

New Zealand weather and climate news

These clips come courtesy of MetService Library

MetService

Thunderstorms and heavy rain expected for rest of the week

"Auckland is probably seeing some pretty heavy showers during their morning commute," said MetService meteorologist Curtis Hayes.

Weather: 'Complex low' brings more rain and wind to New Zealand

Newshub

"Northwest gales may become severe in exposed places," MetService warns. Meteorologist Andrew James said the systems were expected to start ...

South Island to take battering as front hits

Otago Daily Times

A western front followed by a low-pressure system meant everywhere would get some wind and rain this week, MetService Meteorologist Andrew ...

Cold conditions lead to lingering snow and ice for Napier-Taupo Rd

New Zealand Herald

A dusting of snow is set to linger on some of Hawke's Bay's most high-altitude roads, with drivers urged to keep vigilant. MetService meteorologist ...

Heavy rain sees more than 20mm fall on Auckland's North Shore

Stuff.co.nz

Heavy rain saw more than 20 millimetres of rain fall on Auckland's North Shore on Tuesday night. MetService meteorologist Andrew James said a front ...

Fine weather to return to South Canterbury following heavy winds

Stuff.co.nz

Farris said that after Tuesday's strong winds the MetService had not "highlighted any areas of severe weather for South Canterbury out to Saturday at ...

Inside Metservice's \$1.7 million website rebuild

Reseller News

The Metservice.com website redevelopment was originally expected to cost \$1.17 million, but ended up costing \$1.7 million to incorporate significant ...

'Put us on the map': Hastings mayor fumes as MetService removes city from weather map

New Zealand Herald

MetService's new website has left Hastings, population 80,600, off its New Zealand weather map, and the city's mayor is not happy. New Zealand's ...

More cold weather on the way despite the cherry bloom

New Zealand Herald

MetService forecaster Paul Ngamanu said it was not surprising to see cherry blossoms start to bloom with spring around the corner, but a cold front ...

Black ice warning as temperature falls below zero

MetService meteorologist Sarah Haddon said the cool temperatures and fine conditions would likely stick around all day for most of the country, warming slightly in most areas.

Cold snap to bring snow, frosts and freezing overnight temperatures to the country

MetService meteorologist Andy Best said residents in the capital could expect "quite miserable conditions" with rain and cold southerlies on the cards.

Heavy rain prompts emergency response Levin

Flooding and heavy rain in Levin and Ōhau prompted the closure of four streets and the recommended closure of State Highway 1 near the Mobil service station on Oxford St on Saturday afternoon.

Tornado damages Taranaki houses

A tornado has damaged a number of houses in Awakino, north of New Plymouth.

Unsettled, cold August weather may blast into September too

MetService meteorologist Lewis Ferris said the negative value of SAM was a player in the current energetic weather.

Video captures controlled avalanche at Tūroa skifield

A controlled avalanche at Mt Ruapehu's Tūroa skifield has captivated audiences.

Chilly start heralds halt to spring-like conditions

Gisborne Herald

Meanwhile, MetService has issued a severe weather outlook that says ... MetService says at this stage there is low confidence snow might fall down to ...

Otago research shows ski passes still worthwhile

The recent arrival of snow across the country brought relief to ski fields, but as we enter the latter half of the ski season, is this lack of snow a sign of things to come? Should Kiwis continue buying annual ski passes?

MetOcean

Project to develop marine data toolbox for energy sector

International Water Power and Dam Construction

Central to this will be the expansion of Ifremer's flagship HOMERE metocean hindcast database, which currently only covers France and the English ...

Surf's up: Lyall Bay's biggest waves in 20 years

Wellington surfers braved the cold wind and took to the water to ride the biggest waves in 20 years today.

RESOURCECODE to develop marine data toolbox for energy sector

HydroWorld

RESOURCECODE will use partner data from the laboratory, state-of-the-art modeling techniques, satellite and the extensive metocean datasets held ...

Climate change may change the way ocean waves impact 50% of the world's coastlines

The rise in sea levels is not the only way climate change will affect the coasts. Our research, [published today in Nature Climate Change](#), found a warming planet will also alter ocean waves along more than 50% of the world's coastlines.

Roadmap for detecting changes in ocean due to climate change

When will we see significant changes in the ocean due to climate change? A new study finds that some changes are noticeable already, while others will take up to a century.

