

New Zealand weather and climate news

Courtesy of MetService Library

MetService mentions

Northland drought: No feed, no water and coronavirus increases farmers' stress

"Extreme" drought conditions in Northland are being called the worst for decades and have left farms with no stock food and with their water sources drying up.

First snow, then rainbows: Hawke's Bay's autumnal weather

New Zealand Herald

MetService meteorologist Dan Corrigan said the region should brace for a drop in overnight lows but that will be followed by a 24C weekend in ...

Heavy rain warning for upper Whanganui region and Taumarunui this weekend

New Zealand Herald

Metservice's April Clarke said the rain in the headwaters will be a spillover from a north-west flow but the majority of the rain will be in the north.

Your weather: Showers and thunderstorms for much of central New Zealand

New Zealand Herald

MetService meteorologist April Clark said lightning strikes were already occurring to the west of the country and were expected to move over land as ...

Weather: Another front brings 'thunderstorm risk', possible snow in the south

Newshub

... New Zealand on Saturday evening brings an increased risk of thunderstorms and possible snow down to 1000m in the south, **MetService** warns.

MetOcean

Estuaries are warming at twice the rate of oceans and atmosphere

Posted: 14 Apr 2020 05:42 AM PDT

A 12-year study of 166 estuaries in south-east Australia shows that the waters of lakes, creeks, rivers and lagoons increased 2.16 degrees in temperature and increased acidity. Researchers say this could impact economic activity and biodiversity worldwide.

FSU technology to monitor **ocean** currents licensed to Canadian data company

Mirage News

... **ocean** surface currents and assist with operational responses to oil spills, **marine** pollution, **weather** forecasting and search and rescue operations.

Volcano alert/watch

The True Story of the **White Island** Eruption

Outside Magazine

Last December, around 100 tourists set out for New Zealand's Whakaari / **White Island**, where an active volcano has attracted hundreds of thousands of ...

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

Australia: Brisbane records hottest April day in 14 years

Aljazeera.com

Instead, according to Australia's **Weatherzone**, Friday saw the mercury reaching 34C (93F) in the capital city of Queensland, a notable 7C above the ...

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

Penang to fund cloud seeding, MET Msia to provide expertise

New Straits Times Online

... will pay and conduct cloud seeding operations with the assistance of the **Malaysian Meteorological Department** (MET Malaysia) to ensure adequate ...

Extreme weather (and other news) – Americas and Europe

Climate-driven megadrought is emerging in western US, says study

Posted: 16 Apr 2020 12:17 PM PDT

A new study says a megadrought worse than anything known from recorded history is very likely in progress in the western United States and northern Mexico, and warming climate is playing a key role.

UK cold weather MAP: 'Destructive frost' to hit UK as temperatures plummet - Forecast

Express.co.uk

The **Met Office** said: “Showers and some longer spells of rain are possible for many southern parts of England, which may turn heavy and possibly ...

International news and research

How a team of scientists studying drought helped build the world's leading famine prediction model

Science Magazine

“We were looking at a really bad drought,” says Chris Funk, a CHC **climate** scientist. ... **Satellites** can see when green fields turn brown, but that often comes too ... **Weather** in Africa is influenced by other oscillations, including the two ...

Persistent Cloudless Skies Helped Fuel Exceptional Greenland Ice Melt

Warm temperatures, clear weather and little snow all played a role in last summer’s major melt event on the ice sheet

Arctic stratospheric ozone levels hit record low in March

Posted: 16 Apr 2020 10:59 AM PDT

Ozone levels above the Arctic reached a record low for March, researchers report. An analysis of satellite observations show that ozone levels reached their lowest point on March 12 at 205 Dobson units. While such low levels are rare, they are not unprecedented. Similar low ozone levels occurred in the upper atmosphere, or stratosphere, in 1997 and 2011. In comparison, the lowest March ozone value observed in the Arctic is usually around 240 Dobson units.

A house blown onto a street, an untouched cake and photos carried 100 miles: Tornadoes leave ...

Washington Post

Doppler radar even detected clouds of debris suspended high in the rotating supercell thunderstorms associated with the debris fallout. A spattering of ...

Revealed: The United States Is The Second Most Disaster-Prone Country on Earth

APN News

Australia ranks 46th, ahead of the UK in 64th place. Unlike the UK, **Australia** has deaths due to **lightning** and a greater risk of experiencing an ...

