

New Zealand weather and climate news

These clips come courtesy of MetService library

MetService focus

Chance of thunderstorms: Storm, gale warnings for marine areas

Storm and gale warnings have been issued for marine areas around the North Island this morning.

Snow-like hail falls as thunderstorms move over Auckland and Northland

A large amount of hail that looked like snow fell in Orewa in north Auckland around 2pm, with MetService forecaster Gerard Bellam saying it was a symptom of the active system.

Heavy rain, severe gales to hit parts of South Island as front moves up country

Stuff.co.nz

Bursts of heavy rain and wind are expected in the south as a cold front makes its way up the South Island. MetService issued a severe weather ...

MetService launches new website to help with increasing forecast data volume

MetService launched a new website on Tuesday after a three-month beta test period, promising, among other things, more precision forecasts and higher resolution rain radar imagery.

Wellington hit with slip at Horokiwi and 'hefty' amount of rain

Stuff.co.nz

MetService - the country's national meteorological service - has warned people of hazardous driving conditions, floodings and slips around the North ...

Wild weather brings 66000 lightning strikes around the country

TVNZ

According to Metservice, the heaviest rain is expected about Mount Taranaki, the ranges of eastern Bay of Plenty, Gisborne north of Ruatoria and the ...

No rush in packing away winter woollies as summer takes a side-step from the Bay

New Zealand Herald

MetService Meteorologist Andrew James said Hawke's Bay can expect a more traditional weather outlook for this time of year with overcast skies and ...

The tragic reason the North Island will see a beautiful sunset tonight

New Zealand Herald

MetService says some regions can also expect Thursday sunrises to be ... MetService expects this to have an impact on sunset tonight (Wednesday) ...

Measuring changes to our environment – Expert Reaction

The Parliamentary Commissioner for the Environment (PCE) Simon Upton has reviewed our environmental reporting system and found it wanting.

In his latest report, the Commissioner says we don't collect the right data to know how our environment is faring, undermining efforts to protect it.

NIWA

Oz smoke plume to hit NZ tomorrow: What you need to know

Another sprawling plume of smoke and dust stretching across the Tasman Sea from fire-ravaged eastern Australia is set to blow smack into Northland tomorrow.

But Niwa forecaster Ben Noll said the plume would be at its dustiest – when particulates in the air peaks – at around midnight Wednesday, when people were asleep.

NIWA timelapse captures heavy storm moving across Auckland city

A rainy day in Auckland has resulted in some interesting timelapse photography.

A NIWA camera, mounted on the top of the SkyTower, captured a heavy shower between 12pm and 1pm on Tuesday.

WMO

Data exchange improves early warnings

Hydrological and meteorological data in South-East Europe and the Middle East will now be more freely shared as part of a coordinated drive to improve early warnings of a multitude of

hazards such as...

World Weather Information Service looks to the future

The WMO World Weather Information Service (WWIS) is a global website that presents official observations, forecasts and climatological information for selected cities supplied by National...

Arctic Climate Forum predicts another warmer winter

Following a warmer than average summer, surface air temperatures during winter 2019-2020 are forecast to be above normal across most of the Arctic. according to the Arctic Climate Forum, which also...

Pacific Islands climate forum issues seasonal outlook

The Fifth Pacific Islands Climate Outlook Forum (PICO-5) recently issued the Regional Statement on the Climate of 2018/19 and Climate, Ocean and Tropical Cyclone Outlook for October to December...

Extreme weather (and other news) – Australia and Pacific

Bureau of Meteorology releases official 2020 calendar: Incredible weather photos revealed

Townsville Bulletin

Picture: Mal Brewitt /Australian Weather Calendar 2020 Former pilot David Macdonald he relies on the Bureau's aviation weather forecasts and ...

'Brutal' hail wipes out crops: "I've lost 80 per cent of my merlot wine grape crop, out of 200 tonne." Growers in South Australia's Riverland have been assessing the damage after a sudden hailstorm cut through the region late Monday night, wiping out crops in minutes. These golf-ball sized hailstones shredded entire harvests

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

Rising Coastal Sea Levels Pose Threat to Cities in Vietnam and Thailand

Radio Free Asia

Rising sea levels have been driven by greenhouse gas emissions, climate ... Bangladesh, Vietnam, and Thailand by the end of the century face high ...

Storm Nakri weakens, but is dumping heavy rains on the Central Highlands in Vietnam

The Thaiger

PHOTO: National Centre for Hydro-Meteorological Forecasting The storm is not likely to affect weather conditions in Thailand although there may ...

