

## **New Zealand weather and climate news**

### **Courtesy of MetService Library**

#### **MetService mentions**

#### **Severe thunderstorm watch in place for parts of Northland and Auckland**

A severe thunderstorm watch has been issued for parts of Northland and Auckland with rainfall of up to 40 millimetres per hour possible.

#### **Summer is ending but the good weather is sticking around**

New Zealand Herald

**MetService** said the country would wrap up summer with a moist final few days, making nights muggy and warm. Meteorologist Alwyn Bakker told the ...

#### **Summer ends with warm, dry weekend for many - first week of autumn could be wet**

Stuff.co.nz

**MetService** is forecasting a mainly fine Saturday in the North Island, with some showers in elevated areas and places north of Waikato. The South ...

#### **Thirteen flights cancelled due to fog in Wellington, five others diverted**

Stuff.co.nz

A **MetService** spokesman said the fog and low cloud was due to lift in the next couple of hours. If this story had an impact on you, please become a Stuff ...

#### **Wellington fog causes flights delays**

New Zealand Herald

"We usually get a clear view of central Wellington and the harbour from the roof here at **MetService** but that's not the case this morning," **MetService** ...

#### **Your weather: Summer to last just a little longer with warm, dry conditions into Autumn**

New Zealand Herald

Overnight temperatures have also been high, which **MetService** meteorologist Peter Little said was due to a warm northeast flow, light winds and cloud ...

## WMO

### Report shows insufficient climate action plans

UN Climate Change has published an initial assessment of Nationally Determined Contributions, the NDC Synthesis Report, showing nations must redouble efforts and submit stronger, more ambitious...

### Typhoon Committee holds annual session

The Typhoon Committee, a joint body of the United Nations Economic and Social Commission for Asia and the Pacific and the World Meteorological Organization, has just held its 53rd annual session,...

## Extreme weather (and other news) – Antarctica and offshore

### Extreme melt on Antarctica's George VI ice shelf

Posted: 25 Feb 2021 08:33 AM PST

Antarctica's northern George VI Ice Shelf experienced record melting during the 2019-2020 summer season compared to 31 previous summers of dramatically lower melt, a new study found. Using satellite observations that detect meltwater on top of the ice and within near-surface snow, the researchers found the most widespread melt of any season. Surface meltwater ponding is potentially dangerous to ice shelves because when these lakes drain, the ice fractures and may trigger ice-shelf break-up.

## Extreme weather (and other news) – Australia and the Pacific

### Australia facing months of miserable autumn weather

The Weekly Times

“La Nina is past its peak with the tropical Pacific likely to return to ENSO (**El Nino** Southern Oscillation) conditions during the autumn,” said BOM senior ...

## **Family honoured for 100 years of service to Bureau of Meteorology say past 10 years one of the driest**

A Queensland family honoured for 100 years of service to the Bureau of Meteorology as rain observers say the past 10 years have been the driest on record.

## **New Zealand research**

### **THE RESEARCH WORKFORCE OF AOTEAROA NEW ZEALAND**

Research Community Workshop Briefing Paper and Workshop Outcomes 30 November 2020

This paper sets out to stimulate new thinking about the overall research workforce of Aotearoa New Zealand and the associated research labour market for progression into long-term employment. It is divided into five parts. The first three consider a long-term trajectory of the workforce, setting aside the impacts of COVID-19. In the fourth section, those impacts are briefly considered. The final part sets out the outcomes from the workshop. [Read more](#)

## **International news and research**

### **Traditional Hydrologic Models May Misidentify Snow As Rain**

Normally, we think of the freezing point of water as 32°F – but in the world of weather forecasting and hydrologic prediction, that isn't always the case. In the Lake Tahoe region of the Sierra Nevada, the shift from snow to rain during winter storms may actually occur at temperatures closer to 39.5°F, according to new research from the Desert Research Institute (DRI), Lynker Technologies, and citizen scientists from the Tahoe Rain or Snow project.

### **How We Can Better Predict **Weather** Catastrophes**

The New York Times

That's not to say scientists haven't significantly improved **weather** forecasting. They have, thanks to government and private investments in **satellite ...**

## **Alaska thunderstorms may triple with climate change**

Posted: 23 Feb 2021 10:55 AM PST

Warming temperatures will potentially alter the climate in Alaska so profoundly later this century that the number of thunderstorms will triple, increasing the risks of widespread flash flooding, landslides, and lightning-induced wildfires, new research finds.

