

## New Zealand weather and climate news

*(MetService focus)*

### Your weather: Flights cancelled as heavy fog blankets Auckland

Auckland is waking to a blanket of heavy fog, prompting warnings to motorists and cancelling and delaying flights for the second day in a row.

### Flight cancellations, delays as fog blankets Nelson

Several flights in and out of Nelson Airport have been delayed or cancelled on Thursday morning as heavy fog envelopes the city.

### Weather radar to be installed at Hindon, operational by May

Otago Daily Times

MetService confirmed yesterday it had this week signed an agreement with a Hindon landowner and hoped to begin construction of the device at the ...

### Driest June on record for Waimate, Oamaru

Stuff.co.nz

Waimate and Oamaru have just recorded their driest-ever June, while Timaru was not far off. Monthly climate summaries from the National Institute of ...

### Settled weather to make way for stormier July in Whanganui

New Zealand Herald

After a wet start, Whanganui's weather was settled in June but MetService is expecting a stormier July. This follows a warm May changed when winter ...

## **WMO**

### European heatwave sets new temperature records

An unusually early and intense heatwave has set new temperature records in Europe, posing a major threat to people's health, agriculture and the environment. Initial reports indicated that...

Extreme weather (and other news) – Australia and Pacific

### World Bank to prioritise climate change resilience in Pacific

The World Bank will prioritise climate change resilience when working with Australia and New Zealand on their Pacific engagement programmes.

Extreme weather (and other news) – Asia and the Middle East, Africa

Indian is trying out IBM's artificial intelligence platform to offer weather forecast and soil moisture ...

Business Insider India

IBM's Watson Decision Platform will give solution in the field of agriculture through Artificial Intelligence (AI) and weather technology at village ...

Temperatures in Singapore could hit 40°C as early as 2045: Scientists

TODAYonline

'Level 1' alerts were issued by the Malaysian Meteorological Department to as many as 10 areas when the mercury hit maximum temperatures of ...

Monster tornado rips through city in China, killing 6 and injuring 190

**AccuWeather.com**

"It [Kaiyuan] is flat area at the latitude of Tornado Alley of the United States," AccuWeather Meteorologist Jim Andrews said. While tornadoes in this ...

Japan back on alert for drenching rain, mudslides less than a week after deadly flooding

AccuWeather.com

Parts of Japan are bracing for more flooding after downpours triggered deadly mudslides and flooding last week. ... Interactive Japan weather radar

CSIR to provide weather monitoring support to Transnet

defenceWeb

The Council for Scientific and Industrial Research (CSIR) has signed a three-year, multimillion-rand contract with Transnet National Ports Authority ...

Extreme weather (and other news) – Americas and Europe

90-degree heat stifles Anchorage for first time in its history as sweltering heat wave grips Alaska

AccuWeather.com

The previous record of 85 degrees Fahrenheit was set in 1969. ... According to records kept by the National Weather Service (NWS), Alaska is no ...

Mexico, Colombia, Chile, Peru eye bond for extreme weather: minister

The Guardian

By Marco Aquino. LIMA (Reuters) - Mexico, Colombia, Chile and Peru plan to work with the World Bank to launch a new bond to cover losses in the ...

Met Office looking for new weather observation site following closure of Gravesend-Broadness

...

Kent Online

Met Office spokesman Nicky Maxey said: "Planned changes to the site, including the possible development of a new theme park, meant the site would ...

International news and research

Why do we still not trust the weather forecast?

Telegraph.co.uk

The ECMWF is a world leader, but it's not an outlier. Look at the figures: weather forecasts have been getting consistently better for 40 straight years.

The subtle art of weather diplomacy

The Globe and Mail

This trajectory shows no sign of slowing, thanks to continual incremental improvements in the instruments that measure the weather from satellites and ...

Media Files: Washington Post weather editor Jason Samenow on how weather coverage is evolving – and building audience growth

When he founded the blog CapitalWeather.com 15 years ago in Washington DC, Jason Samenow was working for the US government as a climate change analyst. A full-time media career was probably the last thing on his mind.

Predicting weather is hard: A brief history of the National Center for Medium-Range Weather ...

Firstpost

A weather forecasting centre receives terabytes of such data each day to initiate its weather forecasts which must be quality controlled by the ...

[AI tool predicts extreme weather correctly from cloud patterns 99 percent of the time](#)

Firstpost

Their model looks at the movements of the clouds from satellite images since meteorologists cannot possibly look at all the numbers and data.

[Machine Learning to Predict Severe Weather](#)

EconoTimes

However, with expanding weather data set and looming deadlines, it is ... the data in time-sensitive applications such as severe-weather forecasting.

5G network

[5G: hype vs reality – Expert Q&A](#)

Scoop.co.nz

The 26 GHz band is also being looked at for 5G use and this is the band that MetService are concerned about because of its close proximity to the ...

Business/Insurance

[A British supermarket is blaming wet weather for 'pretty dire' sales of barbecues and paddling pools](#)

Business Insider

A British supermarket is blaming bad weather for disappointing sales of ... of some half-decent weather has clearly been a drag on the business." ...

**[Energy and Mining](#)**

[Natural Gas Futures Slip as Surging Production Battles Bullish Weather Trends](#)

Natural Gas Intelligence

“Current Genscape estimates suggest gas demand for power generation this week will average 38.3 Bcf/d, but next week gas demand for power is ...

#### Singapore plans huge 50MW floating solar project

Singapore’s national water agency will work with Norwegian technical consultancy DNV GL to develop what will be one of the largest single floating solar systems in the world – a 50MW project planned for the Tengeh Reservoir in the island’s north-west.