Others

Exceptionally rare warming above Antarctica may be affecting NZ's weather

Stuff.co.nz

Meteorologists are debating whether a sudden stratospheric warming (SSW) began earlier this month, putting a wobble into the polar vortex of ...

Extreme weather (and other news) – Australia and Pacific

Samoa met service puts together a glossary for forecasts

RNZ

The Samoa meteorology service has produced a Samoan glossary for forecasts. The head of the Samoa Meteorological Service, Mulipola Ausetalia ...

Prime Minister Jacinda Ardern announces \$150m Pacific climate funding

Prime Minister Jacinda Ardern is dedicating \$150 million to support climate change resilience in the Pacific.

Call for more investment to cope with extreme weather in Pacific

RNZ

The President of World Meteorological Office Regional Association 5 has called for significantly more investment into dealing with extreme weather ...

Weather again a blow to Samoa banana exports

Unpredictable weather in Samoa has dealt a blow to the export of bananas to New Zealand.

The country's largest commercial banana operation, Ah Liki Farms, had 30 percent of its crops deemed ready for export decimated by strong winds in July.

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

Thailand aims to reduce road accidents by 50% in 2020

The Thaiger

Thai transport authorities and police are aiming to reduce the rate of road accidents by half in 2020. They are aiming to meet the goal set by an ...

El Niño task force reactivated

Philippine Canadian Inquirer

The government's El Niño task force was reactivated earlier this week to address the impacts of the weather phenomenon in the country. On Tuesday ...

As Earth warms up, South India to bear the maximum brunt

Economic Times

Meteorologists say although the monsoon is regularly producing extreme rainfall in parts of the country, the mean rainfall has not been increasing over ...

Nigeria: Govt Moves to End Malpractices in Meteorology, Port Infrastructure

AllAfrica.com

Competent sources told THISDAY that the Nigerian Ports Authority (NPA) ... Ale, said weather reports were sent to relevant government agencies as ...

Global weather chaos shriveling Asia's crop production

Boswell Times

Global weather chaos shriveling Asia's crop production ... have wilted rice fields in Thailand and Indonesia and parched sugar cane plantations and ...

Asia Met President highlights the brilliant success achieved by KSA's General Authority of ...

ZAWYA

Abu Dhabi: His Excellency Dr Abdulla Al Mandous, President of the Regional Association (RA) of Asia II in the World Meteorological Organization ...

First dry spell in Singapore in more than 5 years: Met Service

CNA

SINGAPORE: Singapore is experiencing its first dry spell in more than 5 years, according to a Meteorological Service Singapore (MSS) advisory on ...

Tropical storm with Taiwan track could form tomorrow

Taiwan News

The latest models from the European Centre for Medium-Range Weather Forecasts (ECMWF), United States Global Forecast System (GFS), and ...

Extreme weather (and other news) – Americas and Europe

UK weather forecast: Heatwave to return at end of August - temperatures to rocket by 10C

Express.co.uk

The warmer weather is set to sweep in from the west on the last ten days of August following a few days of colder and wet conditions next week.

Torrential downpour in Turkey triggers deadly flooding

AccuWeather.com

The rain started to fall around noon local time, tapering off around 6 p.m., according to AccuWeather Meteorologist Courtney Travis. The downpour ...

A record-breaking Bank Holiday weekend?

After a rather unsettled couple of weeks, it's going to turn warm and sunny for many - just in time for the late August Bank Holiday weekend.

International news and research

Climbers must be trained to tackle Everest, panel says after deaths

Canada.com

A reliable weather forecasting system should be in place and rope fixing should be done in time, giving enough space for the climbers to use a ...

'Weather in tropics hard to predict'

New Straits Times Online

You have to look at weather data from two to three days ago, how it develops and obtain data from satellites, radars, observation stations, and data ...

A single hailstorm killed more than 11000 birds last week

The Weather Network

Saturday, August 17th 2019, 8:45 am - Severe weather left a deadly trail of destruction across parts of Montana last week.

Scientists assess reliability of multiple precipitable water vapor datasets in Central Asia

EurekAlert (press release)

Range Weather Forecasts (ECMWF), is the most reliable in revealing the spatiotemporal characteristics of precipitable water vapor (PWV) in Central ...

Using Artificial Intelligence to Better Predict Severe Weather

WeatherNation

[NOAA] When forecasting weather, meteorologists use a number of models and data sources to track shapes and movements of clouds that could ...

Warmer winters are changing the makeup of water in Black Sea

Warmer winters are starting to alter the structure of the Black Sea, which could foreshadow how ocean compositions might shift from future climate change, according to new research.