### **Gulf Stream System at its weakest in over a millennium**

Never before in over 1000 years the Atlantic Meridional Overturning Circulation (AMOC), also known as Gulf Stream System, has been as weak as in the last decades. Researchers compiled proxy data, reaching back hundreds of years to reconstruct the AMOC flow history. They found consistent evidence that its slowdown in the 20th century is unprecedented in the past millennium.

### **Scientists Use Weather Radar Tech to Watch Storms of Microbes Brew Inside Cells**

ScienceAlert

Scientists are using a radar-like weather system to watch as a storm of ... and relies on a technique very similar to **Doppler radars**, which can detect the ...

### **El Niño impacts the precipitation recycle ratio over the Tibetan Plateau at interannual timescale**

Phys.Org

"In the **El Niño** decaying summers, the large-scale anomalous anticyclone spans over the Indo-Northwest Pacific and the westerly anomalies along the ...

### **DoD focus on climate could shape future investments in weather satellites**

SpaceNews

... primarily responsible for **weather forecasting** is the Air Force 14th Weather Squadron, based in Asheville, N.C. The squadron uses **data** from ground ...

### **Weather companies**

ClimaCell, an ambitious private weather firm, plans to launch its own satellites

Washington Post

ClimaCell, a growing private **weather company** based in Boston whose customers include airlines, maritime shipping firms and everyday consumers, ...

## StormGeo Providing **Weather Forecasting Services** for Changfang & Xidao OWFs

Offshore WIND

StormGeo Providing **Weather Forecasting Services** for Changfang & Xidao OWFs. February 24, 2021, by Adrijana Buljan. StormGeo has been selected ...

## Aviation

### Sky'S The Limit: Weather Services Project Offers Key To Help Treasury

Bahamas Tribune

“Currently, there is virtually no real time **aviation** tracking, reliable **weather** data or inflight information being provided to **flight** crews in Bahamian air ...

## **Business/Insurance**

### New Zealand sees \$185 million in insured weather-related losses

Business Insurance

The **Insurance** Council of New Zealand said that extreme **weather**-related insured losses reached a record high of \$248 million New Zealand (\$185 ...

## Communications/social media

### TVNZ set to spend most on local content in a decade

New Zealand Herald

TVNZ boss Kevin Kenrick says the company is set to spend big on content in the second half of this year. "Our investment in local content will be the ...

## History

### Weatherwatch: how forecasts emerged in medieval times

The Guardian

By the 14th century, weather observations were studied alongside planetary data to produce “rules” for weather forecasting. Weather prognostications ...

## **Tourism**

Whakatane Tourism launches cheeky sunniest place in the world campaign

Voxy

Most New Zealanders familiar with Whakatāne know it as the home of Whakaari/**White Island**. However, Nicola says there's much more on offer.

## **Weather in pictures**

Incredible Image of Blue and Red Lightning Captured by Hawaii Telescope

The Weather Channel

Peter Michaud, the education and engagement manager for the NOIR Lab, told **Business Insider** that the telescope's cameras, used to track **weather**, ...

## **Journal and articles online**

**Simultaneous Observations of Turbulent Reynolds Stress in the Ocean Surface Boundary Layer and Wind Stress over the Sea Surface**

Chuan Jiang Huang, Fangli Qiao

e2020JC016839 | First Published: 18 January 2021

### **Key Points**

Turbulent Reynolds stress in the ocean boundary layer is affected greatly by surface waves

Ocean boundary layer turbulent Reynolds stress can be greater than wind stress over the sea surface

A combination of the synchrosqueezed wavelet transform and a moving average filter was used for wave-turbulence decomposition

**A data assimilation algorithm for predicting rain**

Tijana Janjić, Yvonne Ruckstuhl, Philippe L. Toint

First Published: 15 February 2021

**For fun**

**Monsoons and Typhoons**

Test your knowledge in this quick quiz

<https://www.asianz.org.nz/quiz/monssons-and-typhoons/>

=====