

New Zealand weather and climate news

Courtesy of MetService Library

MetService focus

Temperatures to stay mostly above 20C for at least the next 10 days

If you got your first sunburn of the summer this past weekend, you weren't alone. Beaches around the country had their busiest day in months, and anyone watching the Blackcaps test at the Bay Oval will have seen more than their fair share of shirtless Barmy Army supporters burnt to a crisp by the sun.

Al Jazeera weather graphics deal is great exposure, says MetService

Stuff.co.nz

Al Jazeera will use weather graphics provided by the MetService for its If viewers are watching weather bulletins online, media companies can have ...

Historian says it is time to officially name Wellington's 'shocking' wind

In France, a northerly wind is called mistral and Greymouth has the barber but despite Wellington being known for its wild wind, it has no official name.

Australian bushfires push up New Zealand temperatures

Unusually hot weather was recorded in many parts of New Zealand today, as fires in Australia pushed our temperatures up.

Hail storm hits vegetable supplies

A sudden and intense hailstorm in Canterbury on Wednesday caused widespread damage to crops, and there are warnings of reduced supply and increase prices for some vegetables as a result.

Old weather records could predict snow in Auckland

Machines will transcribe handwritten weather records from as far back as 1860 to help predict future weather patterns

On the subantarctic Campbell Island, a worker in charge of the daily recording of weather observations started his job with excellent penmanship.

Hawke's Bay mercury tipped to top 30C as lazy, hazy days turn crazy hot

New Zealand Herald

MetService meteorologist Tom Adams said Monday would be an outlier, with a southerly change bringing a drop in temperature, a high of 21C ...

'Summer-like' week for Waikato and Bay of Plenty on way

Stuff.co.nz

A high pressure sitting over the North Island will see "summer-like" temperatures in Waikato and Bay of Plenty, MetService meteorologist Tom Adams ...

Smoky haze from Australian fires covers Nelson Tasman

Smoke and dust from Australia has led to hazy days and spectacular sunsets in the Nelson region.

Metservice meteorologist Tom Adams said the haze from Australian bush fires was visible in satellite images.

Tough leaving family during expeditions

A Dunedin naval lieutenant is on a ship floating off a subantarctic island and misses his baby daughter, but the separation is made easier by other sailors aboard "being in the same boat".

Lieutenant Brett Fitzgerald, who was born and raised in Dunedin, was on HMNZS Canterbury, which departed the T/U sheds in central Dunedin on Friday last week.

The 131m-long ship arrived at the Auckland Islands the following Sunday morning and sailed to Campbell Island that evening.

The other guys (Weatherwatch, BlueSkies, etc)

[Why is NZ so windy? We explain the Roaring Forties!](#)

WeatherWatch.co.nz

Our small size means the weather basically barrels over the top of us. ... to latitude 50) over the Southern Ocean that sailors centuries ago named.

Volcano alert/watch

[Volcanic unrest at White Island, earthquake causing no impact](#)

New Zealand Herald

Moderate volcanic unrest remains on White Island (Whakaari), with yesterday's 5.9 magnitude earthquake having no impact. A GNS Science ...

Extreme weather (and other news) – Australia and Pacific

[Summer outlook from Bureau of Meteorology suggests hot, dry times to continue](#)

ABC News

Summer is looking hot for most of the country and dry for the east, according to the Bureau of Meteorology's summer outlook.

[Weather: First tropical cyclone expected in next 32 hours](#)

Newshub

The first tropical cyclone of the season is expected to form in the next 32 hours. Fiji's MetService has issued a warning for tropical depression TD01F, ...

[Dust storms are being made worse by Australia's drought. Here's how they work](#)

As Victoria sweltered through a [hot, gusty 'code red' day on Thursday](#), the regional hub of Mildura was blanketed in dust, turning the centre of the city orange.

While dust storms are regular occurrences for people living in the centre of Australia, a "double whammy" drought and weather patterns this year means they're happening more.

[Bushfire crisis costing Queensland and northern NSW millions](#)

The damage bill from bushfires burning through Queensland and northern New South Wales has hit \$145 million.