Data assimilation method offers improved hurricane forecasting

Operational models for severe weather forecasting predicted Hurricane Harvey would become a Category 1 hurricane in 2017. Instead, it became a massive Category 4 just before it made landfall, tying Hurricane Katrina for the costliest hurricane on record.

Iceland's Okjokull glacier dies aged about 700

Mourners are gathering in Iceland to commemorate the loss of Okjokull, which has died at the age of about 700.

[How will jet streams shape our weather in a warmer future?](#)

The Weather Network

This has been a summer of unusual weather across the northern hemisphere with many areas experiencing a rollercoaster of heat waves, with July ...

[Colorado: New monster record reminds how hailstorms can devastate and kill](#)

The Weather Network

Thursday, August 15th 2019, 11:53 am - Colorado's record breaking hail serves as a reminder of how easily hailstorms can turn deadly.

[Forces Network shines spotlight on RAF Akrotiri met office \(video\)](#)

In-Cyprus.com

The Forces Network has broadcast a special report on the met office at RAF Akotiri, the RAF's busiest base. "The United Kingdom is a nation obsessed ...

Aviation

[Problems at Civil Aviation Authority bigger than ex-chairman, industry says](#)

Aviation insiders want to see more change at the Civil Aviation Authority following the departure of chairman Nigel Gould.

[Rocket Lab's Look Ma, No Hands rocket launches](#)

Stuff.co.nz

The Electron rocket carrying four satellites took off from Rocket Lab's launch site on the Māhia Peninsula at 12.12am on Tuesday, in a mission ...

[Atlantic Cape debuts new degree in drones this fall](#)

Press of Atlantic City

The program includes courses like Aviation Weather, Aerial Video Production, Small Unmanned Aircraft Systems Maintenance & Repair, and a ...

How airlines and pilots prepare to fly in extreme weather

Business Insider

Airplanes often fly in extreme weather, but passengers may not realize how much preparation goes into each flight. Some major airlines have ...

Strategic Response Partners Launches Extreme Drone Division SkyForceX to Transform Weather ...

PRUnderground (press release)

Their new custom unmanned aircraft systems will employ innovative meteorological technology to help provide site-specific early warning severe ...

Business/Insurance

Demand-Supply Scenario of Weather Monitoring Network Market to Remain Balanced During the ...

Market Reports

Advancements in technology in the recent decades have also improved the overall weather monitoring network for a more precise outlook on the ...

Energy and Mining

Biral launches new capabilities for SWS visibility and weather sensors

Oil and Gas Middle East

With this additional surface protection, the SWS range can be used in all shoreline and off shore applications, such as at ports and harbours, ...

Qld's mining sector unites for safer sites

Mirage News

Delegates will hear from Russell White Managing Director of Driver Safety Australia, Brant North who survived a mine accident and has represented ...

How grid operators forecast weather and output from renewables

Utility Dive

Renewable energy weather forecasting requires more sophisticated ... through demand response, energy storage or other technologies, is needed to ...

Measuring solar stores of the Arabian Peninsula

Tech Xplore

To attract investment in solar energy technologies, however, requires a ... sky is essential for the optimal design of solar energy harvesting technologies, ... Centre for Medium-Range Weather Forecasts for the period 1980-2017 with ...

Optimizing mining feasibility studies: The \$100 billion opportunity

With mining and metals projects becoming increasingly complex, more rigorous feasibility studies help prevent cost and schedule overruns, and maximize value.

Asia's energy transition

The future of the energy sector in Asia will likely be driven by renewables and innovative energy technology.

Farming/horticulture/Aquaculture

LIC named top co-op

Rural News Group

Launched in 2017, Agrigate is a data sharing and exchange platform for New Zealand farmers. By connecting together data sets from Fonterra, LIC, ...

Health

Five ways climate change will damage people's health

The Weather Network

Tuesday, August 13th 2019, 8:01 pm - Healthcare providers and scientists are going to have their hands full trying to keep ahead of these intensifying ...

History

50th anniversary of Hurricane Camille

NBC 15 WPMI (press release)

In 1969 weather satellites were still fairly new technology. NOAA said the first successful weather satellite launched into orbit just nine years before ...

50 years later: Hurricane Camille was a 2-part disaster that remains 1 of the costliest storms ever

AccuWeather.com

"Most hurricanes weaken as they approach landfall, but Camille is the exception," AccuWeather Forensic Meteorologist Steve Wistar explained. "That's ...