Air quality / air pollution

Pioneering project to use AI to understand air pollution impacts

AirQualityNews

... funded through the UK Government's Strategic Priorities Fund and led by the Met Office and the Natural Environment Research Council (NERC).

Climate change: Wellington loses air quality gains over long weekend

Air pollution rose in Wellington during the third week of lockdown and over the Easter long weekend – after two historically low weeks.

Study Links Air Pollution To Higher Coronavirus Death Rates

Even a small increase in air pollution can make the coronavirus more deadly, according to new research from Harvard University.

Aviation

Regions expect air service after government loan agreement - Originair boss

The head of a Nelson-based commuter airline said part of the government's loan agreement with Air New Zealand meant regional New Zealand should expect an air service in future.

Coronavirus: Virgin Australia pulls off one of world's longest flights from Paris to Brisbane

NEWS.com.au

“We also have to look at the level of **weather** forecasts that are available for **the airport** and the availability and accuracy of the **airports'** arrival and ...

Coronavirus: How airlines need to evolve post-Covid-19

There's no question that the future of airline travel in the post-coronavirus era is going to evolve.

Already, the spread of Covid-19 has forced numerous procedural changes as carriers tear up their playbook and, pardon the pun, wing it in the face of an unprecedented drop in demand for flights.

Government funding to Qantas and Virgin to ensure air services on key routes

The government has announced up to \$165 million to enable Qantas and Virgin Australia to service crucial metropolitan and regional routes over the next two months, with a review after that on whether more support is needed.

Virgin Australia gets a lifeline, but will it be enough?

With commercial airline fleets grounded due to lack of demand, the Australian government will pay the nation's two biggest airlines, Qantas and Virgin Australia, \$A165 million to ensure they keep flying critical metropolitan and regional routes over the next two months.

How long will coronavirus lockdowns, travel bans last?

World faces 'uphill battle' in fight against coronavirus as new hot spots emerge across the globe, say experts.

Vaccination cards and seat spacing: Air travel in a post-coronavirus world could be vastly different, experts say

The global coronavirus pandemic will change air travel as we know it, with more emphasis on passenger health and in turn, higher airfares, experts say.

Global aircraft grounding hampers weather forecasting: WMO

Flightglobal

The lack of commercial flights due to the Covid-19 crisis is not only a problem for the aviation industry but also has weather forecasters concerned.

Is Reduced Air Travel Impacting The Accuracy Of Weather Forecasts?

Forbes

During the early to mid-1900s, weather-observing technologies started to grow, and in 1934, the National Weather Bureau started collecting data from ...

Forget aircrafts, MET reverts to weather balloons for forecasting

The Kashmir Monitor (press release)

Srinagar: **Weather forecasting** has been hit after the suspension of the flight ... “In absence of the aircraft **data**, we are noting down the observations ...

Business/Insurance

How will climate change-induced increases in extreme rainfall effect EQC liabilities?

Weather-related hazards have already cost the EQC \$450 million in (inflation adjusted) payouts since the year 2000. New research by Jacob Pastor-Paz, Ilan Noy, Isabelle Sin, Abha Sood, David Fleming-Munoz and Sally Owen has found that climate change, and the expected increase in intensity and frequency of extreme weather-related events, is likely to translate into higher damages and thus an additional financial liability for the EQC.

Climate change / global warming

Five-metre waves in Wellington prompt calls for managed retreat

Huge 5-metre waves in Wellington show life needs to change to save residents in dangerous coastal homes, a councillor has warned.

Communications/social media

[WATCH] **Meteorologist's Dog Interrupts While He's Trying to Record**

kdhlradio.com

Chief **Meteorologist** at 5 On Your Side in St. Louis, Scott Connell, was attempting to record a tease for his weather report while working from home but ...

Cat Interrupts Meteorologist Working From Home And Wins A New Job

HuffPost

He's also started to use **weather graphics** made from images of Betty, including one where her tail appears to hold up an umbrella and another where ...

News 4 meteorologist turns science teacher daily on Facebook

williamsonherald.com

The five **meteorologists** agreed the lessons were a great idea. Each **meteorologist** tapes one lesson per week. During the live video, viewers can write in ...

It's Raining Mets! | How the meteorologists' families feel about them working from home

WHP Harrisburg

This episode discusses what it's like for the rest of the family to have the **meteorologists** working from home. Plus, it's a good time to prepare for Severe ..

Covid-19 / Business

Coronavirus: Suicide, PTSD to rise significantly after Covid-19, report predicts

The fallout from the coronavirus lockdown could pit young and old and rich and poor against each other, a new report warns.

