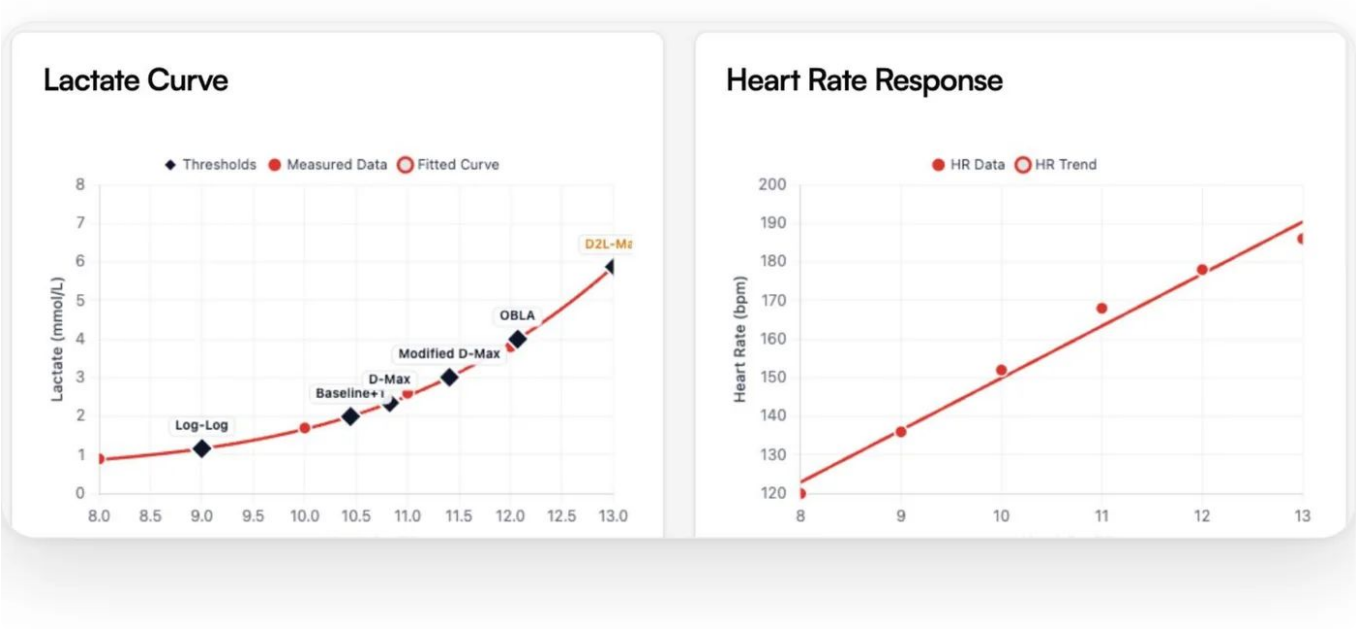
Linked to the athlete. Saved calculations appear on the athlete’s profile under **Saved Calculators**.

HOW-TO 10 · LACTATE CALCULATOR

Step test to training zones

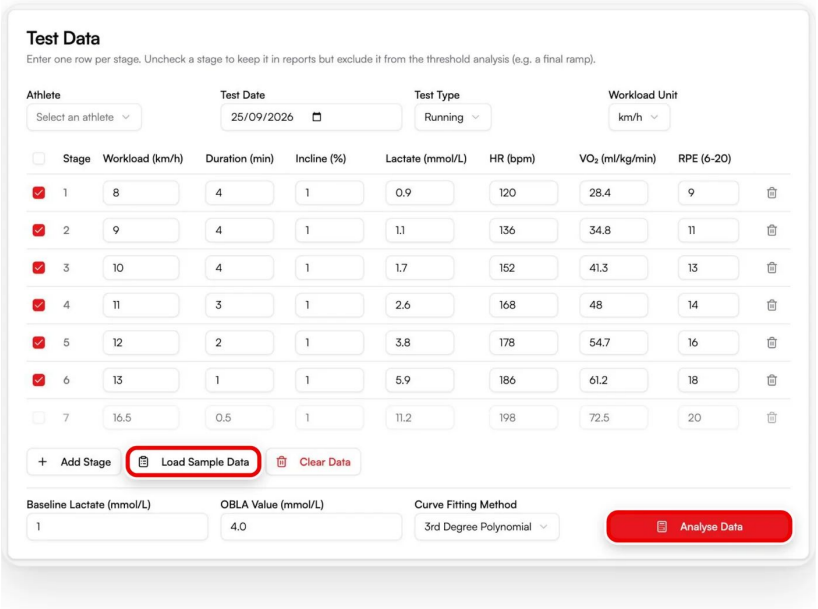
Enter the stages, press Analyse. Thresholds, curves and zones in one go.

