



Media release

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Wellington rain radar returns after major upgrade

After a major upgrade, MetService's Wellington rain radar is today (2 May) back in action. The new radar will provide those in central New Zealand with enhanced real-time rain observations particularly important during severe weather events.

The 2.1-million-dollar upgrade involved replacing the 30-year-old radar hardware with new technology and strengthening the radar tower to meet modern seismic standards.

The radar uses the latest dual polarisation technology which can identify different types of precipitation, be it rain, hail or snow.

MetService Chief Executive Stephen Hunt says, "We're so pleased to be able to invest in providing even better rain and weather radar services and enhanced forecasts and severe weather warnings for everyone in the lower North Island and upper South Island."

"The upgraded radar provides more detailed information for our meteorologists such as the size and shape of precipitation (raindrops, hailstones or snowflakes), which means we have a much clearer picture of what's happening in the atmosphere during a weather event," says Stephen.

The radar site, located on Outlook Hill, 11 kilometres southwest of downtown Wellington and 540 metres above sea level, provides coverage out to 300 kilometres encompassing Marlborough, Nelson, Wellington, Kāpiti Coast, Wairarapa, Horowhenua, Manawatū and Whanganui.

Kevin Alder, Manager Meteorological Data Services who oversees MetService's weather observation network says, "This upgrade is part of MetService's ongoing investment in the New Zealand weather radar network, funded through a contract with the Ministry of Transport."

"Aside from its forecasting value to our meteorologists, real-time rain radar data is of great importance to hydrologists, emergency management staff at regional councils in Marlborough, Tasman, Wellington and Manawatū," adds Kevin.

In terms of weather hazards, radar (along with satellite imagery and the national lightning detection network) are important tools for detecting the exact location of thunderstorms.

The aviation community also benefits from the new radar technology as it provides enhanced information on significant weather hazards. In particular, the radar is able to more accurately identify areas where icing may occur on aircraft flying through clouds.

The radar imagery is very popular on [metservice.com](https://www.metservice.com) and the organisation's weather app.

"We know how much people love the radar imagery on our website and app and rely on it to determine their daily activity such as quickly bringing in the washing or taking the dog for a walk in between showers. We'd like to thank everyone for their patience while it's been offline for two months for this important upgrade." says Kevin.

The upgrade has been 15 months in the planning given the radar itself comes from Finland, while the protective radome, which encases the technology, comes from Italy.

"Our engineers and project team along with local company ACME Engineering and other contracts including Stantec have done a great job to upgrade the radar in the planned two-month timeframe – ensuring it was only offline for the for the shortest amount of time," says Kevin.

While a series of acceptance tests were undertaken ahead of it going live, further optimisation tests will mean that during May and the first half of June the radar will be temporarily offline for short periods of time.

This is the sixth radar in MetService's network of ten radars that now operates dual polarisation technology. The Canterbury radar located near Rakaia is next in line for an upgrade which will take place summer 2024/25.

"As the authorised provider of severe weather warnings, we are always looking to continually improve our forecasting tools and enhance our forecasting abilities – it's imperative as we know that these warning services are crucial in our changing climate," says Stephen.

Ends

Notes to the editors:

- All New Zealand radar imagery is updated every seven and a half minutes, and is available on [metservice.com](https://www.metservice.com) [www.metservice.com/maps-radar/rain/radar/wellington], MetService apps and through MetService's commercial products.
- MetService is designated as New Zealand's only severe weather forecasting and warning authority and the national weather radar network plays an essential role in the delivery of public-safety services.

- MetService operate a network of ten radar throughout the country in Northland, Auckland, Bay of Plenty, Taranaki, Hawkes Bay / Gisborne, Wellington, West Coast, Canterbury, Otago and Southland.