[Hobart temperature drops 10C in 10 minutes as fires burn in Tasmania's north-east](#)

Temperatures in the south of Tasmania dropped 10 degrees Celsius in 10 minutes on Thursday.

Meteorologists say the quick change in temperature was courtesy of a cool change from Antarctica

Parts of Tasmania have hit temperatures in the mid-high 30s today

A fire ban is still in place in the state's east and south until 2:00am Friday

At midday, the Bureau of Meteorology (BOM) measured Hobart's temperature at 36.1C, but plunged to 26C minutes later.

Are climate outlooks important?

Climate outlooks indicate whether it is likely to be wetter or drier than usual, or hotter or colder. But are they beneficial in a constantly changing environment? Research from the Bureau of Meteorology explains.

Cyclone Rita to pass east of Vanuatu

The South Pacific cyclone season's first storm has formed with the system between Solomon Islands and Vanuatu being named Rita.

Samoa climate change resilience challenges Western perceptions

The resilience of Samoan communities in the face of climate change is providing a blueprint for other nations to follow, according to researchers.

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

Cambodia, Laos, Thailand, Vietnam may face severe drought

Bangkok Post

"The drought is caused by insufficient rainfall during the wet season with a delayed arrival and earlier departure of the monsoon rain and an El Niño

Dozens killed by landslides in Kenya

At least 36 people, including seven children, have been killed by landslides triggered by unusually heavy rains in northwestern Kenya, a local official says.

Weather in Malaysia provides early forecasts for UK, study finds

Phys.Org

The scientists found that combining observations of El Niño—a periodic warming of waters in the Pacific—with other natural weather cycles around the ...

Extreme weather (and other news) – Americas and Europe

Nine people killed as deadly rainstorms hit parts of France, Greece and Italy

Nine people have died after deadly storms and historic levels of rain drenched parts of Greece, Italy and France, leading to major floods, landslides and road destruction.

Weather dominates farmer phone use

Irish Farmers Journal

Nine out of 10 farmers use their smartphones to check the weather, according to an IFA survey. The report on farmer use of technology revealed that ...

Scotland is facing the coldest winter for ten years – with temperatures set to plummet to -13C

The Scottish Sun

The worst winter since 2009-10 is due as the sun is at the weakest point of its 11-year cycle of strength, said The Weather Company, the world's ...

New Zealand research

[\\$2 million for STEM projects that unlock our nations' minds](#)

The sixth round of Unlocking Curious Minds has awarded \$2 million in funding to 31 projects aimed at engaging more New Zealanders in science, technology, engineering and mathematics (STEM).

International news and research

[New and Strange Climate Pattern Includes More Violent El Nino Swings](#)

SciTechDaily

El Ninos have become more intense in the industrial age, which stands to worsen storms, drought, and coral bleaching in El Nino years. A new study ...

[Weather Creates Challenges For Next Generation Of Vehicles](#)

Forbes

Interest in autonomous vehicles for the related convenience and safety benefits is growing at a strong pace. There are more than 1,400 self-driving ...

[How Meteorologists Can See Fog Developing in the Middle of the Night](#)

The Weather Channel

Meteorologists use visible satellite imagery to detect clouds and fog during the daytime, but when the sun sets in the evening, visible satellite becomes ...

[Measuring Winds Using Satellites to Help Predict the Weather](#)

WeatherNation

[NOAA] Wind is a fundamental variable of weather. The heating of Earth's surface and atmosphere by the sun drives winds that move heat and ...

[Twofold expansion of the Indo-Pacific warm pool warps the MJO life cycle](#)

Nature.com

McPhaden, M. J. Genesis and evolution of the 1997–98 El Niño. behaviour of the Madden–Julian Oscillation and its relationship with El Niño.

[Here's Why NOAA Under Trump Is in a "Holding Pattern"](#)

Mother Jones

Before his nomination by President Donald Trump, Myers was CEO of AccuWeather, a company that sells weather forecasting technology—much of ...

[NASA soil moisture data improves military weather forecasting](#)

New Atlas

Orbital data on Earth's soil moisture gathered by a NASA satellite is being used to improve the US Air Force's weather forecasting. Real-time ...

