



User Guide

Core & Pro Editions

What is PreDelayIQ?

PreDelayIQ estimates likely weather-related construction delay for a program, based on long-term Australian climate data. You give it a location and a program of phases; it gives back a delay allowance you can price into a tender — either a quick single figure, or a full probability range with everything behind it.

This guide covers both editions:

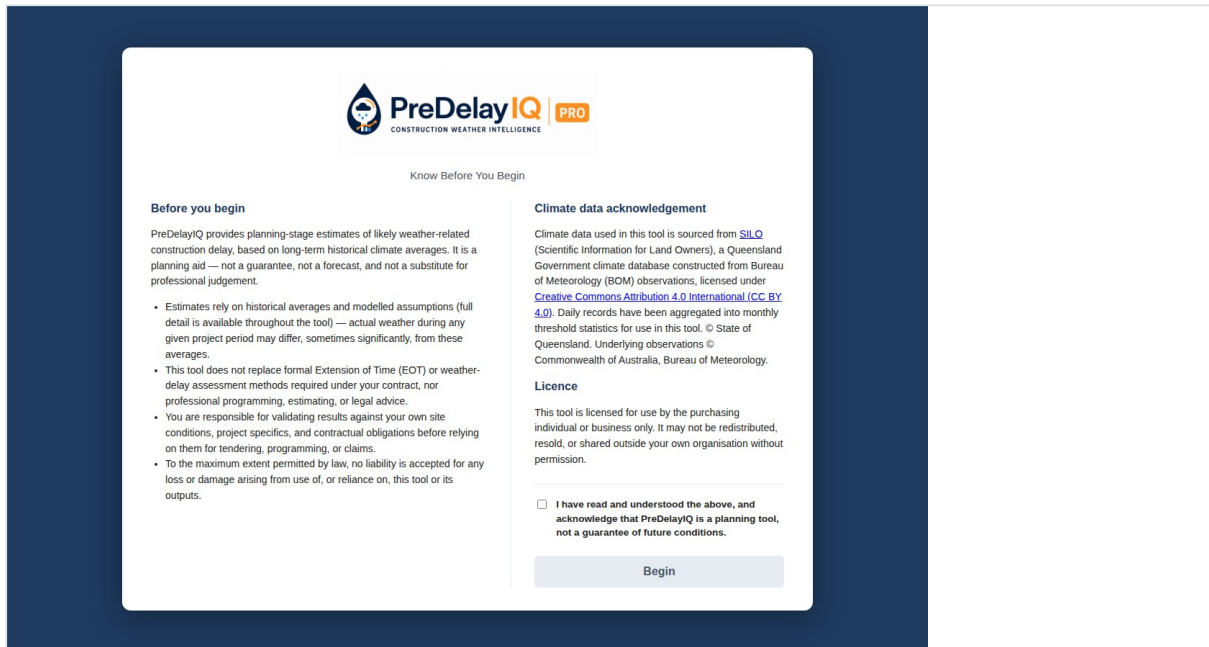
- Core — the calculation itself: weather thresholds, program import or manual entry, dates, location search, and Basic and Detailed (Monte Carlo) analysis.
- Pro — everything in Core, plus the polished, client-facing outputs built from it: the branded print report, Weather Risk Register, Explain My Risk, Find Optimal Start Date, tender methodology text, an alternative delay-aggregation method, and your own company logo on reports.

Before you start

PreDelayIQ is a planning aid based on historical climate averages. It is not a weather forecast and does not guarantee any particular outcome on your project. It supports your own professional judgement — it doesn't replace it. You'll see this same message again inside the tool itself, and you'll need to acknowledge it before you can begin.

Getting Started

Open the PreDelayIQ file in your web browser. After a brief splash screen, you'll see a disclaimer screen explaining what the tool does and doesn't do, and how the climate data is sourced. Tick the acknowledgement box and click Begin to continue — this step is the same in both Core and Pro.



The disclaimer and consent screen — shown before you can use either edition.