The discussion paper, released by think-tank Kōi Tū: Centre for Informed Futures on Friday, predicted a bleak future for New Zealand after coronavirus.

Coronavirus: Forestry industry prepares for restart, hopes for good spraying weather

As the forestry industry prepares to restart once the Government drops to Covid-19 alert level 3, fingers are crossed for a spell of weather suitable for spraying.

Coronavirus: Controlled re-start of education and film industries offers an \$8 billion opportunity for New Zealand

OPINION: Businesses in New Zealand are concentrating on survival during the lockdown period and having to re-imagine and plan how they will operate in coming months and years.

Organisations in sectors that depend on international visitors are of particular concern.

Coronavirus: America's Cup just one event under a cloud as Covid-19 pandemic complicates planning

New Zealand's line-up of high profile sporting events for 2021 is facing disruption as the global fallout from the Covid-19 pandemic leads to calls for postponements.

Coronavirus: David Parker tells councils to keep consenting during Covid-19 crisis

Environment Minister David Parker has urged mayors and councils to clear a backlog of development consents during the lockdown to pave the way for New Zealand to build its way to economic recovery.

Coronavirus: Could an alliance with Taiwan help NZ survive the coronavirus cataclysm?

OPINION: New Zealand and the Republic of China (Taiwan) were wartime allies, who stood together for decades. Should they now turn to each other during the Covid-19 crisis? Doing so could help New Zealand maintain our independence and resilience in this time of global upheaval.

Think tank cuts Taiwan 2020 GDP growth forecast to 1.03%

Taiwan News

The Chung-Hua Institution for Economic Research (CIER) has cut its forecast for Taiwan's gross domestic product (GDP) for 2020 to 1.03 percent after ..

Maths, models & insights into the coronavirus pandemic

Since the COVID-19 pandemic began, it would be fair to say that many of us have become obsessed with numbers.

The number of cases of coronavirus, the number of deaths and so on.

NZ insurers save \$100 million as drivers stay put during lockdown

New Zealand insurance companies will save about \$100 million on payouts for motor vehicles alone during the lockdown because of the dramatic drop in driving during the pandemic.

Coronavirus: Where will the jobs be in a post-Covid-19 world?

So far, given the scale of job chaos, it's only a trickle; 23,000 people signed on for the unemployment benefit between March 17 and April 10, as the lockdown, and the cessation of most businesses, started to bite.

Energy and Mining

New Zealand's Four Largest Electricity Distributors Offer Businesses Payment Deferrals

Scoop.co.nz

Electricity lines companies Orion, **Powerco**, Vector and Wellington Electricity serve 60% of **New Zealand's** electricity customers. The group has worked ...

OMV Announces Positive Results In Toutouwai Exploration Well

OMV NZ, on behalf of the Toutouwai Joint Venture (with partners Mitsui E&P Australia and SapuraOMV), is pleased to announce a positive result with the Toutouwai-1 exploration well in the Taranaki Basin. Drilling commenced in the Petroleum Exploration

COVID-19 Hit Cleantech Hard, But **Energy Analytics Companies Are In Higher **Demand** Than Ever ...**

Forbes

... an analytics company that helps **energy** retailers and grid operators anticipate **electricity demand**, factoring in variables like regional **weather** events.

New model can improve natural gas demand predictions in New York, other states

UB News Center

Limited storage for excess **energy** generated by renewables. ... including climate and **weather** data, historical **demand** for natural gas and **electricity**, ...

Coronavirus: Domestic **electricity use up during day as nation works from home**

BBC News

Energy providers can see that, in a "delay" to early **electricity demand**. ... use it for central heating, and the lockdown coincided with warmer **weather**.

A closer look at clouds to optimize energy forecasts

pv magazine International

The model uses satellite **data** to estimate the light transmission properties of clouds, a metric often overlooked in standard **weather forecasting**, but ...

Hydrology / Flooding

'Big picture thinking' needed to manage Southland flood risk

It's going to take some big-picture thinking to manage the flood risk in Southland in future.

That's the view of Ian Davidson-Watts, who was Gore District Council's civil defence controller when the Maitua River burst its banks in February.

High tides, storm surges flood low-lying areas

High tides combined with storm surges inundated parts of the Otago coastline last week, and forced water over beaches and sandbars into low-lying areas.

