

New Zealand weather and climate news

These clips come courtesy of MetService library

MetService mentions

Warm winter: Parts of New Zealand forecast to hit 20C

Put your thermals away – some parts of New Zealand could hit 20 degrees Celsius this week.

Just days after the country recorded its coldest June temperature in five years, parts of the North and South Island could see temperatures between 15 and 20C on Tuesday and Wednesday.

Weather: 'Flip flop' forecast on the cards with 'smorgasbord' of weather incoming

There's a "smorgasbord" of weather on the cards for New Zealand in the coming week.

"Very much a flip flop this week," said MetService meteorologist Lewis Ferris. "Cold to warm, back to cold and there's gonna be widespread rain through the latter part of the weekend."

Weather: Snow, gales, heavy rain and unseasonable temperatures

Newshub

After a bitterly cold weekend for most of the country, MetService says this week winter will flip the switch and show its wetter, warmer side. A rain front ...

Praying for snow and fine weather ahead of winter ski season

Towns reliant on the economic boost of a healthy North Island ski season are praying for snow and fine weekends.

Snow to 500 metres, heavy rain as cold blast moves up the country

Snow is forecast to 500 metres in the South Island, some of it significant, as cold southerlies move up the country, while heavy rain is expected in central areas.

MetService is forecasting snow on some of the South Island high passes, with the first falls starting on Wednesday afternoon.

Downpours bring down slips on Wellington roads

Heavy rain has brought down slips on Wellington roads and led to surface flooding.

Heavy rain prompts warning for Wellington commuters

Heavy rain overnight and on Thursday morning has led to slips closing roads across Wellington, with commuters urged to take extra care.

Emergency office fails on coastal wave warnings

Stuff.co.nz

Regional emergency managers had set up notifications from weather forecaster MetService in case large swells were expected to impact the Kapiti ...

Weather: Lull in winter weather sees temperatures reach low 20's in South Island

New Zealand Herald

MetService meteorologist Tahlia Crabtree says those in the south should expect "a very sharp change" tomorrow. Another front will move in and ...

MetOcean

Why Southern Ocean's monster waves will get even bigger

Monster waves in the Southern Ocean - already been shown to reach as high as eight-storey buildings - could grow even bigger and more frequent under climate change, scientists warn.

WMO

Arctic Climate Forum expects above normal temperatures

Posted:

Above normal temperatures are expected to continue across the majority of the Arctic for June–August 2020, according to the Arctic Climate Forum, which provides information for decision-makers about...

Meteorological departments form synergy for first typhoon in 2020 - China Meteorological Administration

Posted:

At 8:50 a.m. on June 14, this year's 2nd typhoon Nuri (tropical storm scale) made landfall in coastal regions of Hailing Island, Yangjiang, Guangdong province, becoming the first typhoon that landed...

Provision of critical weather information services in Weather Modification efforts to prevent and curb drought-induced forest fires

Posted:

Jakarta / Indonesia takes special precaution of wildfire risk in peatlands areas, and attempt to mitigate the risk by rewetting the peatlands by weather modification activities. The Agency for...

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

Australia's longest weather record reveals snow in surprising places

Scientists piecing together Australia's longest weather record have discovered snow used to fall more often at low elevations in parts of South Australia.

Australia had more supersized bushfires creating their own storms last summer than in previous 30 ...

The Guardian

Australia experienced more supersized weather-generating fires in the ... conditions and are capable of generating their own winds and lightning.

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

What has caused more extreme summer heat events over northeast Asia?

Widespread hot extremes are seen across the world in recent years, causing heat-related mortality and harmed crops and livestock. In summer 2018, a record-breaking heat wave swept large areas of Northeast Asia. The China Meteorological Administration issued high-temperature warnings for 33 consecutive days. In Japan, at least 71,266 required hospitalization for heat stroke.

Extreme weather (and other news) – Americas and Europe

Wales storms: Lightning strikes 'will probably damage buildings'

BBC News

The Met Office said: "Fifteen to 25mm of rain may fall in an hour in some places whilst a few spots could see 30 to 40mm of rain in two or three hours.

International news and research

Taking a landslide's temperature to avert catastrophe

Posted: 15 Jun 2020 12:51 PM PDT

Engineers have developed a comprehensive model of deep-seated landslides and demonstrated that it can accurately recreate the dynamics of historic and current landslides occurring under varying conditions. The model points to the temperature of a thin layer of clay at the base of the landslide as critical to the potential for sudden cataclysmic failure. The approach is currently monitoring a landslide in Andorra and suggests methods for mitigating the risk of its escalation.