The TrackStat Team · 25 September 2026



Step 1 · Enter the test.

One row per stage: workload, duration, lactate, and heart rate, VO_2 and RPE if you have them. Untick a stage to leave it out of the analysis.



Step 2 · Press Analyse Data.

Thresholds come back as workload, pace, lactate and heart rate, each with a reliability grade.

Threshold Results

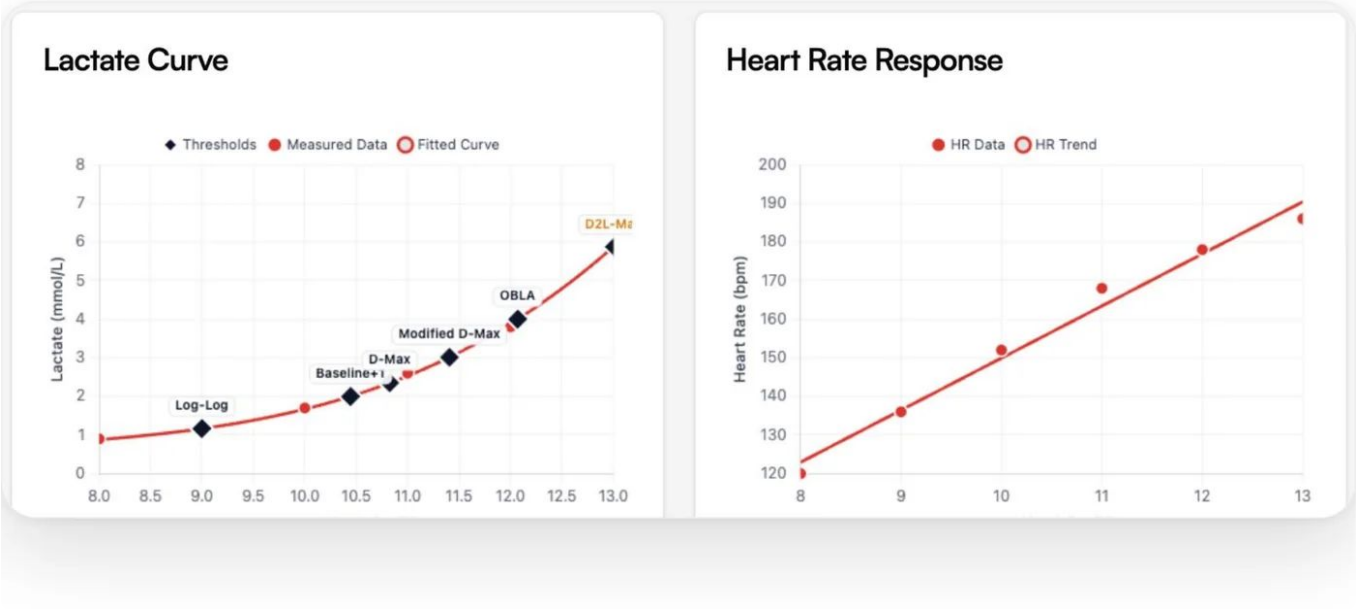
Six methods over the fitted curve — check the reliability grade before prescribing from a single method.