Step 1 — Project Details

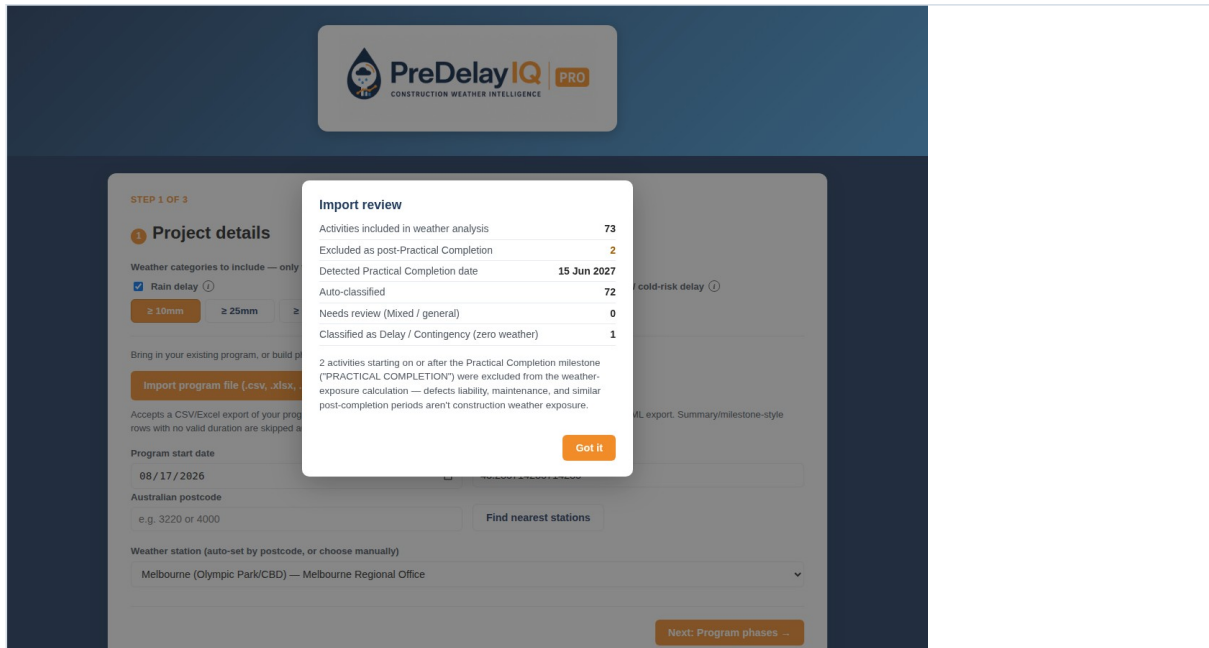
Step 1 is ordered to get you to a result as fast as possible: set your weather thresholds, bring in or build your program, confirm the dates, then finally pin down the location — the one step most likely to involve a map that takes a moment to look at. Everything above the location step is visible on one screen without scrolling, on either edition.

1. Choosing weather categories

Tick Rain, Heat, and/or Frost, and pick the threshold that matters for your trades (for example, $\geq 10\text{mm}$ rain, $\geq 35^\circ\text{C}$ heat). Only ticked categories count toward the total. Click the small "i" icon next to each category for a plain explanation of what the thresholds mean and where the figures come from.

2. Importing an existing program

Bring in an existing program — CSV, Excel, or an MS Project XML export — and PreDelayIQ will do its best to recognise each task's work type automatically from its name. Importing also sets your program start date and duration to match the file, so if you're importing, you may not need to touch the date fields at all.



If a task's work type can't be automatically recognised, an import review summary shows exactly how many activities were included, auto-classified, or need a look — along with the detected Practical Completion date on an MS Project import, if the file names one clearly.

Phases that couldn't be matched to a work type are set to "Mixed / general" and flagged (an orange border and a note) in the phase table on Step 2. Genuine contractual delay or contingency periods (like a client-held EOT allowance) are recognised separately and correctly carry zero weather sensitivity, rather than falling into Mixed. If you're not importing, you can add phases manually on Step 2 instead.

3. Program dates

Set your program's start date and duration in weeks — or leave them, if you're about to import a file that will set them for you.

4. Finding your location

Enter an Australian postcode and click Find nearest stations. PreDelayIQ will locate the nearest weather station (or blend the five nearest, for a more representative average), show you the distance, and plot it on a map.

Program start date

08/01/2026

Program duration (weeks)

10

Australian postcode

3220

Find nearest stations

5 nearest stations:

STATION	DISTANCE	BLEND WEIGHT
Geelong	3km	63%
Avalon (Geelong/Lara)	17km	14%
Drysdale (Bellarine Peninsula)	20km	12%
Werribee	48km	5%
Colac	51km	5%

☒ Blend climate data from the 5 nearest stations (distance-weighted average) instead of using just the single nearest station

Weather station (auto-set by postcode, or choose manually)

Blended average (5 nearest to postcode)

Next: Program phases

After a postcode search — nearest stations found, with distances, blend weighting, and the map.

Step 2 — Program Phases

Build the program as a list of phases — a name, a work type (Earthworks, Concrete, Roofing, and so on), a start week, and a duration. PreDelayIQ matches each phase to the calendar months it actually runs through, since that's what determines its real weather exposure. This section is collapsed by default — click the heading to expand it.