Aviation

Airport's estimated \$1.56m income likely cut to \$50k

In the wake of coronavirus, New Plymouth's airport will likely receive a fraction of its predicted fourth-quarter income

Air NZ exploring options to raise capital - report

Air New Zealand is considering a capital raise before the end of the year so it does not have to use a government loan, according to an investment analyst.

New Plymouth Airport likely to receive just \$50k income for three months

New Plymouth Airport is set to receive about \$50,000 in revenue this quarter - about three per cent of the \$1.56 million predicted before the coronavirus pandemic.

\$41 million funding boost for 60 regional airports

Infrastructure Magazine

The Australian Airports Association (AAA) Chief Executive Officer, James ... The funding will ensure safe emergency services access in all weather ...

Air New Zealand resuming flights to China, despite new outbreak

Air New Zealand will resume passenger flights between

Auckland and Shanghai from June 22, despite a new outbreak of Covid-19 in that country.

Air NZ expects \$120m loss for 2020 year

Air New Zealand is expecting a loss of up to \$120 million for its 2020 financial year.

In its latest financial update to the NZX, the airline said that it had suspended earlier guidance "due to the significant uncertainty surrounding the duration, scale and impact of the Covid-19 pandemic".

Warp-speed ahead: Rocket Lab's fastest turnaround yet at Mahia, three weeks between launches

New Zealand Herald

Rocket Lab founder and CEO Peter Beck said it had a unique capability to provide dedicated and responsive space access to small satellite customers. " ...

Business/Insurance

First quarter GDP figure release expected to show first contraction since 2010

The economy's golden run of nine years of uninterrupted growth is set to come to a shuddering halt with the release of first quarter GDP numbers on Thursday showing the impact of the Covid-19 pandemic, which forced the shutdown of most businesses.

How the COVID-19 crisis is affecting UK small and medium-size enterprises

Small and medium-size enterprises (SMEs) account for 50 percent of the total revenue generated by UK businesses and 44 percent of the country's labor force.¹ With the COVID-19 pandemic causing a crisis that affects both lives and livelihoods, how are these vital parts of the economy feeling?

The value of value creation

Long-term value creation can—and should—take into account the interests of all stakeholders.

Communications/social media

Behind the scenes: Learning about the green screen

WKBN.com

Our computer technology takes anything that is green and puts our weather graphics on top of it. In the studio, it just looks like a green wall. On your ...

Clouds

Cloud spotting gains new fans amid coronavirus pandemic as people search for calm

Lisa Flower's children affectionately call her the "crazy cloud lady" for her tendency to pause mid-walk and marvel at the sky.

The Melbourne marketing manager is a member of the Cloud Appreciation Society — a global hub for like-minded cloud enthusiasts.

El Nino / La Nina

How hot will 2020 get? NOAA data shows an even chance of La Nina conditions in the Pacific

Red, Green, and Blue

El Niño isn't completely ruled out, but it is less likely, with a chance of about 10%. June 2020 ENSO update from NOAA. May 2020 sea surface ...

Energy and Mining

OMV signals commitment to Taranaki with \$15m refurbishment

OMV New Zealand is to spend \$15 million refurbishing its new headquarters in New Plymouth, a move the oil and gas company says underscores its long-term commitment to Taranaki.

Draft Decision Approving Transpower's \$154m Major Capex Proposal

The Commerce Commission has published its draft decision paper approving a major capital expenditure proposal from Transpower New Zealand Limited (Transpower).

Health

Coronavirus lockdown puts the brake on flu season

Sweeping measures brought in to prevent the spread of coronavirus have helped flu levels plummet to historical lows.

Working in the sun: Heating of the head may markedly affect safety and performance

Prolonged exposure of the head to strong sunlight significantly impairs cognitively dominated functions and coordination of complex motor tasks shows a new study. This may have important implications for work safety and productivity.

History

How's the Weather, Jim?

Television (Full Length) – 2002

Over more than two decades presenting the weather on One News, Jim Hickey kept the nation informed of the wind, rain and sunshine they could expect. In this documentary he explains how forecasts are done, and looks at some stranger meteorological phenomena. Among them are Christchurch's infamous behaviour-altering nor'wester, Wellington's persistent wind and Auckland tendency for "four seasons in one day". He checks out some of the country's more extreme weather events too, including interviewing a tornado survivor and finding answers on climate change.