5G network

[Global 5G wireless deal threatens weather forecasts](#)

Nature.com

Meteorologists say international standards for wireless technology could degrade crucial satellite measurements of water vapour.

[New deal won't prevent 5G communication networks from interfering with weather forecasts](#)

Science Magazine

The standard, although in line with European recommendations, is less stringent than the -55-dBW standard sought by the World Meteorological ...

Aviation

[Baron Announces Suite of Aviation Weather Data Products](#)

AVweb

Baron, the worldwide provider of critical weather intelligence, announces Aviation Weather, its suite of aviation weather data products. Baron Aviation ...

[Aerospace industry targets Christchurch for space hub](#)

With enough investment, Christchurch could become the country's space hub within five years and offer thousands of aerospace-related jobs.

Business/Insurance

[Insurance companies face deluge of hail damage claims](#)

Stuff.co.nz

On Thursday, home and business owners, farmers, motorists and car dealerships were left cleaning up and counting the cost of the weather ...

[Private companies are taking the weather biz by storm... and raising some red flags](#)

The Hustle (blog)

Valued at \$7B and growing, the private weather forecasting biz in the US is booming. Startups like Spire and ClimaCell are selling weather data ...

Motu Working Paper 19-19 [EQC and extreme weather events \(part 2\): Measuring the impact of insurance on New Zealand landslip, storm and flood recovery using nightlights](#) by Sally Owen, Ilan Noy, Jacob Pastor-Paz and David Fleming
Climate change is predicted to make extreme weather events worse and more frequent in many places around the world. In New Zealand, the Earthquake Commission (EQC) was created to provide insurance for earthquakes. In some circumstances, however, homeowners affected by extreme weather events can also make claims to the EQC – for landslip, storm or flood events. In this paper, we explore the impact of this public natural hazard insurance on community recovery from weather-related events. We do this by using a proxy for short-term economic recovery: satellite imagery of average monthly night-time radiance. Linking these night-time light data to precipitation data records, we compare houses which experienced damage from extreme rainfall episodes to those that suffered no damage even though they experienced extreme rainfall. Using data from three recent intense storms, we find that households which experienced damage, and were paid in a timely manner by EQC, did not fare any worse than households that suffered no damage from these extreme events. This finding suggests that EQC insurance is serving its stated purpose by protecting households from the adverse impact of extreme weather events. [Read more...](#)

Communications/social media

[Who are the artists behind WAVE 3 News' new look?](#)

WAVE 3

We have hundreds of different weather graphics at WAVE 3 News, and each of them had to be converted by hand to match our new look.

Energy and Mining

[Grid reliability under climate change may require more power generation capacity](#)

Posted: 21 Nov 2019 11:14 AM PST

Researchers applied a new modeling approach for long-term planning of the U.S. power grid under future climate and water resource conditions. The new approach shows the grid may need an additional 5.3% to 12% of power-generating capacity to meet demand and reliability requirements. The changes would lower water use and carbon emissions, potentially helping mitigate future climate changes.

[Can Our Global Energy Industry Weather Extreme Weather?](#)

Forbes

The report considers the effect of extreme weather events on fossil fuel power, renewable energy technologies, nuclear power and electricity grids.

[New instruments developing to hedge power market weather risk: Swiss Re](#)

S&P Global

Hurricanes typically destroy both electricity demand and a generators' ability to produce electricity. One way to mitigate some of the economic risk ...

Farming/horticulture/Aquaculture

[Hail damage devastates Canterbury vegetable crops](#)

An intense hailstorm in South Canterbury and mid-Canterbury this week caused widespread damage to crops, including vegetables destined for the home and international markets.

Hydrology / Flooding

[Disaster hacks: South American cities harness tech and nature to tackle flooding](#)

Reuters

But over half of cities have not carried out risk assessments to map which areas, residents and businesses are under threat from extreme weather, the ...

Lightning

[Double lightning strikes seen in Sydney, Australia](#)

Stuff.co.nz

Double lightning strikes have been caught on camera in Sydney, Australia. They were caught on camera as severe thunderstorms hit the city on Friday ...