STEP 2 OF 3

Program phases

Break the program into phases so weather sensitivity is matched to the calendar months each phase actually runs through. Weeks are relative to the program start date above. Add phases manually, or import them from an existing program in Project details above.

PHASE NAME	WORK TYPE	START WEEK	DURATION (WEEKS)	
Site establishment & earthworks	Earthworks & civil / drainage	0	4	Remove
Concrete & structure	Concrete & structure (footings, slab)	4	10	Remove
Roofing & envelope	Roofing & building envelope	10	6	Remove
External facade	External facade / cladding / paintin	14	8	Remove
Internal fit-out	Internal fit-out & services	18	8	Remove

+ Add phase Reset to example phases

► Advanced: work-type sensitivity assumptions

— Back Next: Results & exports —

Advanced settings — work-type sensitivity

Each work type has its own rain/heat/frost sensitivity factor — how much a day at that threshold actually slows that trade down.

In Pro, these factors are fully editable — adjust them to match your own EBA policy or past project experience:

STEP 2 OF 3

Program phases

Break the program into phases so weather sensitivity is matched to the calendar months each phase actually runs through. Weeks are relative to the program start date above. Add phases manually, or import them from an existing program in Project details above.

PHASE NAME	WORK TYPE	START WEEK	DURATION (WEEKS)	
Site establishment & earthworks	Earthworks & civil / drainage	0	4	Remove
Concrete & structure	Concrete & structure (footings, slab)	4	10	Remove
Roofing & envelope	Roofing & building envelope	10	6	Remove
External facade	External facade / cladding / paintin	14	8	Remove
Internal fit-out	Internal fit-out & services	18	8	Remove

+ Add phase Reset to example phases

▼ Advanced: work-type sensitivity assumptions

For each work type, "Rain factor" / "Heat factor" / "Frost factor" = fraction of an average day at the selected threshold that becomes a lost or reduced working day for that trade (see stand-downs, reduced productivity, curtailment/restrictions). Adjust these to match your own EBA policy or past project experience.

WORK TYPE	RAIN FACTOR	HEAT FACTOR	FROST FACTOR
Pre-construction / premeasures (design, approvals, procurement — not weather dependent)	0	0	0
Delay / contingency allowance (contractual, not weather dependent)	0	0	0
Earthworks & civil / drainage	0.75	0.25	0
Concrete & structure (footings, slabs, etc)	0.65	0.35	0.4
Steel / frame erection	0.55	0.35	0
Timber framing & carpentry (exposed structure)	0.55	0.3	0
Roofing & building envelope	0.7	0.3	0
External facade / cladding / painting	0.45	0.2	0
Landscaping & external works	0.6	0.2	0
Internal fit-out & services	0.08	0.03	0
Testing & Commissioning	0	0.05	0
Practical Completion / Defects Rectification	0.05	0.08	0
Mixed / general (blended default for on-site work of unclear type)	0.35	0.15	0

Monte Carlo simulations per calculation: 10000

Confidence intervals (P10–P90) are no longer set by a manual contingency % — they emerge from repeated simulation using each station's month-by-month historical weather variability. Higher counts give smoother percentiles at a small speed cost. 10,000 is the recommended minimum for tender-grade output.

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Estimates are based on long-term US O climate averages (built from Bureau of Meteorology observations) and simplified productivity-loss assumptions — a planning allowance, not a guarantee. Validate against site-specific conditions and your contract's EOT/weather delay clauses before submitting a tender.

Advanced settings in Pro — every factor is editable.

In Core, you can see the built-in default factors for full transparency, but they're fixed:



STEP 2 OF 3

Program phases

Break the program into phases to weather sensitivity is matched to the calendar months each phase actually runs through. Weeks are relative to the program start date above. Add phases manually, or import from an existing program in Project Details above.

PHASE NAME	WORK TYPE	START WEEK	DURATION (WEEKS)	
Site establishment & earthworks	Earthworks & civil / drainage	0	4	Remove
Concrete & structure	Concrete & structure (footings, slab)	4	10	Remove
Roofing & envelope	Roofing & building envelope	10	6	Remove
External facade	External facade / cladding / painting	14	8	Remove
Internal fit-out	Internal fit-out & services	18	8	Remove

[+ Add phase](#) [Reset to example phases](#)

▼ Advanced: work-type sensitivity assumptions

For each work type, "Rain factor" / "Heat factor" / "Frost factor" = fraction of an average day at the selected threshold that becomes a lost or reduced working day for that trade (see table below, reduced productivity, durability restrictions). These are PreDelayIQ's built-in default factors, shown here for transparency. Customising them to match your own EBA policy or project experience is a Pro feature.