Norwester - Wind of Contrasts

Television (Full Length Episode) – 1990

This documentary, made by TVNZ's Natural History Unit (now NHNZ), charts the progress of the nor'west wind from its formation in the Tasman Sea across the Southern Alps to the Canterbury Plains and the east coast of the South Island. Along the way it dumps metres of precipitation on West Coast rain forest and snow on the Alps, then transforms to a dry, hot wind racing across the Plains. The film shows the wind's impact on the ecosystem and farming and muses on the mysterious effect it can have on humans. It screened as part of the beloved Wild South series.

General purpose meteorological plotting chart of New Zealand and offshore islands / drawn by the Lands and Survey Dept., N.Z..

Item Title:

General purpose meteorological plotting chart of New Zealand and offshore islands / drawn by the Lands and Survey Dept., N.Z..

Publisher:

[Wellington] : Published by the Meteorological Branch, Air Dept. N.Z.

Publication Date: 1950

Tourism

Covid-19: Lowest number of arrivals to NZ since 1960s

The number of people travelling in and out of the country in April fell to its lowest level in more than 50 years.

Transport/roading/shipping/freight

Weather forecast shifts start of Motueka Bridge repairs

The commencement of work scheduled for the Motueka River Bridge has been put back by a week.

Frosty reception for NZTA at meeting on SH73 road closures after snowfall

The New Zealand Transport Agency (NZTA) will have "blood on their hands" if they continue to close alpine passes after snowfall, a former West Coast doctor says.

Te[[LS10](#)] [[LS11](#)] reo

Te Reo Matariki Workshop

Public

· Hosted by [Toi Poneke Arts Centre](#) and [Wellington City Council](#)

Saturday, 25 July 2020 from 10:00-12:00

[Toi Poneke Arts Centre](#)

61 - 69 Abel Smith St, Te Aro, Wellington, New Zealand 6011

Join Joan Costello from Reo Tūhono for a fun and friendly 2 hour workshop working on your te reo pronunciation and tips for speaking more confidently. Morning tea is included.

To register: please e-mail sascha.perfect@wcc.govt.nz

Emergency preparedness / disaster planning / resilience

From COVID-19 crisis comes opportunity to rethink risk

The COVID-19 disaster is a manifestation of what the international scientific community has recognised for years: that in an increasingly interdependent world, our lifestyles, and our choices mean that hazards are interwoven and spread throughout communities, societies and economies in complex ways that lead to systemic and cascading risks.

Demand From Governments for Effective Preparation for Future Calamities to Drive Valuation of ...

PRNewswire (press release)

These factors have resulted in enhanced weather forecasting services, which, in turn, is estimated to drive the demand for weather monitoring ..

Journal and articles online

New Zealand aquaculture industry: research, opportunities and constraints for integrative multitrophic farming,

Jeanette M. E. Stenton-Dozey, Philip Heath, Jeffrey S. Ren & Leonardo N. Zamora (2020)

**New Zealand Journal of Marine and Freshwater Research, DOI:
10.1080/00288330.2020.1752266**

The New Zealand aquaculture industry is based primarily on the production of Greenshell™ mussels, Chinook salmon and Pacific oysters. The industry is primed for development and is anticipating increasing its export earnings to NZ\$3 billion by 2035. To achieve this target and retain its ‘clean and green’ image, the industry must be able to demonstrate that its practices are sustainable. Integrated multi-trophic aquaculture (IMTA) systems provide an avenue to address this challenge, with most of the work in New Zealand focusing on the integration of low trophic level high-value species such as sea cucumbers and seaweeds with mussels, providing environmental bioremediation and provision of valuable secondary products (nutraceuticals and pharmaceuticals). Ecophysiological, hydrodynamic and benthic diagenesis models have been developed to underpin this IMTA research into sustainable farming designs. However, many regulatory barriers are still in place, which together with the current lack of investment, market

security for these new products and associated operational costs form the main constraints to development. Nevertheless, the recent emergence of aquaculture forums where industry, researchers, and regulators meet to discuss future research and development has invigorated interest in diversification of the sector, inclusive of IMTA within existing coastal areas and upcoming land-based and open-ocean operations.