Export CSV

Threshold Method	Workload (km/h)	Pace (min/km)	Lactate (mmol/L)	Heart Rate (bpm)	Reliability
OBLA (4.0)	12.1	4:58	4.00	178	High
Baseline+1	10.4	5:45	2.00	156	High
D-Max	10.8	5:33	2.35	161	High
Modified D-Max	11.4	5:16	3.01	169	High
Log-Log	9.0	6:40	1.17	136	High
D2L-Max	13.0	4:37	5.87	190	Medium

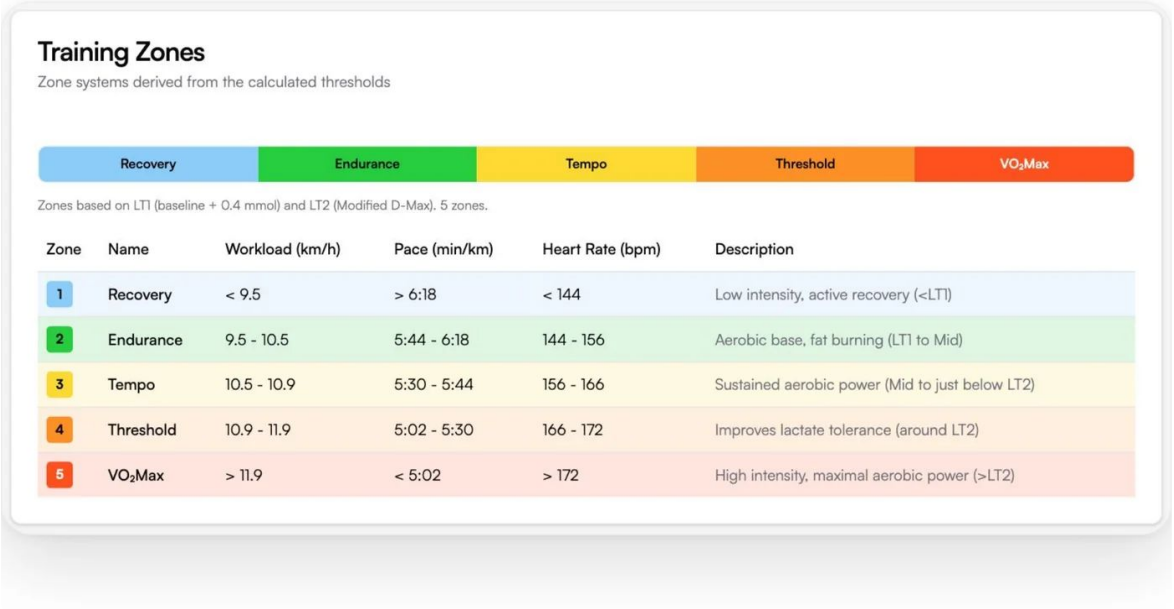
The result · The curves.

Lactate and heart rate against workload, with the thresholds marked on the curve.



The result · Training zones, ready to prescribe.

Five zones from the test: workload, pace and heart rate for each.



Training Zones

Zone systems derived from the calculated thresholds

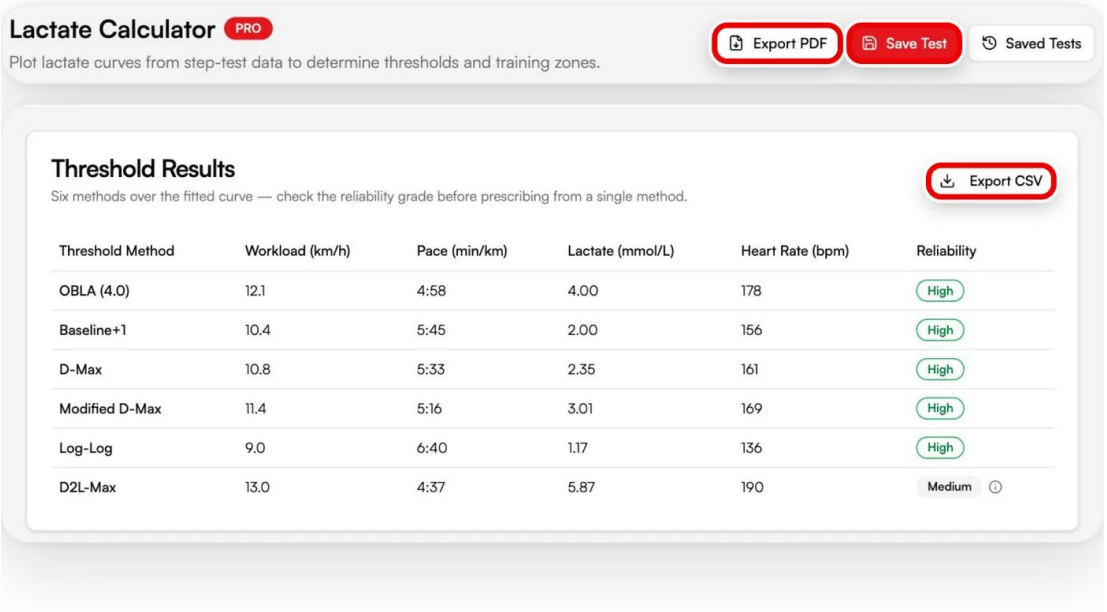
Recovery | Endurance | Tempo | Threshold | VO_2Max

Zones based on LT1 (baseline + 0.4 mmol) and LT2 (Modified D-Max). 5 zones.