Cyclone Bulbul kills 20 as millions are evacuated in India, Bangladesh

Twenty people have died and more than two million others spent a night huddled in storm shelters, according to officials, as Cyclone Bulbul smashed into the coasts of India and Bangladesh with fierce gales and torrential rains.

Fires in NSW partly caused by delayed monsoons in India, experts say

NSW's fire boss said the state had never seen anything like it before.

And, a weather system thousands of kilometres away is at least partly responsible, experts say.

Arabian Sea Sees Formation of Four Cyclones in a Year, First Time After 1902

This year, the sea that touches the Indian subcontinent, West Asia and West Africa, has seen formation of Vayu, Hikka, Kyarr and Maha cyclones.

Extreme weather (and other news) – Americas and Europe

Venice floods: Climate change behind highest tide in 50 years, says mayor

Severe flooding in Venice that has left much of the Italian city under water is a direct result of climate change, the mayor says.

New Monaco Weather Lab seeks to raise the bar in maritime safety

Seatrade Cruise News

The Monaco Weather Lab, a new training program devoted to marine weather, climatology and safety at sea, is scheduled to be inaugurated at the ...

Record-breaking summer heatwaves will be normal by 2050, says Met Office

Telegraph.co.uk

And the latest set of Met Office projections of future UK climate change also suggest that these summer temperatures could be normal by the 2050s.

Climate events have cost the US economy more than \$500 billion over the last 5 years, Fed official ...

Business Insider Nordic

Climate- and weather-related events have directly cost the US more than \$500 billion over the ...
Visit the Business Insider homepage for more stories.

Hurricanes have become bigger and more destructive for USA

A new study shows that hurricanes have become more destructive since 1900, and the worst of them are more than 3 times as frequent now than 100 years ago. A new way of calculating the destruction unequivocally shows a climatic increase in the frequency of the most destructive hurricanes that routinely raise havoc on the North American south- and east coast.

International news and research

Professor Alan Thorpe appointed to Met Office Board

GOV.UK

He will work with the Met Office Board and executive team to ensure the organisation continues to offer global leadership in the fields of weather and ...

Study says 'specific' weather forecasts can't be made more than 10 days in advance

Washington Post

The American Meteorological Society agrees. Their statement on the limits of prediction, in place since 2015, states that “presently, forecasts of daily or ...

'Veery' smart birds | Del State professor's research into songbirds could help meteorologists better ...

WDEL 1150AM

New research out of Delaware State University shows songbird behavior could help improve the accuracy of forecasting hurricane season.

National Weather Center tests new weather warning system

KAKE

"The Hazardous Weather Testbed is a space where National Weather Service forecasters, emergency managers and broadcast meteorologists all ...

6 Questions People Ask Meteorologists - And Ones They Probably Should

Forbes

Inevitably, the weather is going to come up because I am a meteorologist. I have loved the weather since 6th grade so it is not a problem. However ...

Meteorologists say AccuWeather's unscientific forecasts are hurting their credibility

Washington Post

Long-range weather forecasts beyond 10 days are generally not considered reliable. However, for years AccuWeather has produced highly-specific ...

Turbulence creates ice in clouds

Vertical air motions increase ice formation in mixed-phase clouds. This correlation was predicted theoretically for a long time, but could now be observed for the first time in nature. Using laser and radar equipment, the team measured the vertical air velocity and ice formation in thin mixed-phase clouds.

Ethiopia's modernises their meteorological infrastructure with state of the art radar system and ...

International Environmental Technology

The project expands the Ethiopian meteorological infrastructure and service ... Vaisala's solution includes a weather radar network integrated with a ... water management, and aviation," says Fetene Teshome, Director General, NMA.

How 2 Major Advances in Meteorological Technology Changed Our View of Weather Forecasting

Iteris, Inc.

How 2 Major Advances in Meteorological Technology Changed Our View of Weather Forecasting , Iteris, Inc. The global leader in applied informatics ...

Aviation

Tour Rocket Lab's Stunning New Zealand Launch Site in This Video

Space.com

Reusable rockets, frequent launches and spectacular high-definition rocket videos aren't just the province of SpaceX any more. Rocket Lab showed ...

Nigerian Airlines Lose Revenue on Weather Related Delays, Cancellations

THISDAY Newspapers

Nigerian airlines have lost revenues projected to amount to millions of naira due to flight cancellations, delays and aircraft damage due to bad weather ...

New weather radar means a safer, smoother ride for Jetstar passengers.

Airline Ratings

Jetstar passengers are in for a smoother, more efficient ride thanks to advanced weather radar being fitted to its new aircraft. The second version of the ...

Aviation emissions' impacts on air quality larger than on climate, study finds

New research has quantified the climate and air quality impacts of aviation, broken down by emission type, altitude and location. The team found that growth in aviation causes twice as much damage to air quality as to the climate.

