

New Zealand weather and climate news

Courtesy of MetService library

MetService mentions

Heavy rain predicted for much of the country

Stuff.co.nz

MetService says heavy rain is forecast for the ranges of Buller and Nelson, west of Motueka, from 3pm today until midnight. A front is moving east over ...

'Pulse of wet weather' to hit Auckland early this week

New Zealand Herald

MetService meteorologist Alwyn Bakker says a high pressure system over the entire country held off rain last week but showers will patter many cities ...

Weather: Warnings issued as 'tropical air' steams towards New Zealand

Newshub

"After a stretch of mild, cloudy but mostly dry weather a low is barreling this way during the weekend," **MetService** says. "A lot of South Island areas will ...

New radar helps flood officers

Otago Daily Times

The **MetService's** new rain radar station near Hindon in Otago proved "extremely valuable" during the recent heavy rainfall event which left much of ...

Warm Nights On The Horizon

Scoop.co.nz

MetService is forecasting an end to the relatively settled conditions over Aotearoa during the weekend, as the ridge of high pressure over the country ...

How much Canterbury flood damage was caused by climate change

Stuff.co.nz

Since then, MBIE has funded the **Extreme Weather Event Real-time Attribution Machine** – a three-year, year, \$1 million research programme – that ...

Wet weather ahead as low that caused big Oz storm arrives

The same low pressure system that brought snow to Australia last week is wheeling into New Zealand – but now it's packing a much milder, albeit wetter, flavour.

MetOcean

Climate change is making ocean waves more powerful, threatening to erode many coastlines

Sea level rise isn't the only way climate change will devastate the coast. Our research, published today, found it is also making waves more powerful, particularly in the Southern Hemisphere.

Scientists Set Sail On Northland Ocean Research Expedition

A team of 15 scientists, artists and students will embark on a 14-day expedition between Auckland and Opuia, stopping for outreach events in Leigh and Whangarei.

Marine Indigenous Knowledge Crucial For Solving Global Challenges

World Oceans Day has seen Aotearoa New Zealand's government acknowledge that protecting our seas can safeguard us from climate, food and biodiversity challenges.

WMO

The Future of Weather and Climate Services

Posted:

WMO has held a top-level dialogue session on the future of weather and climate forecasting as part of its ongoing drive to strengthen collaboration and Public-Private Engagement (PPE) in order to...

Warmer than average summer forecast in the Arctic

Posted:

Above normal air and sea-surface temperatures are expected over the majority of the Arctic regions in June, July, and August 2021. Lower to near normal ice cover is the predominant forecast while...

Greater Horn of Africa climate outlook

Posted:

The upcoming rainfall season, June to September is an important rainfall season for Djibouti, Ethiopia, Eritrea, South Sudan, Sudan, and Uganda. For some of these countries, it is the main farming...

Ecosystem restoration is vital for climate, biodiversity

Posted:

Facing the triple threat of climate change, loss of nature and pollution, the world must deliver on its commitment to restore at least one billion degraded hectares of land in the next decade – an...

Seasonal outlook issued for Southeast Asia

Posted:

The ASEAN Climate Outlook Forum (ASEANCOF) has issued its seasonal forecast for June-July-August 2021 for Southeast Asia, taking into account the end of the La Niña event and the Indian Ocean Dipole...

Regional Association for Asia supports WMO priorities

Posted:

The World Meteorological Organization (WMO) Regional Association for Asia (RAII) has held a virtual session with a focus on how to improve service delivery, disaster risk reduction, and climate...

Volcano alert/watch

Mt Ruapehu crater lake temperature lowers after reaching 40C

New Zealand Herald

In December, Geonet raised the Volcanic **Alert** Level of the mountain to two, indicating a heightened risk of volcanic eruption. Mt **Ruapehu's** crater lake ...

Short burst of seismic activity detected at Whakaari/**White Island**

New Zealand Herald

A short, low-energy volcanic tremor was detected at Whakaari/**White Island** at 4am on Tuesday, June 1. GNS Science's on-duty volcanologist said the ...

Volcanic activity worldwide 9 Jun 2021: Etna volcano, Karymsky, Krakatau, Semeru, Reventador ...

VolcanoDiscovery

White Island (New Zealand): An elevated volcanic tremor was recorded on 1 June starting about 04:00 local time that lasted approx. 2 hours.

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

Coldest day in 37 years causes 'sea smoke' on famous waterway

Yahoo News

The fog on Sydney Harbour delayed some harbor ferry services and a **road weather** alert was issued by the Bureau of Meteorology for hazardous ...

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

Asia: Above normal cyclone landfalls predicted till Sep for East China, South China, and Vietnam

Asia Insurance Review

... above-normal activity is consistent with the **El Nino**–Southern Oscillation (ENSO) neutral conditions which follow a weak to moderate La Nina year.