WORK TYPE	RAIN FACTOR	HEAT FACTOR	FROST FACTOR
Pre-construction / preliminaries (design, approvals, procurement — not weather dependent)	0	0	0
Delay / contingency allowance (contractual, not weather dependent)	0	0	0
Earthworks & civil / drainage	0.75	0.25	0
Concrete & structure (footings, slabs, lift-up)	0.65	0.35	0.4
Steel / frame erection	0.55	0.35	0
Timber framing & carpentry (exposed structural)	0.55	0.3	0
Roofing & building envelope	0.7	0.3	0
External facade / cladding / painting	0.45	0.2	0
Landscaping & external works	0.6	0.2	0
Internal fit-out & services	0.08	0.03	0
Testing & Commissioning	0	0.05	0
Practical Completion / Defects Rectification	0.05	0.08	0
Mixed / general (default default for on-site work of unclear type)	0.35	0.15	0

Monte Carlo simulations per calculation: 10000

Contingency intervals (P10–P95) are no longer set by a manual contingency % — they emerge from repeated simulation using each station's month-by-month historical weather variability. Higher counts give smoother percentiles at a small speed cost. 10,000 is the recommended minimum for tender-grade output.

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Estimates are based on long-term GCM climate averages (built from Bureau of Meteorology observations) and simplified productivity loss assumptions — a planning allowance, not a guarantee. Validate against site-specific conditions and your contractor's GCM/weather-delay decision before submitting a tender.

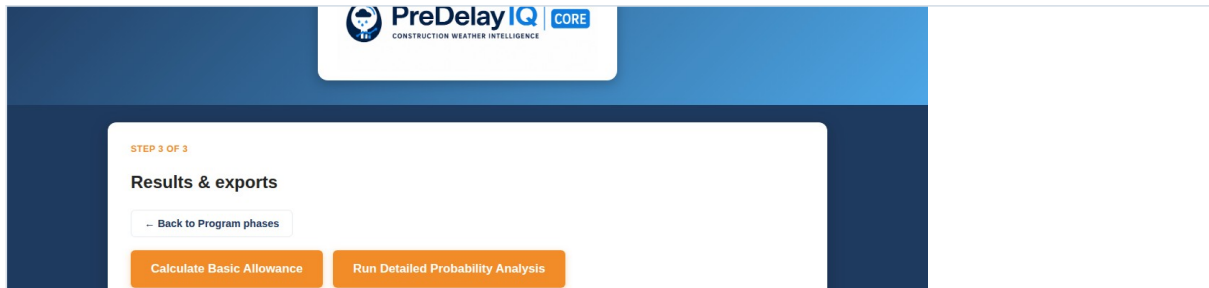
Advanced settings in Core — visible, but locked.

Step 3 — Results & Exports

This is where you calculate the delay estimate and generate anything you need from it.

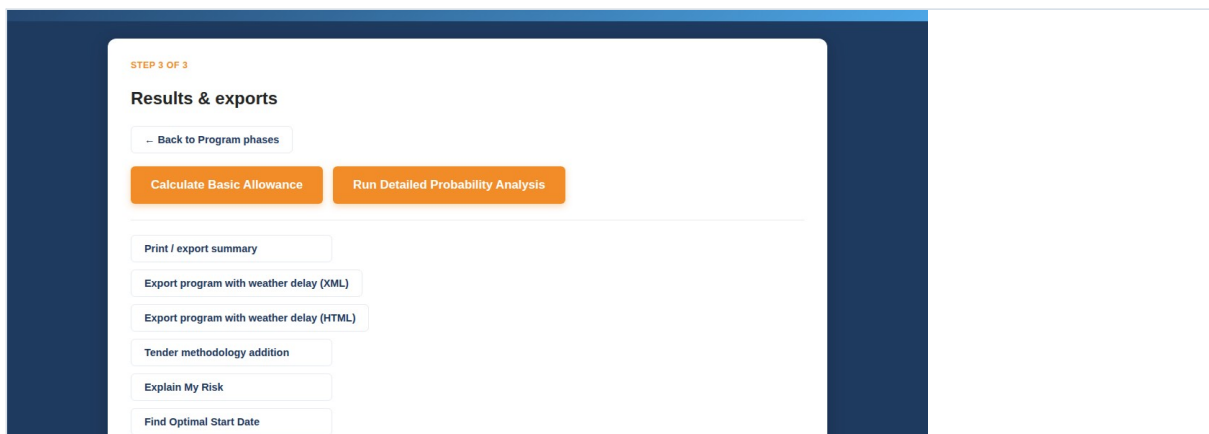
Core

Two calculation buttons, plus the two program exports:



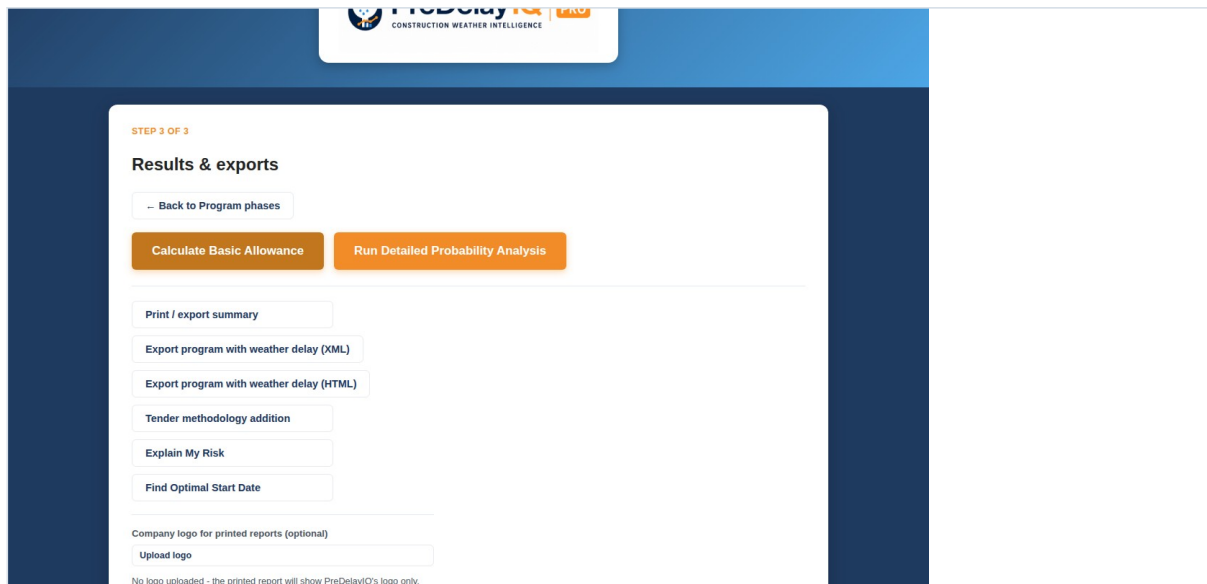
Pro

The same two calculation buttons, plus the full set of Pro outputs — Print/export summary, both program exports, Tender methodology, Explain My Risk, and Find Optimal Start Date — along with the company logo upload for branded reports:



Calculate Basic Allowance

An instant, single-number estimate — the long-term average weather-day frequency for each selected category, multiplied through by each phase's work-type sensitivity, summed across the whole program.