Infrastructure

Fletcher Building is developing health and safety plans get staff back to work under level 3

Fletcher Building says its "developing plans" for working under level 3 restrictions as the country awaits the decision on whether lockdown will lift next week.

Space weather

UNH gets \$6M space weather instrument contract

Seacoastonline.com

UNH gets \$6M space **weather** instrument contract ... NOAA monitors and predicts space **weather** and issues civilian alerts from its operational ... Hampshire on the map as a leader in technological **innovation**," said Shaheen, the lead ...

Tourism

Coronavirus: global pandemic a chance to re-set New Zealand tourism

OPINION: One part of the silver lining on the dark cloud of Covid19 may well be the promised review of tourism.

Call for serious rethink of New Zealand's approach to tourism

As the country grapples with the effects of Covid-19 on tourism post-lockdown, there are calls for a serious rethink of how the industry operates, including a cap on numbers.

Don't leave home - but then go see your country

How will our tourism sector - and our personal tourism ambitions and experiences - change in coming years? Ian Yeoman, of Victoria University of Wellington, sets out 10 key trends.

Coronavirus: With flights grounded indefinitely, how will travel agencies survive Covid-19?

Steve Lee started his travel broker business in 2007. Today, New Zealand Travel Brokers works with 175 contracting brokers across the country. But tomorrow? Who knows.

Along with the rest of the travel and tourism industry, the Palmerston North company is experiencing "negative sales" as it refunds clients forced to cancel trips amid the global coronavirus pandemic.

Transport/roading/shipping/freight

German Navy's Baden-Württemberg frigate completes extreme **weather tests in South Atlantic**

Naval News

When the frigate left her home **port** of Wilhelmshaven at the beginning of February, restrictions on public life in Germany and in large parts of the world ...

Water

Fresh water? Dire warning for New Zealand's lakes, rivers and streams

Nearly all of the country's rivers and lakes in populated areas exceed environmental guidelines according to a government report that warns our freshwater is at breaking point.

Polluted, drained, and drying out: new warnings on New Zealand's rivers and lakes

The latest environmental report on New Zealand's lakes and rivers reiterates bleak news about the state of freshwater ecosystems, and warns that climate change will exacerbate existing threats.

Innovation and technologies and AI

IBM Offers Free Tools Based on Trusted Data to Track COVID-19 Cases on Your Phone and Online

New Kerala

... said Cameron Clayton, general manager of IBM's The Weather Company. The Weather Channel is now providing COVID-19 data - so you can see ...

Things to entertain

Do Māori Made Easy with me: Week one – pronunciation

She's not a teacher or a fluent speaker – she just wants to practise te reo Māori with you! Join Leonie Hayden as she works through the first four weeks of Scotty Morrison's Māori Made Easy thanks to Penguin Random House NZ (buy it [here](#)).

Emergency preparedness / disaster planning / resilience

What Happens When Other Disasters Hit during a Pandemic?

Emergency management experts are concerned about everything from evacuations to public messaging

Journal and articles online

Ocean warming pattern effect on global and regional climate change.

Xie, S.-P. (2020). *AGU Advances*, 1, e2019AV000130. <https://doi.org/10.1029/2019AV000130>

Anthropogenic emissions of greenhouse gases cause the planet to warm, and the ocean uptake of anthropogenic heat slows the warming, preventing the climate system from equilibrating with the increasing radiative forcing. The uneven ocean surface warming affects regional changes in tropical rainfall, El Niño, and the global climate sensitivity. Thus, the study of ocean warming patterns bridges the ocean-atmospheric dynamics community focusing on spatial patterns on one hand and the climate change community with a traditional emphasis on the planetary energy budget and radiative feedback on the other.

Daily and Latent Lagged Effects of Rainfall on Pedestrian–Vehicle Collisions

António Lobo, Sara Ferreira, Isabel Iglesias, and António Couto

The potential use of operational radar network data to evaluate the representation of convective storms in NWP models

Thorwald H. M. Stein, Robert W. Scovell, Kirsty E. Hanley, Humphrey W. Lean, Nicola H. Marsden

First Published: 25 March 2020

Initial Evidence for Increased Weather Salience in Autism Spectrum Conditions

Matthew J. Bolton, William G. Blumberg, Lara K. Ault, H. Michael Mogil, and Stacie H. Hanes

Evaluating the GECCO3 1948-2018 Ocean Synthesis - a configuration for initializing the MPI-ESM climate model

Armin Köhl

First Published: 24 March 2020

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Thanks to our regular contributors.