Lightning

Breathtaking moment lightning strikes volcano on remote Russian island

The Weather Network

Lightning and volcanos are powerful forces of nature and photographer Martin Reitze was able to capture both at the same time. The video above ...

Lightning strike 'partly to blame' for power cut

Carbon Brief

In an "exclusive", the Guardian reports that the British government has privately appealed to senior Coalition ministers in Australia to develop a more ...

Lightning in a bottle: how we track this elusive force

The Weather Network

Lightning flashes and deep rumbles of thunder have mesmerized humans for thousands of years -
- we're the most primitive lightning detection ...

Protecting wind power one turbine at a time: the need for proper earthing and lightning protection

Creamer Media's Engineering News

Protecting renewable energy equipment from lightning strikes ... than, the lightning hot spots of north and south America, Asia and northern Australia.

Lightning strike to blame for massive UK power loss

A huge electricity blackout that left more than one million Brits in the dark earlier this month was caused by a lightning strike, according to preliminary findings presented by the country's grid owner on Tuesday (20 August).

Satellites and radar

Polish solutions to test European meteorological satellites

The First News

The last of eight Polish devices to be used for testing new-generation European meteorological satellites under the European Space Agency's (ESA) ...

Tourism

Former Prime Minister Helen Clark challenges tourism on climate

Helen Clark has sounded a warning over the country's growing tourism industry and what it means for climate change.

Transport/roading/shipping/freight

CustomWeather Introduces CW Voyage Marine Weather Route Solution

AiThority (press release) (blog)

CustomWeather, Inc., a premier, specialized provider of high-resolution weather data and alert services, is pleased to announce the availability of its ...

Innovation and technologies and AI

A novel forecasting tool helps experts prepare for extreme weather

Phys.Org

A novel forecasting tool helps experts prepare for extreme weather ... climate predictions with renewable energy production and electricity demand.

NOAA Betting on 'EPIC' to Drive US Weather Forecast Innovation

FYI: Science Policy News

In a bid to regain global leadership in weather forecasting, the National Oceanic and Atmospheric Administration is establishing an Earth Prediction ...

Face recognition technology 'could improve weather forecasting', scientists say

Yahoo News UK

Technology used for facial recognition could improve weather forecasts, with trials showing that the technology can predict how severe hailstorms will ...

Applying machine learning in intelligent weather consultation

Phys.Org

... upcoming 2022 Winter Olympics, hopefully providing more accurate, intelligent and efficient weather forecasting services for this international event.

Climate change / global warming / sea level rise

Rising seas: NZ must 'put brakes on' coastal development

Scientists have warned against developing in coastal areas – even in places not yet threatened today – as new data shows how hundreds of thousands of Kiwis are living in climate change's firing line.

Motu Working Paper 19-12 Winchester, Niven, Dominic White and Catherine Leining. 2019. “A community of practice for economic modelling of climate change mitigation in New Zealand.”

The public and private sectors face important strategic decisions about low-emissions transitional pathways. Such decisions require sound evidence, with input from experts and stakeholders across the board. Models can be used for evidence-based decision-making, but New Zealand has shortcomings in its capacity for climate policy analysis, particularly in comparison with other jurisdictions. These deficiencies pose a serious risk to New Zealand's future economic development. Climate policy analysis requires assessing a wide range of factors. A multi-model approach supported by multiple providers improves consistency, coordination, and collaboration across members of the modelling community, users of modelling results, and funders of modelling. This document summarises the compelling case for developing a New Zealand 'Climate Policy Modelling Initiative' (CPMI). This initiative would coordinate and enhance delivery of modelling across multiple providers. This work is informed by several workshops that brought together economic modellers from a range of organisations. If supported by

government leadership and commitment, the CPMI would have a transformational effect on New Zealand's capacity to plan for a successful low-emissions future.

Odd spot

Hurricanes drive the evolution of more aggressive spiders

Researchers who rush in after storms to study the behavior of spiders have found that extreme weather events such as tropical cyclones may have an evolutionary impact on populations living in storm-prone regions, where aggressive spiders have the best odds of survival.