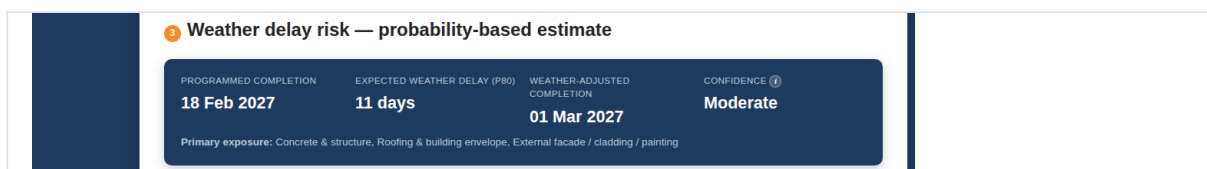


Run Detailed Probability Analysis

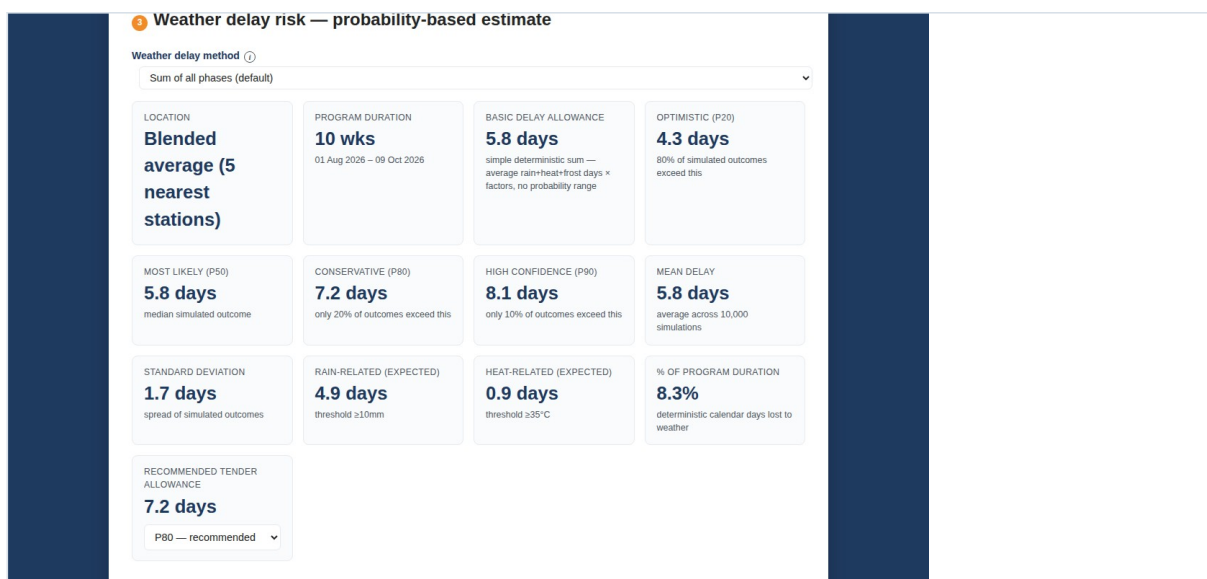
Runs a full Monte Carlo simulation — 10,000 independent runs by default — producing a genuine probability range (P10–P95) instead of a single guess. This is the figure most worth quoting in a tender, since it comes with a stated confidence level.

At a glance

A summary sits at the top of the Detailed results, before the full stats grid — your programmed completion date, the expected weather delay at the currently selected percentile, the resulting weather-adjusted completion date, a Confidence read on how tight the simulated spread is for this specific program, and which work-type categories are actually driving the number. Available in both Core and Pro.



The headline summary — driven by the same figures shown in the stats grid below it, including whichever percentile is currently selected.

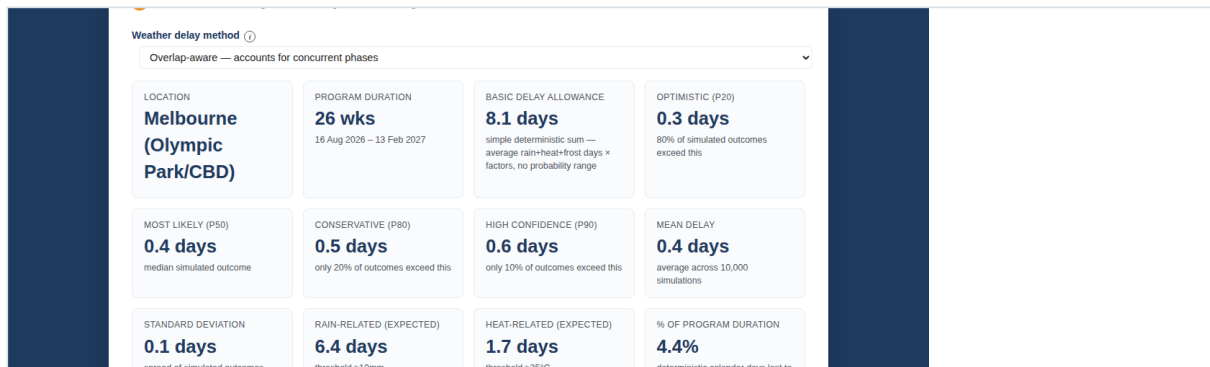


Detailed results — the full probability range, in both Core and Pro.

The Recommended Tender Allowance dropdown lets you pick which percentile to carry into your exports — P80 is the default, meaning only 1-in-5 simulated outcomes came in worse than that figure.

Weather delay method (Pro only)

By default, PreDelayIQ adds every phase's own simulated delay together — the original method, and still the default even in Pro. Pro adds a second option: "Overlap-aware", which instead looks at whichever phase ends up finishing latest once its own delay is applied, so time genuinely shared by overlapping or concurrent phases isn't counted once per phase.



The same program, recalculated with Overlap-aware selected instead of Sum — no need to re-run the simulation, both methods are ready instantly.

Worth knowing before you switch

Overlap-aware fixes double-counting for phases that genuinely run at the same time. It cannot make an earlier phase's delay push back a later, non-overlapping phase's start — PreDelayIQ doesn't track dependencies between phases, so it has no way to know one phase is waiting on another. It's a more honest read on concurrent work, not a critical-path engine.