Business/Insurance

Weather data – the secret 'source' for unlocking new business opportunities?

ITProPortal

For businesses in industries including insurance, energy, and fuel, transport, and agriculture, the weather has always had a strong financial and ...

Continuous Disclosure: What really drives markets? Saudia Arabia's Aramco shapes as biggest ...

New Zealand Herald

It turns out that extremely hot weather leads to declines in market value of shares on the stock market, according to research from Victoria University of ...

Energy and Mining

Mercury NZ pours in \$208m extra on New Zealand's largest wind farm

Power company Mercury will spend another \$208 million building the country's largest wind farm near Palmerston North.

2060 energy modelling shows path to faster decarbonisation

The release of new modelling on what New Zealand's energy future could look like by 2060, is an invaluable tool, says the Energy Efficiency and Conservation Authority (EECA).

How climate change will affect hydropower production in Canada

Changing climate and weather patterns are going to have dramatic impacts on Canada's production potential of hydroelectricity, according to new research. Hydropower giant Quebec will see its hydroelectricity output potential jump by as much as 15%. In contrast, British Columbia, the second biggest hydropower producer in Canada, as well as Alberta, the Northwest Territories and Nunavut, will see drops in production potential as steep as 10%.

Farming/horticulture/Aquaculture

University of Florida prepares growers for winter weather

FreshPlaza.com (press release)

... reliability will be discussed at Winter Weather School, including education on the Florida Automated Weather Network tools available for growers.

Fire

Increased fire risk with hotter than average summer expected

Fire and Emergency is warning people to prepare for an increased risk of fires starting and spreading over summer

Australia's east coast is in for 'catastrophic fire conditions'. Here's what they can expect

Australia's already fire-ravaged east coast is facing a "catastrophic" fire danger and there are fears the weather will make it worse.

About 12,000 firefighters are battling bushfires from New South Wales up into Queensland.

The causes of unprecedented bushfires are complex but climate change is part of the puzzle

As bushfires tear through New South Wales and Queensland, leaving a trail of destruction, we inevitably find ourselves asking: what can be done to stop (or at least tame) them?

Fire weather: Cold front drags in hot, blustery air and sudden dangerous wind changes

A catastrophic fire danger is forecast for Greater Sydney, Greater Hunter, Illawarra and Shoalhaven regions on Tuesday, prompting the New South Wales Premier to declare a seven-day state of emergency.

Climate change is not the only man-made reason for the fires

The Australian Financial Review

The current fires in Australia are attributable in part to the localised effects of the natural cycles: a combination of drought, the influence of El Nino since ...

Australia fires could be out of control for months, says fire chief

The Guardian

Forecasters warned that "dry lightning" strikes could ignite new blazes, with fires worsening when hotter temperatures arrive over the weekend.

Firestorms and flaming tornadoes: how bushfires create their own ferocious weather systems

As the east coast bushfire crisis unfolds, New South Wales Premier Gladys Berejiklian and Rural Fire Service operational officer Brett Taylor have each warned residents bushfires can create their own weather systems.

How Australian bushfires can change weather, create dangerous firefighting conditions

Stuff.co.nz

The massive bushfires raging in Australia could change the weather, ... Lightning that accompanied these storms also proved dangerous, as it had the ...

Bushfires rage along Australian East Coast - Expert Reaction

Devastating bushfires along the New South Wales and Queensland coastline have caused the loss of more than 150 homes and at least three deaths.

There are more than 130 fires burning across the two states, with the number and severity of the fires prompting many to call the situation 'unprecedented' this early in the fire season.

The SMC asked experts to comment on the fires.

Dark as night, hot as hell: What it's like inside an Oz forest fire

This week, New Zealand woman Bonnie Callagher likened the 25m-high flames approaching her New South Wales home to "looking into the gates of Hades".

'This is not normal': climate change and escalating bushfire risk

12 Nov 2019

Climate Council of Australia

Climate Council of Australia

The nature of bushfires in Australia has changed. Bushfire conditions are now more dangerous than in the past, and the risk to people and property has increased. For well over 20 years scientists have warned that climate change would increase the risk of extreme bushfires in Australia. This warning was accurate. Scientists expect extreme fire weather will continue to become more frequent and severe without substantial and rapid action to reduce greenhouse gas emissions.

Lightning

Using AI to predict where and when lightning will strike

Researchers have developed a novel way of predicting lightning strikes to the nearest 10 to 30 minutes and within a radius of 30 kilometers. The system uses a combination of standard data from weather stations and artificial intelligence.

