






-  Good conditions for sealing
-  Marginal conditions
-  Do not seal



Targeted weather insights for smarter Road Science product application.

Zeus is Road Science's intelligent weather risk assessment tool, designed to provide clear, location-specific guidance on when and where our products will cure effectively. Built on extensive laboratory testing and product-specific curing algorithms, Zeus combines live and forecast weather data with curing science to deliver the most accurate forecasts available.

While Zeus uses conservative forecasting to minimise risk, it also supports informed decision-making by allowing users to apply local knowledge. As with any forecast, uncertainty exists and increases the further out you look - always recheck Zeus on the day of sealing for the highest confidence.

Access to Zeus:

Desktop version available via Zeus service page on Road Science website, or direct link [HERE](#)

Google Play/Apple Store: *App link to be supplied in April.*

Benefits

- Purpose-built forecasting tool tailored specifically to Road Science products and performance thresholds
- Intuitive interface displaying daily risk levels based on temperature, humidity, rainfall, and product type
- Enables users to plan work with greater confidence, reducing the chance of product failure due to weather
- Continuously updated with nationwide weather data, offering reliable insights no matter your location
- Ability to generate targeted weather insights for specific projects or regions

Technology Background

Zeus provides the most accurate location-based forecast available, using a 4km grid system (like hundreds of virtual weather stations). This means forecasts are at most 2km from your selected location.

Zeus is built on extensive laboratory testing of our products across all climatic conditions. Product-specific algorithms were developed using environmental chambers to understand curing behaviour in relation to temperature and humidity over time.

Forecasting is intentionally conservative, while still allowing users to apply local knowledge to make the best sealing decision.

Even with high accuracy, Zeus is predicting the future, which carries uncertainty.

- Accuracy improves closer to the time of sealing
- Accuracy decreases the further out the forecast goes
- Always recheck Zeus on the day of sealing.

Weather Forecast Considerations

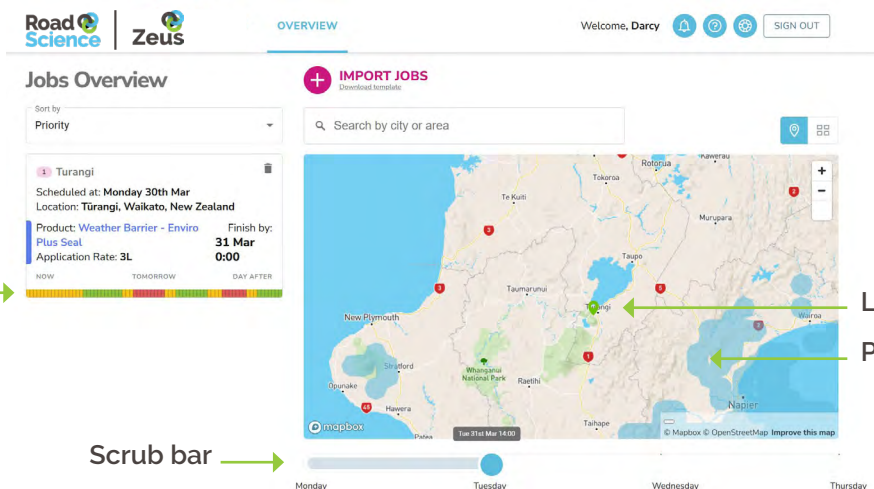
- A five-day forecast can predict general weather patterns with approximately 90% accuracy
- Predicting rainfall to the exact hour is more difficult due to micro-climates and rain cloud movement
- Rainfall may occur up to 3 hours earlier or later than predicted - this must be considered when making sealing decisions
- Blue patches on the scrub bar indicate predicted rain events that could cause wash-off - **these require the greatest caution**
- If sealing in an orange window, ensure there is no forecasted red following.

Sealing Condition Colours

- Green** – Conditions are suitable for sealing and allow enough time for curing (Sealing must stop before conditions move to orange or red).
- Orange** – Marginal conditions. Consider incoming weather. Sealing may be acceptable only if no rainfall is predicted before the next green period.
- Red** – Do not seal. Temperature or humidity is outside curing limits, or rain is forecast during the curing period.

Inside Zeus Application

Once a job is imported with the location, preferred date, and product selected, a sealing window time line is displayed, showing sealing suitability based on curing time. Dragging the cursor along the scrub bar also reveals any predicted rainfall and highlights preferred sealing windows. The location pin changes colour (green, orange, or red) to indicate sealing suitability at the selected time.



The screenshot shows the Zeus application interface. On the left, a 'Jobs Overview' panel displays details for a job in Turangi, scheduled for Monday 30th Mar, with a finish by 31 Mar 0:00. Below this is a 'Sealing window time line' represented by a horizontal bar with colored segments (green, orange, red) and blue patches indicating predicted rain events. A 'Scrub bar' is located below the time line, with a blue dot indicating the current selection. On the right, a map shows the location of Turangi, with a 'Location pin' and 'Predicted rain patches' highlighted. The interface includes a navigation menu, a search bar, and a 'SIGN OUT' button.