#### Solar farm under consideration would be biggest in the country

Refining New Zealand is considering spending up to \$39 million to build the country's largest solar farm next to its oil refinery in Northland.

### **Government (regional and national)**

Subject: Parliament Alerts: Call for public submissions

The following documents matching your alert criteria have been published.

10 Jul 2019 - Climate Change Response (Zero Carbon) Amendment Bill

Public submissions are now being invited on this Bill

### **Hydrology / Flooding**

Pacific Alliance plans a new bond to cover hydro-meteorological events

MercoPress

“What we're going to do is design a new bond that's not just for earthquakes, but for hydro-meteorological events, climate, the el Nino phenomena,” ...

### **Lightning**

Earth Networks Releases 2019 Mid-Year Lightning Report

Yahoo Finance

... mitigate financial, operational and human risk by providing environmental intelligence from the world's largest hyperlocal weather network. Schools ...

One fatality reported after lightning strike hits 12 people during Independence Day celebration

AccuWeather.com

As many as 12 people were struck by lightning, four of which were unresponsive, according to the Emergency Management report. The incident ...

### Artificial intelligence used to predict lightning strikes

Digital Journal

The system is designed to help with weather forecasting and for taking ... Through the new technology, which was developed by researchers at ...

### After the strike: The physical and psychological toll of lightning strikes

AccuWeather.com

We have updated our Privacy Policy and our Cookie Policy. Please review them. CONTINUE.  
Get AccuWeather alerts right in your browser!

Transport/roading/shipping/freight

### Ship IoT Tech Enables Navigation Safety

MarineLink

Now a similar concept is coming into the shipping industry. Danelec ... Weather events can include high winds and heavy weather on the ship's route.

Innovation and technologies (inc data and new products)

### San Fernando LGU develops weather forecasting app

Sun.Star

CITY OF SAN FERNANDO -- The City Government here, through its Disaster Risk Reduction and Management Council (DRRMC), has developed an ...

### New computer chip could speed up scientific discoveries by 1000 times

Daily Times

A new type of computer chip that makes data operations 1,000-times faster could ... The design allows for drastically more efficient modelling of data, meaning it would be useful fo weather forecasting and predicting climate change.

### Climate change / global warming / sea level rise

### Historic landfill sites across Nelson Tasman at risk of sea level rise

Almost 20 historic landfill sites in the Tasman district are at risk of being exposed by storm surges and sea level rise.

Information from local councils show there are 20 closed landfills across Nelson and Tasman, 18 of which are located on the coastline or near rivers and estuaries.

### Welcome to the fastest-heating place on Earth

In the world's northernmost town, temperatures have risen by 4C, devastating homes, wildlife and even the cemetery. Will the rest of the planet heed its warning?

## **Journal and articles online**

### Using weather sensitivity analysis to predict business performance

Hannah Brown, Malcolm Lee, Edward Steele, Robert Neal, Katie Chowienczyk

Pages: 231-236 | First Published: 05 July 2019

Ultimately, the goal for any corporate decision-maker is to understand the key influences on their business performance in sufficient detail to enable them to predict it. Of the many possible influences, weather is frequently cited for its impact on operations and profits, affecting both supply (e.g. products) and demand (e.g. consumer behaviours). The application of weather sensitivity analysis techniques quantifies the effects of weather on business performance, which in turn can lead to the development of predictive demand models.

### How important are aerosol–fog interactions for the successful modelling of nocturnal radiation fog?

C. Poku, A. N. Ross, A. M. Blyth, A. A. Hill, J. D. Price

Pages: 237-243 | First Published: 25 April 2019

Schematic demonstrating the three stages of the evolution of nocturnal radiation fog: pre-fog, fog formation and fog development. Orange dots – CCN; light blue dots – water vapour; red arrows – radiative cooling; yellow arrows – convection.

### Probing the ‘grey zone’ of NWP – is higher resolution always better?

John C. Kealy

Pages: 246-249 | First Published: 16 May 2019

Although the advantages of continuously improving the resolution of weather models over the years have been palpable, an unwanted obstacle has now begun to emerge – the ‘grey zone’. This new regime is creating many issues for the simulation of convection and boundary-layer turbulence; the question is, what can be done about it?

What is the El Niño–Southern Oscillation?

Adam Scaife, Eric Guilyardi, Michelle Cain, Alyssa Gilbert, the RMetS Climate Science Communications Group

Pages: 250-251 | First Published: 23 January 2019

## **Meteorological Applications**

### Accepted Articles

Accepted, unedited articles published online and citable. The final edited and typeset Version of Record will appear in the future.

Effect of Background Error Tuning on Assimilating Radar Radial Velocity Observations for the Forecast of Hurricane Tracks and Intensities

Dongmei Xu, Feifei Shen, Jinzhong Min

First Published: 04 July 2019

Developing a hazard impact model to support impact-based forecasts and warnings: The Vehicle OverTurning Model

Rebecca Hemingway, Joanne Robbins

First Published: 03 July 2019

Multi-model ensemble predictions of aviation turbulence

Luke N. Storer, Philip G. Gill, Paul D. Williams

Pages: 416-428 | First Published: 12 November 2018

Plot of a moderate or greater turbulence event with the Met Office Global and Regional Ensemble Prediction System (MOGREPS) turbulence forecast.

---

My latest WeatherEyes from John Maunder

<https://www.sunlive.co.nz/blogs/13536-auranga-june-average-afternoon-temperatures-19132019.html>

<https://www.sunlive.co.nz/blogs/13516-auranga-june-rainfalls-18982019.html>