Journal and articles online

Weather

Early View

Online Version of Record before inclusion in an issue

Research Articles

Analysis of the severe drought in Ireland in 2018

Simone Falzoi, Emily Gleeson, Keith Lambkin, Jesko Zimmermann, Richa Marwaha, Robert O'Hara, Stuart Green, Simona Fratianni

Version of Record online: 06 August 2019

The progress of the drought recorded in summer 2018 in Ireland has been analysed using four meteorological and satellite indicators: Standardised Precipitation Index (SPI), Percent of Normal Index (PNI), Soil Moisture Deficit (SMD) and Enhanced Vegetation Index (EVI). An ordinary kriging interpolation was applied to estimate the national coverage of drought based on those indices in order to show local variations in effects on agriculture as determined through changes in biomass production and compared to long-term means.

Research Articles

Anomalously warm months in 2018 in Poland in relation to circulation patterns

Robert Twardosz

Version of Record online: 06 August 2019

Synoptic situation on 28 April 2018; The markings on maps represent the following: PPms – old polar maritime air; PPmc – warm polar maritime air; PPM – polar maritime air; PPk – polar continental air; PZ – tropical air; N – atmospheric low; and W – atmospheric high. (Source: Institute of Meteorology and Water management.)

Research Articles

2018 Kīlauea eruption

Zinkova Mila

Version of Record online: 06 August 2019

This article describes some of the meteorological aspects associated with the 2018 Kīlauea eruption on the Big Island of Hawaii, including a unique lava-fuelled thunderstorm. The article analyses the mechanisms behind the formation of eruption-related weather-making pyrocumulus clouds. This paper also discusses some of the eruption-related hazards and their effects on the residents.

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.

August 20, 2019

News

Facial recognition technique could improve hail forecasts

August 19, 2019 - Phys.org

The same artificial intelligence technique typically used in facial recognition systems could help improve prediction of hailstorms and their severity, according to a new study from the National Center for Atmospheric Research (NCAR).

[Read MORE](#)

Loss of Arctic sea ice may not be causing cold winters in U.S., Asia after all, study finds

August 19, 2019 - Chicago Tribune

For the past several years, one of the most hotly debated questions in climate science has been determining exactly how rapid Arctic warming, and associated sea ice loss, is affecting the weather thousands of miles away, in parts of the United States, Europe and Asia.

[Read MORE](#)

[NASA Made a Rare Flight Right Through a Thundercloud Formed by a Wildfire](#)

August 16, 2019 - Vice (US)

Scientists conducted the most detailed reconnaissance of one of Earth's rarest atmospheric phenomena in a spectacular flight.

[Read MORE](#)

[Climate Collapse: is AI the Antidote?](#)

August 19, 2019 - Forbes

AI will help combat the climate crisis, but it won't save us.

[Read MORE](#)

[Fighting Climate Change Will Help Economic Growth, Study Finds](#)

August 19, 2019 - Bloomberg

Slowing the pace of climate change in line with the Paris Agreement has clear economic benefits as global warming is increasingly seen as a risk to financial stability and the economy.

[Read MORE](#)

[Global Satellite Launch Vehicle Market is Expected to Reach \\$2.9 Billion by 2026](#)

August 20, 2019 - Markets Insider- Business Insider

Growing remote sensing applications is one of the major factor fuelling market growth.

[Read MORE](#)

[Data assimilation method offers improved hurricane forecasting](#)

August 15, 2019 - Phys.org

A new approach developed at Penn State's Center for Advanced Data Assimilation and Predictability Techniques can forecast the intensity and trajectory of Hurricane Harvey, according to researchers at Penn State and the National Oceanographic and Atmospheric Administration.

[Read MORE](#)

[A Guide For Debunking Lightning Myths](#)

August 17, 2019 - Forbes

Tips for staying safe and debunking common myths about lightning.

[Read MORE](#)

[It's the size of a briefcase, but this Colorado satellite can see inside a hurricane](#)

August 14, 2019 - The Denver Channel

It's this small spacecraft, developed by researchers at Colorado State University in Fort Collins, that can peer inside a hurricane, giving researchers the possibility of a cheaper – and more frequent – way of watching how a storm develops.

[Wet Bulb Globe Temperature Is Great For Heat Warnings - Why Don't We Use It?](#)

August 14, 2019 - Forbes

The U.S. Occupational Safety and Hazard Administration (OSHA), military agencies, and other nations also use WBGT. Why doesn't everyone else use it?

[Read MORE](#)

Cool roofs can help shield California's cities against heat waves

August 14, 2019 - ScienceDaily

A new study shows that if every building in California sported 'cool' roofs by 2050, these roofs would help contribute to protecting urbanites from the consequences of dangerous heatwaves.

Read MORE

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