Zone	Name	Workload (km/h)	Pace (min/km)	Heart Rate (bpm)	Description
1	Recovery	< 9.5	> 6:18	< 144	Low intensity, active recovery (<LT1)
2	Endurance	9.5 - 10.5	5:44 - 6:18	144 - 156	Aerobic base, fat burning (LT1 to Mid)
3	Tempo	10.5 - 10.9	5:30 - 5:44	156 - 166	Sustained aerobic power (Mid to just below LT2)
4	Threshold	10.9 - 11.9	5:02 - 5:30	166 - 172	Improves lactate tolerance (around LT2)
5	VO_2Max	> 11.9	< 5:02	> 172	High intensity, maximal aerobic power (>LT2)

Save it · Save the test. Export the report.

Save Test keeps it with the athlete. **Export PDF** or Export CSV to send it on.



Lactate Calculator PRO

Plot lactate curves from step-test data to determine thresholds and training zones.

Export PDF | Save Test | Saved Tests

Threshold Results

Six methods over the fitted curve — check the reliability grade before prescribing from a single method.

Export CSV

Threshold Method	Workload (km/h)	Pace (min/km)	Lactate (mmol/L)	Heart Rate (bpm)	Reliability
OBLA (4.0)	12.1	4:58	4.00	178	High
Baseline+1	10.4	5:45	2.00	156	High
D-Max	10.8	5:33	2.35	161	High
Modified D-Max	11.4	5:16	3.01	169	High
Log-Log	9.0	6:40	1.17	136	High
D2L-Max	13.0	4:37	5.87	190	Medium

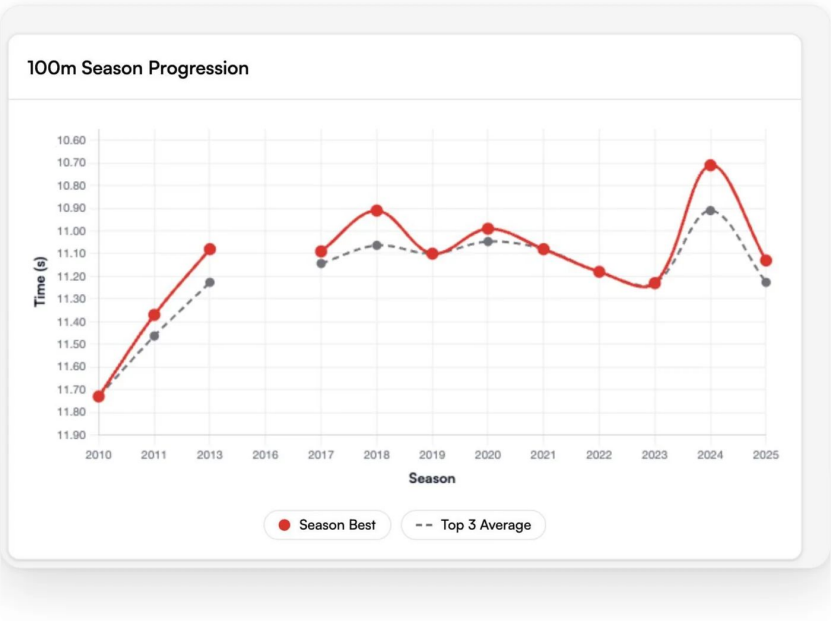
Linked to the athlete. Saved calculations appear on the athlete's profile under **Saved Calculators**.