Satellites and radar

\$3 million invested in space science partnerships

Six New Zealand research projects have received \$500,000 each from the Ministry of Business, Innovation and Employment to fund the development of innovative space technologies including satellite control systems and ocean and coastal monitoring satellites.

Combining satellites, radar provides path for better forecasts

EurekAlert (press release)

Every minute counts when it comes to predicting severe weather. Combining data from cutting-edge geostationary satellites and traditional weather ...

COSMIC-2 Satellites Improve Tropical Weather Forecasts

WeatherNation

[NOAA] The Constellation Observing System for Meteorology, Ionosphere, and Climate (COSMIC) are satellites launched in 2006 to orbit the earth ...

Space weather

New space weather service center put in motion in Helsinki

Xinhua

The space weather center of the Pan-European Consortium for Aviation Space Weather User Services (PECASUS) is operated by the Finnish ...

South Africa beefs up space weather expertise

Market Reports Observer

South Africa has not been affected by the impacts of space weather as far as it is concerned. There were two incidents where a satellite fell silently and ...

Innovation and technologies and AI

IoT-based weather monitoring system trialed in land speed record attempt

Traffic Technology Today

This is the first time that this type of advanced sensor technology will be applied in supporting a high-speed challenge. IoT remote sensor stations will ...

Weather Forecasting Latest Trend In Crowdsourcing Apps

Forbes

Crowdsourcing mobile apps are becoming more and more commonplace as platforms for users to share information and resources. Typically, they are ...

Climate change / global warming / sea level rise

National Party won't reveal hand before crucial climate vote

The National Party won't say whether it will support a crucial vote on climate change.

The Government's Zero Carbon Bill – its flagship climate change law – is up for its final vote on Thursday afternoon, well over a year after it was originally intended to pass.

The climate crisis will make entire cities uninhabitable. It's time to head underground

Underground cities have long been sci-fi fodder, but now governments and planners are taking them seriously. One of the biggest challenges to overcome is convincing people to be comfortable underground

Delhi's massive fog problem is the visual climate wakeup call we need

Images of children struggling to breathe in New Delhi have forced the Indian government to finally take action on pollution. The way we portray environmental risks could have a huge impact on the battle with climate change

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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.

November 12, 2019

News

Examining the Structure of Tropical Cyclones' Upper Levels

November 12, 2019 - Eos - Earth and Space Science News

Unique observations used to examine the structure and mass balance of hurricanes' top levels find that regions of high pressure violate the gradient wind balance.

[Read MORE](#)

[New blazes break out as Australians take shelter from intense bushfires](#)

November 12, 2019 - Reuters US News

Fires raged across a swathe of Australia's east coast on Tuesday, destroying more homes and shrouding Sydney in smoke from a blaze authorities fear they will be unable to control until next week.

[Read MORE](#)

[A photographer spent 7 years chasing storms through Tornado Alley. Here are 15 of his most breathtaking photos.](#)

November 11, 2019 - INSIDER

Meola spent years traveling through Tornado Alley, capturing storms, rainbows, and everything in between.

[Read MORE](#)

[Combining satellites, radar provides path for better forecasts](#)

November 11, 2019 - Phys.org

Combining data from cutting-edge geostationary satellites and traditional weather radar created a path toward earlier, more accurate warnings, according to Penn State researchers who studied supercell thunderstorms in the Midwest.

[Read MORE](#)

[Antarctica's first zero-emission research station shows that sustainable living is possible anywhere](#)

November 11, 2019 - Phys.org

The base is staffed during the summer season from October to March, when the majority of scientists conduct their research.

[Read MORE](#)

[6 Questions People Ask Meteorologists - And Ones They Probably Should](#)

November 10, 2019 - Forbes

For better or worse, meteorologists always get these 6 questions.

[Read MORE](#)

[Using AI to predict where and when lightning will strike](#)

November 8, 2019 - ScienceDaily

Researchers have developed a novel way of predicting lightning strikes to the nearest 10 to 30 minutes and within a radius of 30 kilometers.

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[No wind? No sun? This power plant solves renewable energy's biggest problem](#)

November 7, 2019 - CNN-US

Virtual power plants could solve one of renewable energy's most vexing challenges: the weather.

[Read MORE](#)

[Geoscientists hope to make induced earthquakes predictable](#)

November 7, 2019 - ScienceDaily

Geoscientists have created a model to forecast induced earthquake activity from the disposal of wastewater after oil and gas production.

Read MORE

Science says 'specific' weather forecasts can't be made more than 10 days in advance

November 7, 2019 - Chicago Tribune

But just how far can we take a day-by-day forecast?

Read MORE

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My latest *WeatherEye* from John Maunder

<https://www.sunlive.co.nz/blogs/14040-tauranga-october-rainfalls-18982019.html>

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