Incorporating Māori values into land management decision tools,

Shannan K. Crow, Gail T. Tapa, Kyle D. Nelson & Amy L. Whitehead (2020)

**New Zealand Journal of Marine and Freshwater Research, DOI:
[10.1080/00288330.2020.1772322](https://doi.org/10.1080/00288330.2020.1772322)**

Environmental sustainability and the long-term wellbeing of Māori (the indigenous people of New Zealand) are interdependent and degradation of landscapes risks the progressive degradation of Māori wellbeing. The present study developed an analysis framework based on Ki Uta Ki Tai (holistic-mountains to the sea- management philosophy advocated by Ngāi Tahu) for exploring relationships between landcover and Māori values to enable predictions of cultural values through space and time. We used this framework to predict how two Māori values (Overall Health and Cultural Land Use) have been altered as a result of landcover change between 2001–2012 in three Canterbury catchments. The area of native vegetation declined while exotic pasture increased between 2001–2012, and there were corresponding declines in both cultural health scores. These results suggest that the change in landcover has reduced the ability of the landscape to support Māori values. This framework for assessing changes in Māori values with respect to changing environmental conditions may identify opportunities for Māori to better engage in land use management decisions.

The magnitude and frequency of storm surge in southern New Zealand,

Ryan J. Adam, Michael J. Hilton, Tim Jowett & Wayne J. Stephenson (2020)

**New Zealand Journal of Marine and Freshwater Research, DOI:
[10.1080/00288330.2020.1764596](https://doi.org/10.1080/00288330.2020.1764596)**

There is currently little understanding regarding storm surge in New Zealand, particularly in the southern region. To date, there has been no attempt to establish the frequency and magnitude of storm surge using observed sea level data on the open coast. The aim of this study is to examine the nature of storm surge in southern New Zealand and explore the influence of the Southern Annular Mode (SAM) and the El Niño Southern Oscillation (ENSO) on the frequency and magnitude of storm surge. Bayesian estimation is used through the ‘extRemes’ package in R to determine the return period for storm surge at three locations around southern New Zealand. The 100-year return level varied between 0.91 and 1.31 m. In addition, a statistically significant increase (2.88%) in storm surge intensity (SSI) on the south-east coastline was found. Applying cross-correlation to assess the response of SSI to ENSO and SAM, returned no detectable relationship, except a weak relationship between SAM and SSI on the south-east coast where a two-three month lagged response was present.

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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.

NASA follows Tropical Storm Nuri's path

EurekaAlert! - June 15, 2020

An animation of four days of imagery from NASA's Terra satellite showed the progression and landfall of Tropical Storm Nuri.

New 'sun clock' quantifies extreme space weather switch on/off

ScienceDaily - June 10, 2020

By devising a new, regular 'sun clock', researchers have found that the switch on and off of periods of high solar activity is quite sharp, and are able to determine the switch on/off times.

Smoke from Australian fires rose higher into the ozone layer than ever before

ScienceNews - June 15, 2020

As one plume rose to record heights, it wrapped itself in unusual winds.

What has caused more extreme summer heat events over northeast Asia?

Phys.org - June 15, 2020

Widespread hot extremes have been seen throughout the world in recent years, causing heat-related mortality and harming crops and livestock. In summer 2018, a record-breaking heat wave swept across large areas of Northeast Asia.

National Weather Service proposes eliminating 'advisories' to simplify severe warning system

The Washington Post - June 12, 2020

The suggested changes are part of a larger effort at streamlining public communication.

Is A Tropical Depression In Wisconsin Weird? - Yes

Forbes - June 10, 2020

Earlier this week, Cristobal was still a Tropical Depression as it traversed the state of Wisconsin and as a post-tropical system, it is moving into Canada. Is that weird?

The state of China's climate in 2019: Warmer and wetter, but less loss

Phys.org - June 9, 2020

The National Climate Center (NCC) of China has just completed a report in which it provides an authoritative assessment of China's climate in 2019 based on the NCC's operational system.

2020 likely to be the warmest year on record globally

CBS News - June 15, 2020

Reviews of temperatures for May 2020 have now been reported by four standard-bearer climate data organizations including NASA, NOAA, Berkeley Earth and the European agency Copernicus.

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Weather Eye with John Maunder

<https://www.sunlive.co.nz/blogs/14796-tropospheric-temperatures-january-1979-to-may-2020.html>

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Thanks to our regular contributors.