HOW-TO 11 · COMPETITION INSIGHTS

Every race result, in context

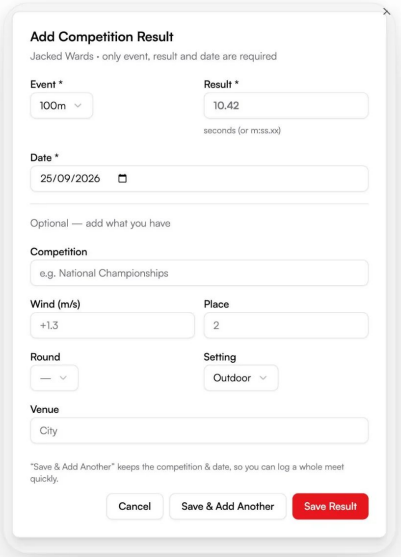
Log results as they happen. See PBs, season bests and progression at a glance.

The TrackStat Team · 25 September 2026



Step 1 · Add a result.

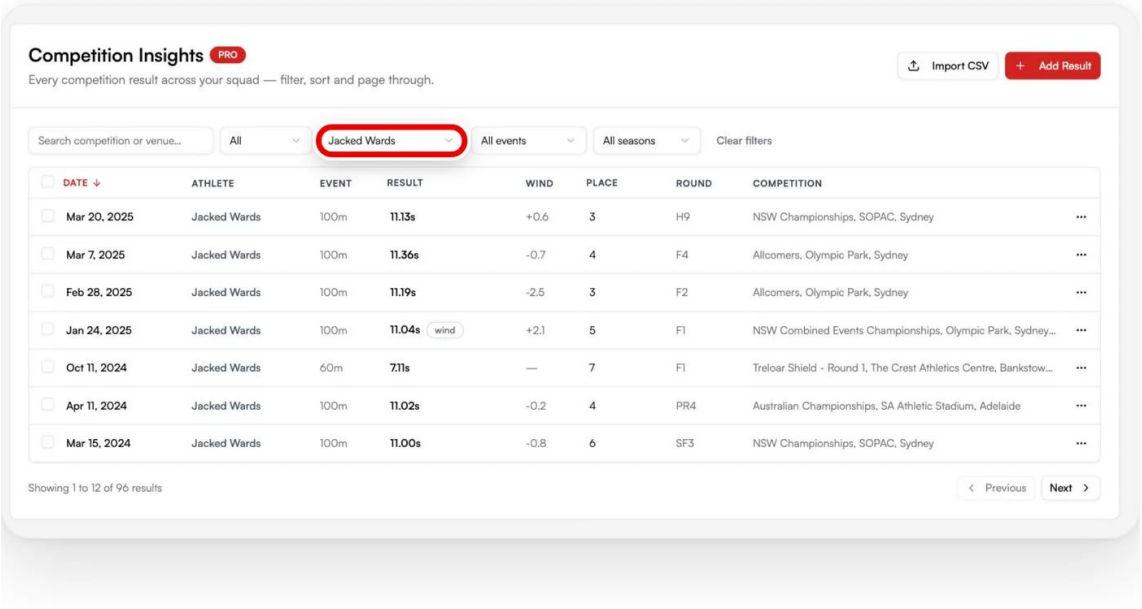
Only the event, the result and the date are required. Add competition, wind, place, round and venue if you have them.



Logging a whole meet? Save & Add Another keeps the competition and date. Or Import CSV for a season at once.

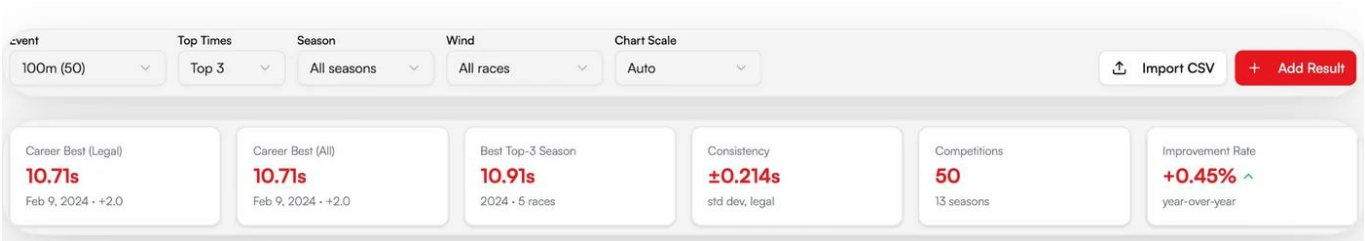
Step 2 · Every result across the squad.