Pro Features

These tools are only available in the Pro edition. Each one builds on the Detailed analysis above, so run that first.

Explain My Risk

Breaks the total down phase by phase — not just which phase has the biggest number, but which one is genuinely unpredictable. To keep this readable on a real program with many phases, only Medium and High risk phases are shown in full; Low risk phases are collapsed into a single line by default, with the option to expand and see them. A High/Medium/Low filter also controls what's included if you print this view.

Explain My Risk

A per-activity view of weather risk, so you can see which phases are actually driving the total — not just the headline number.

ACTIVITY	RISK	MEAN DELAY	VARIABILITY
Site establishment & earthworks	Medium	0.6 days (±0.7 std. dev.)	High
Roofing & envelope	Medium	1.5 days (±1.0 std. dev.)	High

► 3 phase(s) assessed as Low risk — no action needed, click to view

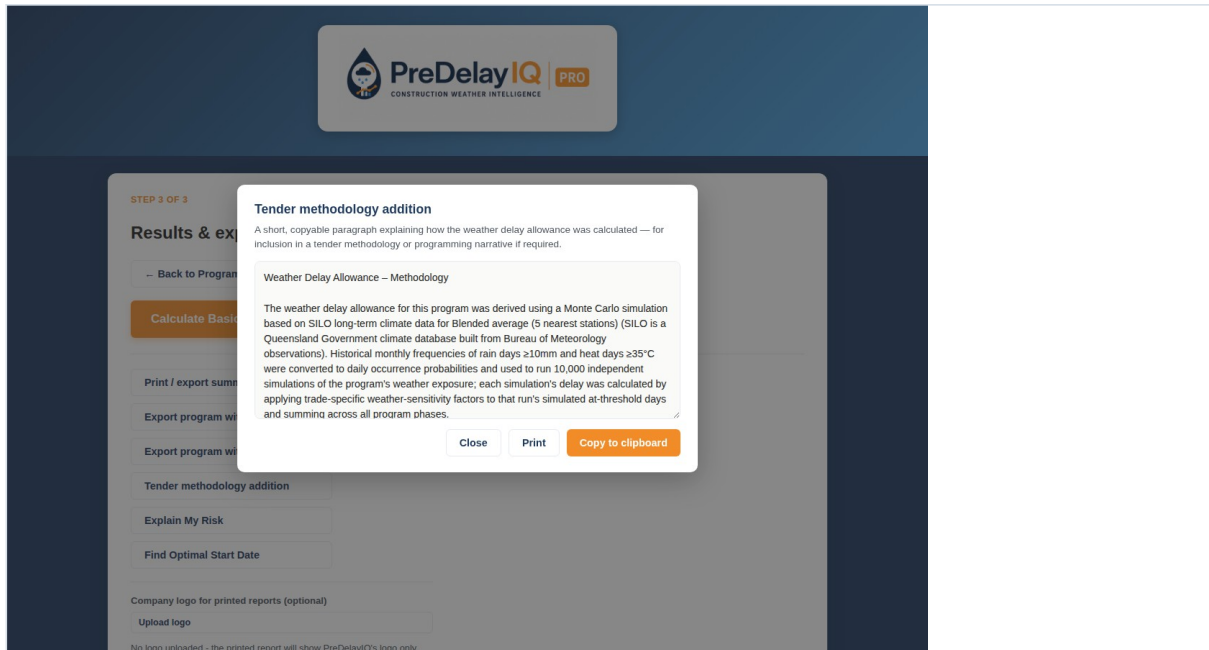
Each phase's own 10,000 simulated outcomes (the same simulation behind the P10–P95 figures above) are used to classify risk across two dimensions: **impact** — how big the delay is relative to that phase's own duration — and **variability** — how unpredictable it is, run to run, regardless of size. A phase with a modest average delay but high variability is genuinely riskier than one with a bigger but very consistent delay, even though a single deterministic number would show them the other way round — that's exactly the distinction a per-phase simulation captures and a single expected-value figure can't.