[Scientists use AI to predict lightning with 30-minute heads-up](#)

The Weather Network

Wednesday, November 20th 2019, 4:11 pm - The researchers say their system, which is based on a decade of lightning observations in Switzerland, ...

Transport/roading/shipping/freight

Motu Note #40. [Climate change adaptation within New Zealand's transport system](#) by Anthony Byett, Ben Davies and others
New Zealand's transport system is inter-dependent. It comprises a network for which demand is derived from local communities and the wider economy. People use this network for economic and social purposes, such as commuting, shifting freight, and visiting friends and family. Transport also provides critical links during emergencies. Climate change affects the transport network itself. It causes damage, accidents and network disruption (Koetse & Rietveld, 2009). These have wider effects on communities and the economy. Climate change also alters the spatial allocation of activities and consequently leads to changes in derived demand for transport infrastructure. Climate change is important to consider in transport planning because transport assets are long-lived, and because the transport system is inter-twined with the wider economic and social systems. There are opportunities for adaptation in the normal cycle of infrastructure build and renewal. However, there are also many challenges due to the costs involved, the uncertainties ahead and the need to coordinate the different institutions that make up the transport system. This note discusses climate change impacts and adaptation within New Zealand's transport sector. First, we describe the physical and institutional structure of New Zealand's transport system.² Second, we review the science behind, and impacts of, climate change related events that disrupt the transport network. Third, we discuss issues around climate change adaptation and the many questions that are still to be addressed. Finally, we conclude by identifying opportunities for further research. [Read more...](#)

Climate change / global warming / sea level rise

[We're recruiting to supercharge Stuff's climate crisis coverage](#)

OPINION: 2019 is on track to be Earth's [second- or third-hottest year](#) ever. In New Zealand, preliminary calculations have us sitting on the third-warmest year on record. That would be a fittingly troubling finish to the decade that already includes the hottest year ever – 2016 – and the next five.

[Climate pioneer Dave Lowe "we only have one atmosphere"](#)

It's hard to imagine now that over 40 years ago compelling evidence demonstrating human-driven climate change already existed, and a significant contributor to the science was a New Zealander.

[Climate change: Greenhouse gas concentrations again break records](#)

Atmospheric concentrations of carbon dioxide and other greenhouse gases once again reached new highs in 2018.

=====

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 26, 2019

News

[Researchers uncover key reaction that influences growth of potentially harmful particles in atmosphere](#)

November 25, 2019 - Phys.org

This week, a group led by University of Pennsylvania scientists in collaboration with an international team report a new factor that affects particle formation in the atmosphere.

[Read MORE](#)

[The weather is big business, and it's veering toward a collision with the federal government](#)

November 25, 2019 - SFGate

Fueled in part by climate change, extreme weather is an increasing liability to the economy, with 10 weather and climate disasters costing more than \$1 billion each so far this year, according to NOAA.

[Read MORE](#)

Why do some people ignore severe weather alerts?

November 24, 2019 - SFGate

Whether people immediately take protective measures, seek more evidence that the danger is imminent or simply wait and watch depends on a variety of factors, and understanding them can make severe weather warnings more effective and, hopefully, save lives.

[Read MORE](#)

Why Calling Rainy Conditions A 'Monsoon' Is Technically Incorrect

November 23, 2019 - Forbes

Do you call very rainy conditions a monsoon? Why that is technically incorrect.

[Read MORE](#)

El Nino swings more violently in the industrial age, compelling hard evidence says

November 23, 2019 - Phys.org

A new study has found compelling evidence in the Pacific Ocean that the stronger El Ninos are part of a climate pattern that is new and strange.

[Read MORE](#)

Can Our Global Energy Industry Weather Extreme Weather?

November 22, 2019 - Forbes

Last week, the International Atomic Energy Agency published their new report, Adapting the Energy Sector to Climate Change, that explores a range of climate impacts on the energy sector resulting from gradual climate change together with extreme weather events.

[Read MORE](#)

New Satellites Will Tell Us Exactly how Quickly the Oceans are Rising

November 22, 2019 - Universe Today

Now a joint mission involving the US and European countries is launching a pair of satellites to monitor the rising sea levels. The two satellites will monitor the oceans until 2030.