Extreme weather (and other news) – Americas and Europe

UK heatwave: Searing heat to hit Britain before 'real change' - Atlantic system barrels in

Daily Express

Saturday will also be very warm for England, Wales and most of Scotland, with widespread temperatures reaching 25C, according to **Met Office** ...

Calgary's 2020 hailstorm is Canada's 4th costliest natural disaster

The Weather Network US

Kyle Brittain, a video journalist at The **Weather Network**, was at the scene. He captured a row of cars that were heavily damaged by hail. The stones also ...

International news and research

UTA team to test geothermal de-icing technique on working bridge

De-icing system moving from test site to Texas bridge

24000-year-old microorganisms thawed from Siberian permafrost

The Weather Network

Remarkably, the tiny creatures aren't even the oldest beings to be successfully returned to life after spending millennia in the deep freeze.

Study of Hurricane Harvey flooding aids in quantifying climate change

Posted: 10 Jun 2021 10:56 AM PDT

Researchers used a hydraulic model to consider the degree to which human-caused climate change may have affected flooding in Houston in 2017 during Hurricane Harvey. Resources were used to quantify the increase in Houston flood area and depth and to host a portal where other scientists and the public can access and explore the resulting data.

Improved climate resilience through better seasonal forecasts

Posted: 10 Jun 2021 10:56 AM PDT

Lack of water, floods, or crop losses: As a result of climate change, pronounced periods of drought and rainfall are causing human suffering and major economic damage. Precise seasonal

forecasts can help to mitigate these consequences. A research team has now been able to improve global forecasts using statistical methods so that they can be used on the regional level.

The rocky road to accurate sea-level predictions

Posted: 10 Jun 2021 10:56 AM PDT

The type of material present under glaciers has a big impact on how fast they slide towards the ocean. Scientists face a challenging task to acquire data of this under-ice landscape. Choosing the wrong equations for the under-ice landscape can have the same effect on the predicted contribution to sea-level rise as a warming of several degrees, according to researchers.

World Oceans Day: Recounting Journey of Floating Data Buoys on Indian Ocean That ...

The Weather Channel

Over the past decade, **weather** forecasting has improved manifolds, thanks to the latest **technologies** being imbibed into the system. On this occasion of ...

University of Reading: Weather Prediction Game Challenges Public To BEAT The Scientists

India Education Diary

An interactive **weather forecasting** game has returned, allowing everyone from amateur meteorologists to school pupils ... students spent part of their degrees, and Nanjing University of Information Science and **Technology** in China.

Landslide caused mysterious flood in India

A flood that killed at least 200 people and damaged two hydroelectric power plants in February was caused by a massive avalanche of rock and glacier ice. Researchers used satellite images, eyewitness accounts and computer models to discover that an unusually fluid mix of water and material crumbled from the steep face of a mountain called Ronti Peak, dropping several kilometres at speeds of up to 60 metres per second. A 500-metre scar on the face of Ronti Peak, captured by satellite, shows the scale of the landslide.

Meteorologists Improve Multivariable Integrated Evaluation Method for Climate Model

Mirage News

The Multivariable Integrated Evaluation (MVIE) method can help **meteorologists** to quantitatively evaluate the overall performance of a climate model ...

Nobody knows exactly how tornadoes form — and the mystery can be deadly

Vox

This is one of the most frustrating, stagnant problems in **meteorology**. ... The problem is that **meteorologists** can look at two supercell thunderstorms ...

Weather companies

TPG invests \$100 million in Climavision, a new **weather company**

Axios

... escalating weather and climate risks, from well-established and deep pocketed players like IBM (which owns The **Weather Company**) to expanding ...

The perfect storm: How to survive the erosion of consumer trust and the shifting tides of privacy

The Drum

And while The **Weather Company's** chief executive officer Sheri Bachstein is used to preparing for storms, she says it's the multiple headwinds coming ...

Future of Weather and Climate Services

Mirage News

... The **Weather Company**, IBM, discussed the Global high-Resolution Atmospheric Forecast (GRAF) System: Advancing Numerical Weather Prediction ...

How a Louisville **weather** startup plans to use a \$100M investment to improve forecasting

Courier Journal

The Kentucky native and U.S. Air Force veteran spent more than a decade with what is now the **Weather Channel** family of companies, owned by IBM, ...

Monitoring Energy Usage at **Met Office** HQ

ThisWeekinFM

10 June 2021. Ralph James, FM & Technical Services Manager at the **Met Office**, explains how the latest sensor technology has allowed him to monitor ...

Aviation

As Aviation Digitizes, Leaders Stress Need for Accuracy

Aviation International News

“We are in the very early stages of digitizing **aviation** and automation will ... Shay Har-Noy, general manager of space-based **flight** and **weather** data ...