Print: ☒ High ☐ Medium ☐ Low

Close Print Risk Register Print

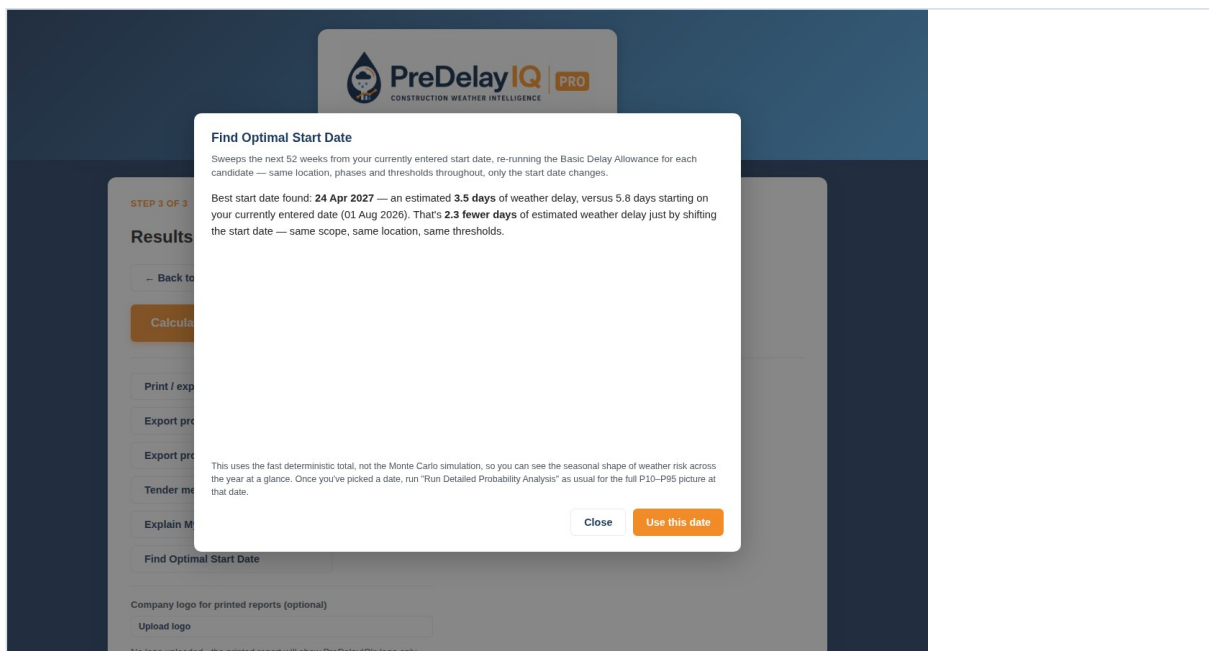
Tender Methodology Addition

Auto-writes a ready-to-paste paragraph explaining exactly how the figure was calculated — the data source, the method, and the key assumptions — sized for dropping straight into a tender submission. If you've switched to the Overlap-aware delay method, the wording updates to accurately describe that method instead.



Find Optimal Start Date

Tests 52 candidate start dates across the year ahead and shows which one minimises weather delay for this exact program — useful where the start date genuinely isn't locked in yet.



Print Risk Register

A standard, recognisable compliance document — every phase rated Low/Medium/High risk, sorted by severity. Uses the same High/Medium/Low print filters as Explain My Risk (High only by default), with mitigation guidance stated once per risk tier rather than repeated on every row. Opens directly in your browser's print dialog, ready to print or save as PDF — accessed from inside the Explain My Risk window.

Company logo for printed reports

Upload your own company logo — it appears top-left in the printed summary report and the Risk Register, alongside PreDelayIQ's own logo top-right. Saved on your computer, so it's remembered next time.



Ongoing data refreshes

Pro includes access to periodic refreshes of the underlying climate data as it's updated over time — not on a fixed schedule, but at no extra cost when it happens. If you purchased through Lemon Squeezy, updated files appear automatically under "My Orders" using the email you checked out with — no need to repurchase.

Core vs Pro — Quick Reference

Feature	Core	Pro
Weather threshold selection	✓	✓
Program import (CSV / Excel / MS Project)	✓	✓
Manual program builder	✓	✓
Location search & mapping	✓	✓
Basic Delay Allowance	✓	✓
Detailed Probability Analysis (Monte Carlo)	✓	✓
Program export (XML / HTML)	✓	✓
View default work-type factors	✓	✓
Edit work-type factors	—	✓
Overlap-aware delay method	—	✓
Branded print report	—	✓
Company logo on reports	—	✓
Explain My Risk	—	✓
Find Optimal Start Date	—	✓
Tender methodology text	—	✓
Print Risk Register	—	✓
Ongoing climate data refreshes	—	✓

A reminder before you rely on any of this

Every figure PreDelayIQ produces — in either edition — is a planning estimate built from historical climate averages, not a forecast or a guarantee of what will actually happen on your project. Use it to support your own judgement and your contract's formal EOT process, not to replace either.