



Thursday 28 November 2024

New Canterbury weather radar will provide improved services

MetService's Canterbury weather radar is back in action by midday today after undergoing a complete replacement over the past nine weeks. The new radar will provide improved services to communities in the Canterbury region.

The 3.5-million-dollar project involved the demolition of the 30-year-old radar and concrete tower, then installing a stronger 19-metre-high steel tower and the new radar on top. The replacement is part of our ongoing investment in the New Zealand weather radar network, funded through our contract with the Ministry of Transport.

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

MetService Chief Executive Stephen Hunt says, "The new radar technology will provide more detailed weather information for the Canterbury region. Our meteorologists will use this to enhance our weather forecasting and severe weather warning services for central South Island communities, and for aviation, and civil defence agencies. We are aware that the Canterbury radar is well loved by the region and are pleased to be able to deliver improved services through this leading-edge technology."

The radar site, located three kilometres south of Rakaia provides coverage out to 300 kilometres encompassing all the Canterbury region, the central Southern Alps and parts of Marlborough and Otago.

Kevin Alder, General Manager Observing Systems who oversees MetService's weather observation network says, "It can pick up the size of the droplets and their density which means we can determine rainfall rates in real time."

"Aside from its forecasting value to our meteorologists, the new rain radar will deliver significant benefits to hydrologists and emergency management staff in Environment Canterbury," adds Kevin.

The aviation community also benefits from the new radar technology as it provides enhanced information on significant weather hazards. In particular, the radar can more accurately identify areas where icing may occur on aircraft flying through clouds – we will now be able to better provide warnings to airlines to avoid these areas.

The radar imagery is very popular on 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. So, we'd like to thank everyone for their patience while it's been offline for this important upgrade," says Kevin.

The project has been 15 months in the making given the radar itself comes from Vaisala in Finland and the radome, which encases the technology, is from Italy.

"Our engineers and project team, along with Wellington-based Acme Engineering have done a great job to replace the radar well within in the planned three-month timeframe, ensuring it was only offline for the for the shortest amount of time," says Kevin.

"We are delighted the radar project is now complete, ahead of schedule. This is the seventh radar in our network of ten radars that now operates dual polarisation technology. The Auckland Radar near Warkworth is next in line to be replaced which will take place in early 2027," says Stephen.

"As New Zealand's authorised provider of severe weather warnings, we are always looking to continually improve our national observation network and enhance our forecasting abilities for Aotearoa New Zealand. This is imperative as climate change continues to increase the severity of weather impacts," Stephen adds.

Ends

Notes:

- 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 operates a network of ten weather radars throughout the country in Northland, Auckland, Bay of Plenty, Taranaki, Hawkes Bay / Gisborne, Wellington, West Coast, Canterbury, Otago and Southland.
- All New Zealand radar imagery is updated every seven and a half minutes, and is available on metservice.com, MetService apps, and through MetService's commercial products.