Filter by athlete, event and season. Wind-assisted results are flagged.



Step 3 · Open the athlete.

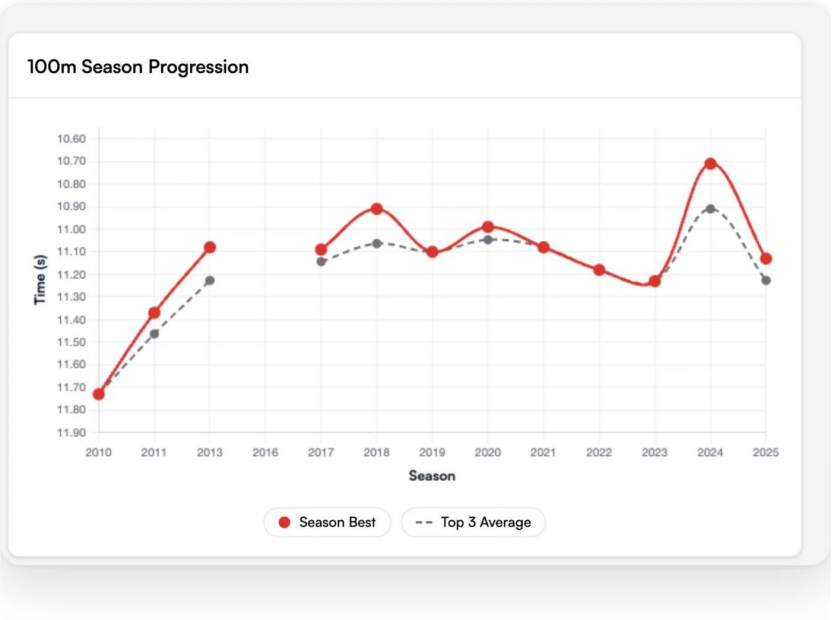
On the athlete's profile, Competition Insights shows their career best, best season, consistency and improvement.



Jacked Wards' 100 m: 50 races across 13 seasons.

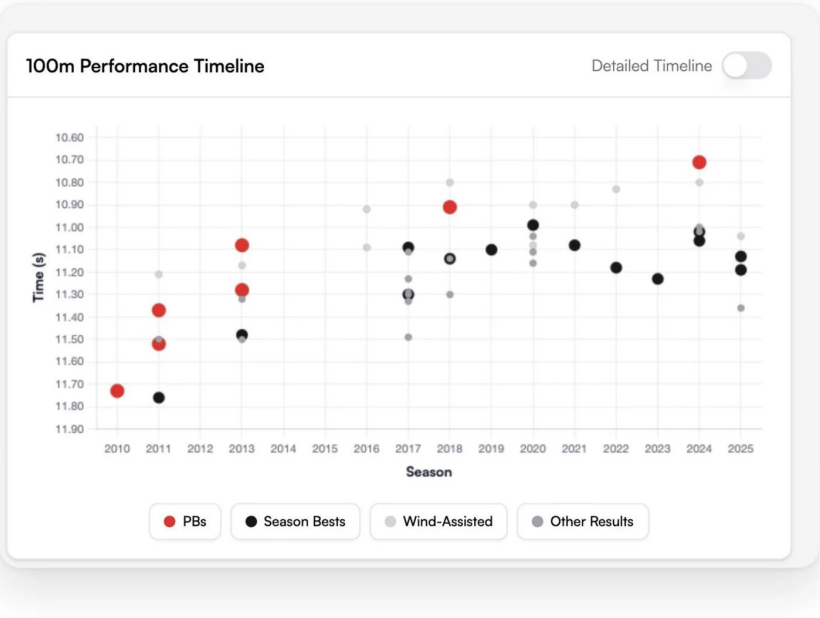
The result · Season by season.

Season best and the top-three average for every year.



The result · Every race on one timeline.

PBs, season bests, wind-assisted and other results, each marked.



The result · The full record.

Every result with round, wind, place and venue. PBs and season bests are tagged.