[Read MORE](#)

NASA examines tropical storm Fung-Wong's rainfall

November 22, 2019 - EurekAlert!

NASA analyzed Tropical Storm Fung-Wong's rainfall and found two small areas of moderate to heavy rainfall, despite being battered by strong wind shear.

[Read MORE](#)

[New 5G Wireless Deal Threatens Accurate Weather Forecasts](#)

November 22, 2019 - Scientific American

Meteorologists say international standards for wireless technology could degrade crucial satellite measurements of water vapor.

[Read MORE](#)

[A New Frontier In Hurricane Observations](#)

November 22, 2019 - NCAR/UCAR

Disposable drone may help solve mysteries of powerful storms.

[Read MORE](#)

[White House pick to lead NOAA withdraws nomination, citing health concerns](#)

November 20, 2019 - The Washington Post

Barry Myers, President Trump's controversial nominee to lead the National Oceanic and Atmospheric Administration (NOAA), has withdrawn from consideration due to health concerns.

[Read MORE](#)

=====

Weather eye with John Maunder

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 26, 2019

News

Researchers uncover key reaction that influences growth of potentially harmful particles in atmosphere

November 25, 2019 - Phys.org

This week, a group led by University of Pennsylvania scientists in collaboration with an international team report a new factor that affects particle formation in the atmosphere.

[Read MORE](#)

The weather is big business, and it's veering toward a collision with the federal government

November 25, 2019 - SFGate

Fueled in part by climate change, extreme weather is an increasing liability to the economy, with 10 weather and climate disasters costing more than \$1 billion each so far this year, according to NOAA.

[Read MORE](#)

Why do some people ignore severe weather alerts?

November 24, 2019 - SFGate

Whether people immediately take protective measures, seek more evidence that the danger is imminent or simply wait and watch depends on a variety of factors, and understanding them can make severe weather warnings more effective and, hopefully, save lives.

[Read MORE](#)

Why Calling Rainy Conditions A 'Monsoon' Is Technically Incorrect

November 23, 2019 - Forbes

Do you call very rainy conditions a monsoon? Why that is technically incorrect.

[Read MORE](#)

El Nino swings more violently in the industrial age, compelling hard evidence says

November 23, 2019 - Phys.org

A new study has found compelling evidence in the Pacific Ocean that the stronger El Ninos are part of a climate pattern that is new and strange.

[Read MORE](#)

Can Our Global Energy Industry Weather Extreme Weather?

November 22, 2019 - Forbes

Last week, the International Atomic Energy Agency published their new report, *Adapting the Energy Sector to Climate Change*, that explores a range of climate impacts on the energy sector resulting from gradual climate change together with extreme weather events.

[Read MORE](#)

New Satellites Will Tell Us Exactly how Quickly the Oceans are Rising

November 22, 2019 - Universe Today

Now a joint mission involving the US and European countries is launching a pair of satellites to monitor the rising sea levels. The two satellites will monitor the oceans until 2030.

[Read MORE](#)

NASA examines tropical storm Fung-Wong's rainfall

November 22, 2019 - EurekAlert!

NASA analyzed Tropical Storm Fung-Wong's rainfall and found two small areas of moderate to heavy rainfall, despite being battered by strong wind shear.

[Read MORE](#)

New 5G Wireless Deal Threatens Accurate Weather Forecasts

November 22, 2019 - Scientific American

Meteorologists say international standards for wireless technology could degrade crucial satellite measurements of water vapor.

[Read MORE](#)

A New Frontier In Hurricane Observations

November 22, 2019 - NCAR/UCAR

Disposable drone may help solve mysteries of powerful storms.

[Read MORE](#)

White House pick to lead NOAA withdraws nomination, citing health concerns

November 20, 2019 - The Washington Post

Barry Myers, President Trump’s controversial nominee to lead the National Oceanic and Atmospheric Administration (NOAA), has withdrawn from consideration due to health concerns.

[Read MORE](#)

=====

WEATHEREYE from John Maunder

<https://www.sunlive.co.nz/blogs/14068-the-southern-oscillation-index.html>

=====

Thanks to our regular contributors

=====