Alaska Airlines is using artificial intelligence to craft more efficient flight plans

Popular Science

They'll be thinking about dynamic factors like the **weather**, wind, or off-limits military airspace. “To get all this information, they have to go through these ...

European Aviation Safety Agency Proposes Use of New Technologies to Support All-Weather

...

HSToday

... update the regulatory framework applicable to all-**weather** operations (AWOs) and flight crew training to allow the application of latest **technological** ...

Business/Insurance

Wild weather costing Canadians billions – but brokers can help

Insurance Business Canada

“Climate change is real, and **insurance** brokers know this,” she said. “That's why we're working with clients to help them find ways to lower their costs ...

Here's How You're Already Paying for Climate Change

U.S News & World Report Money

The consequences of extreme **weather** are varied across regions, but ... The cost of **insurance coverage** for extreme events such as fire and flood may ...

Bank of England launches climate stress test for banks and insurers

Reuters

... of London **insurance** market, to stresses from the shift to a net zero-carbon economy over coming decades as well as the impact of extreme **weather**.

Tropical cyclone risk assessment using GIS mapping

Geospatial World

... both clients and **insurance** agencies rarely get relevant **weather**-related data in a timely manner. This is where using GIS mapping for **insurance** risk ...

Using Satellites to Fight **Business** Disruptions Caused by **Weather**

Bloomberg

Using Satellites to Fight **Business** Disruptions Caused by **Weather**.

NSW study flags **insurance** options to protect farmers

Insurance News

Investing in weather data and technology to reduce basis risk, removing stamp duty on agricultural **weather insurance** to make products more ...

UK retail sales in May saw highest rise since start of Covid crisis

The Guardian

The **company** said footfall on UK high streets was up by 17% on the ... said a combination of the bank holiday, good **weather** and the school break had ...

Climate change / global warming

Mirror Books to publish ITV **meteorologist** Tobin's guide to climate change

The Bookseller

Mirror Books will publish a guide to reducing your carbon footprint from ITV **meteorologist** and climate change expert Laura Tobin. In the currently ...

Ināia tonu nei: a low emissions future for Aotearoa

Government of New Zealand

9 Jun 2021 | Report | Environment

This report outlines the Climate Change Commission's first advice to government on climate action in Aotearoa. The advice in this report details the paths Aotearoa can take to meet its climate targets.

[Feeling the heat: the fate of nature beyond 1.5°C of global warming](#)

World Wildlife Fund (United Kingdom)

3 Jun 2021 | Report | Environment

This report highlights twelve species that are experiencing the devastating impacts of climate change, and outlines how their future depends on humanity's urgent response to the environmental crisis.

[Kaumātua says climate change affecting Tītī harvest](#)

Ngāi Tahu kaumātua Michael Skerrett says muttonbirding has been affected by climate change.

He has been going to the islands for over 65 years and says his world revolves around the tītī.

[Inside the Climate Commission's modelling – Expert Q&A](#)

[Expert Q&A](#) | Published: 08 June 2021

The Climate Change Commission has drawn on several models to help shape its advice to government, which is due to be made public tomorrow. Two external reviewers explain more about the models – and how the results compare with overseas work.

[Climate Commission's final advice calls for step-up on climate action – Expert Reaction](#)

[Expert Reactions](#) | Published: 09 June 2021

Progress is underway to shift towards a low-carbon future – but more action is urgently required, the Climate Commission says in its [report to government](#).

[Clouds](#)

Earth from Orbit: Actinoform Clouds

WDRB

NOAA **satellites** captured actinoform clouds over the eastern Pacific Ocean on June 3, 2021. These collections of shallow clouds, organized in a ...

Communications/social media

How rain, wind, heat and other heavy weather can affect your internet connection

When your Netflix stream drops out in the middle of a rainstorm, can you blame the wild weather?

Energy and Mining

Team Applies **Power** of AI To Forecast **Energy Supply, Demand**

University of Texas at Dallas

Weather conditions also affect supply — solar panels generate less **electricity** on cloudy days and nothing overnight, while wind farms often produce ...

Farming/horticulture/Aquaculture

UK farmers prioritise renewable energy and agri-**tech**

The Scottish Farmer

... the use of high **tech** equipment on their farms, in particular advanced **weather forecasting**, DNA soil testing and drone mapping and crop spraying,

Stewart Island seaweed breakthrough could unlock **\$500m industry**

A scientific discovery that will allow seaweed to be grown commercially may fast track the seaweed farming industry in New Zealand that could potentially be worth \$500 million in the next seven years.

Fire

Rapid wind–terrain correction for wildfire simulations

James Hilton and Nikhil Garg

Wildfire simulations require high-resolution wind data to resolve terrain effects, but this is usually only available at coarse scales. We introduce a fast, simple downscaling method that produces comparable results to current methods. The method can be directly coupled to wildfire models allowing dynamic wind–terrain interactions to be modelled.