Results — 100m

50 results

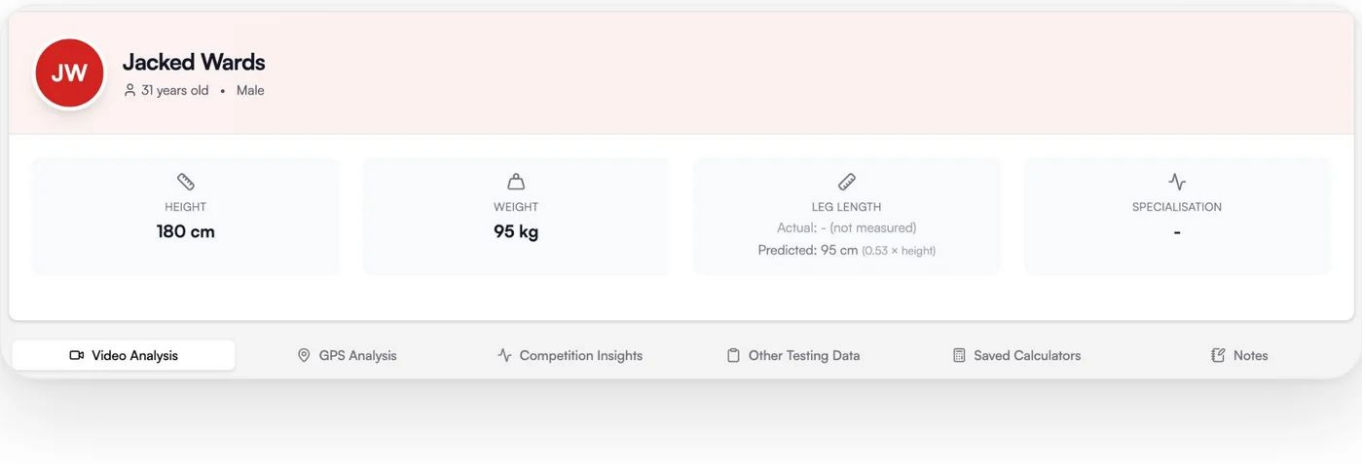
Date	Competition	Round	Result	Wind	Place	Venue
Mar 20, 2025	NSW Championships, SOPAC, Sydney	H9	11.13s SB	+0.6	3	SOPAC, Sydney (AUS)
Mar 7, 2025	Allcomers, Olympic Park, Sydney	F4	11.36s	-0.7	4	Olympic Park, Sydney (AUS)
Feb 28, 2025	Allcomers, Olympic Park, Sydney	F2	11.19s SB	-2.5	3	Olympic Park, Sydney (AUS)
Jan 24, 2025	NSW Combined Events Championships, Olympic Park, Sydney - I...	F1	11.04s wind	+2.1	5	Olympic Park, Sydney (AUS)
Apr 11, 2024	Australian Championships, SA Athletic Stadium, Adelaide	PR4	11.02s	-0.2	4	SA Athletic Stadium, Adelaide (AUS)
Mar 15, 2024	NSW Championships, SOPAC, Sydney	SF3	11.00s	-0.8	6	SOPAC, Sydney (AUS)
Mar 14, 2024	NSW Championships, SOPAC, Sydney	H2	11.07s wind	+3.2	2	SOPAC, Sydney (AUS)
Feb 9, 2024	Illawong High Velocity Meet, Barden Ridge Athletics Track, Sydney	F4	10.71s PB	+2.0	1	Barden Ridge Athletics Track, Sydney (AUS)