[Abstract](#) | [Full Text](#) | [PDF \(2.7 MB\)](#)

Recent Heatwave Fuels Wildfire Conditions: Highlights Need For Predictive **Technology**

Forbes

With this **weather**, comes an increased risk of wildfires across many regions of the country from California to the upper Midwest and even southern ...

History

Fitzroy and Richardson, **Weather Forecasting** Pioneers – 8/6/2021 – Marcelo Viana

KSU | The Sentinel Newspaper

From this **data**, Fitzroy made what he called “**weather forecasting**” a shocking concept for a time when meteorological weather was viewed as an act of ...

Innovation, Technologies and AI

India Moves Forward in the Race of **Artificial Intelligence**

Analytics Insight

... proof of concept pilot in 15 districts (counties) in India to use **artificial intelligence**-based real-time advisory based on satellite imagery, **weather** data, ...

The Forecast for Weather-Spotting Technology

Maritime Professional

Sofar Ocean, a San Francisco-based creator of marine instruments for **data** collection and **weather forecasting**, is determined to increase the collection ...

Weather app Dark Sky will shut down in 2022

Gearbrain

These will launch with iOS 15 this coming fall, and include new **weather graphics**, details about wind, barometric pressure and UV index. The native ...

Machine Learning Model Doubles Accuracy of Global Landslide 'Nowcasts'

Jet Propulsion Laboratory

Because terrain, characteristics of the rocks and soil, **weather**, and climate all contribute to landslide activity, accurately pinpointing areas most at risk

MIT Researchers Leverage **Machine Learning** for Better Lidar

Datanami

This helps protect the system against misleading inputs, such as messy lidar data during **weather** events. “By fusing the control predictions according to ...

Lightning

Recent lightning storm does damage to museum, rocks military vehicles

Pampa News

While wind, hail and tornadoes are often considered the primary threats with thunderstorms, lightning is often a forgotten one.

That will likely not be the case for a while for the staff and board members of the Freedom Museum USA in Pampa.

Satellites and radar

NASA **satellites** may vastly underestimate downpours

E&E News

A government scientist investigating Hurricane Maria's destruction said yesterday that NASA **satellites** may underestimate precipitation during major ...

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Welcome to AMS News You Can Use.

Each week, we send out a sampling of recent news and items of interest in meteorology and related fields, as covered by various media outlets.

Extreme rainfall: More accurate predictions in a changing climate

Phys.org - June 3, 2021

Regional Climate Models are high-resolution models of the Earth's climate that are able to improve simulations of extreme weather events that may be affected by climate change and thus contribute to limiting impacts through timely action.

There are so many cicadas hatching in the mid-Atlantic that they're being picked up by weather radar

Insider - June 7, 2021

The 17-year "Brood X" cicadas are hatching in such high numbers that they're being picked up by weather radar in Virginia.

Which way does the solar wind blow?

EurekAlert! - June 3, 2021

Using supercomputers, researchers develop new software for improved space weather prediction.

New study calls for 'national dialogue' on future environmental satellites

SpaceNews - June 8, 2021

The Aerospace study says a discussion on weather satellite investments could be elevated to White House-level bodies like USGEO and ICAMS.

Record-breaking temperatures more likely in populated tropics

ScienceDaily - June 2, 2021

New research shows that most extreme heat events are going to occur in the tropics rather than the poles.

World Ocean Day 2021: This is how climate change may alter 10 of the world's natural wonders

ABC News - June 8, 2021

Dryer climates, stronger storms and rising sea levels could destroy the sites.

Tornadoes Caused No Deaths This May in the U.S. for the First Time in Seven Years

The Weather Channel - June 7, 2021

May, typically the busiest month for tornadoes in the continental United States, saw a slightly above average number of twisters this year.

Chasing Cyclones from Space

Eos - June 2, 2021

The pioneering use of satellite-based synthetic aperture radar to characterize tropical cyclones in near-real time has provided a crucial new tool with which to forecast powerful storms.

Researchers Examine “Godzilla” – The Record-Shattering 2020 Trans-Atlantic Dust Storm

SciTechDaily - June 1, 2021

For two weeks in June 2020, a massive dust plume from Saharan Africa crept westward across the Atlantic, blanketing the Caribbean and Gulf Coast states in the U.S. The dust storm was so strong, it earned the nickname “Godzilla.”

Weather Eye with John Maunder

<https://www.sunlive.co.nz/blogs/15715-may-rainfalls-tauranga18982021.html>

https://thebfd.co.nz/2021/06/12/weather-eye-with-john-maunder-9/?utm_source=envelope&utm_medium=website&utm_campaign=SocialSnap

<https://www.sunlive.co.nz/blogs/15730-vikings-and-their-explorations-warmer-world.html>

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