HOW-TO 12 · ATHLETE PROFILE

Everything on one athlete

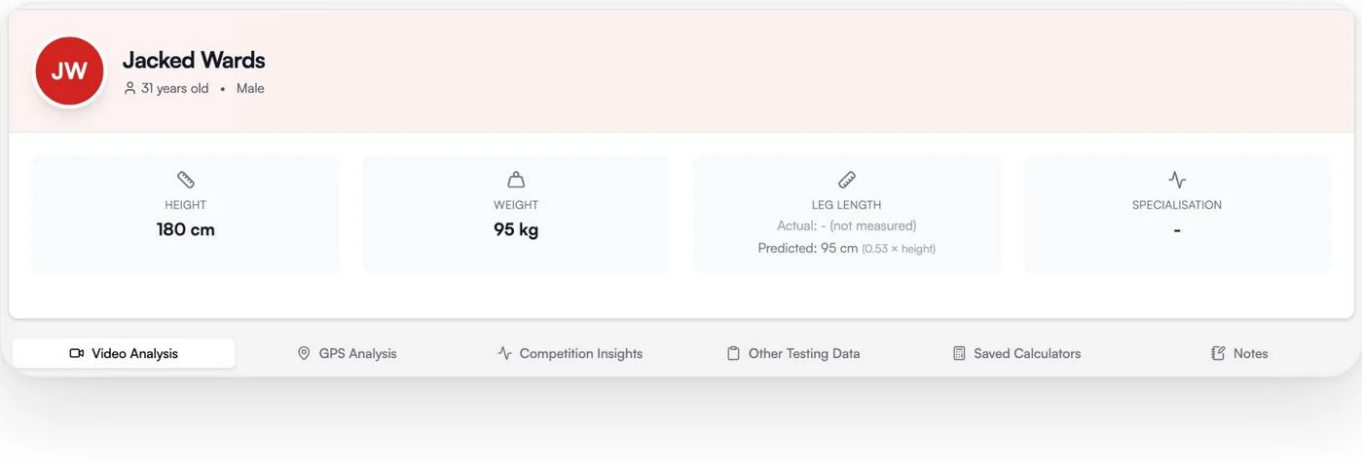
Video, GPS, competition results, testing and calculators, in one place.

The TrackStat Team · 25 September 2026



Step 1 · Open the athlete.

Athletes → View. The profile opens on their details, with a tab for each kind of data.



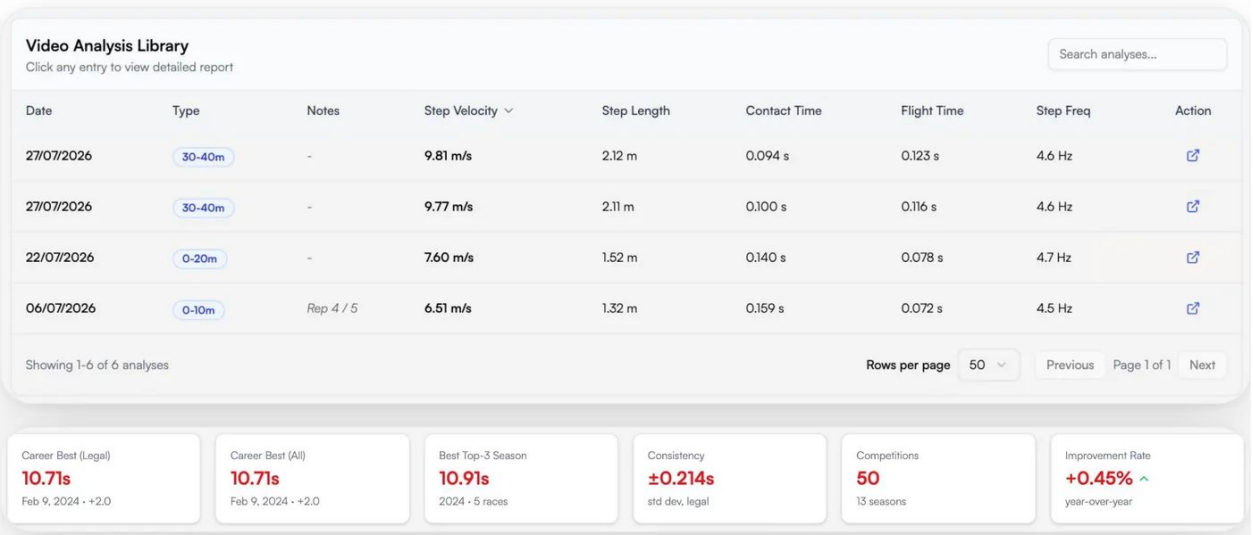
The tabs · Where everything lands.

1. Video Analysis
2. GPS Analysis
3. Competition Insights
4. Other Testing Data
5. Saved Calculators
6. Notes

Every analysis, run, result, test and calculation you save for an athlete shows up here. Nothing to copy across.

Example · Video Analysis and results, side by side.

Every rep the athlete has been analysed on, with step velocity, length, contact, flight and frequency. Click one to open the full report.



The same athlete's Video Analysis and Competition Insights tabs.