

New Zealand weather and climate news

Courtesy of MetService Library

MetService mentions

WATCH: Thunderstorm rattles Hawke's Bay's Toitotai Art Centre

New Zealand Herald

Napier and Hastings both experienced the storm which blew out to sea, about 6.45pm, as per MetService predictions. Some surface flooding was ...

Weather: New Zealand warned to keep eye out for thunderstorms, heavy showers

Newshub

... and lightning on Monday afternoon. MetService says Kiwis should keep an eye on the rain radar with "rumbles of thunder" forecast later today.

Above average temperatures could push Christchurch into heatwave

Otago Daily Times

MetService says a heatwave must have five days of temperatures more than 5 deg C above the average. Forecaster Tahlia Crabtree said the forecast ...

'Is that all?' Kiwis mocked over 25-degree heatwave

Yahoo News Australia

MetService NZ Meteorologist Angus Hines explained Christchurch and surrounding areas including Ashburton, Alexandra and Blenheim reach an ...

Timaru's hailstorm cost reaches record \$170m mark

Stuff.co.nz

The insurance bill for Timaru's 2019 hailstorm is now at \$170 million, making it New Zealand's costliest weather event this century. The Insurance ...

Hawke's Bay heavy rain a silver lining for drought-hit farmers

The rain clouds that brought flooding to Napier had a silver-lining for drought-hit Hawkes Bay farmers.

Wind gusts bring danger

Strong wind gusts toppled a sidelifter, used for hoisting containers, and tipped over a caravan during a hot and blustery day in the South.

Leonid meteor shower visible in NZ skies

The Leonid meteor shower will be in full effect over New Zealand skies for the next few mornings.

The meteor shower appears from November 14-21, but it is only visible in New Zealand from about 4am and is best viewed on a cloudless night when the moon is not too bright.

NIWA

Marine heatwave signals a warm summer on the way

Our seas are experiencing their third heatwave in four years – which will drive air temperatures up as well, according to Niwa.

Meteorologist Ben Noll said Northland's oceans are recording temperatures of between 18 and 21 degrees Celsius – that's 1.6C above average for this time of year. These types of measurements officially put the region into a marine heatwave.

Muggy summer forecast for New Zealand, with little respite in overnight temperatures

Stuff.co.nz

Expect this summer to be warm and muggy, with little respite in the temperatures overnight, meteorologists say. Ben Noll, a meteorologist at Niwa ...

WMO

East Asia winter Climate Outlook Forum predicts near-normal or stronger-than-normal monsoon

Posted:

The World Meteorological Organization (WMO) actively supports the activities of the Regional Climate Outlook Forum (RCOF), which brings together experts to produce seasonal, regional climate...

Impact-based forecast and warning services training in Solomon Islands

Posted:

A five-day World Meteorological Organization (WMO) Workshop on Impact-Based Forecast and Warning System (IBFWS) was organized in Honiara, Solomon Islands. The training workshop is funded through the...

Tie for most active Atlantic hurricane season on record. Western wildfires continue to set new records - NOAA

Posted:

For October, the average contiguous U.S. temperature was 54.4°F, 0.3°F above the 20th-century average. This ranked in the middle third of the 126-year period of record. For the year-to-date,...

Successive tropical cyclones cause devastation

Posted:

Back-to-back tropical cyclones have caused massive destruction and impacted millions of people in Central America and parts of Southeast Asia, underlining once again the threats posed by tropical...

South West Indian Ocean Countries Strengthen Early Warning Systems

Posted:

South West Indian Ocean countries have launched a new five-year project to improve operational forecasting and multi-hazard early warning systems in a region which is exposed to climate change, sea...

State of the Climate 2020 - Bureau of Meteorology - Australian Government

Posted:

The Bureau of Meteorology and CSIRO play an important role in monitoring, analysing and communicating observed and future changes in Australia's climate. This sixth biennial State of the Climate...

WMO Reviews Data Policy

Posted:

The World Meteorological Organization (WMO) has promoted free and open exchange of weather, climate and water data since 1873, and has created a global standardized network, which is the cornerstone...

ECMWF

GEOGloWS Announces Global Streamflow Service Running at ECMWF

Group on Earth Observations

This GEOGloWS ECMWF Streamflow Service is now fully running on ECMWF cyberinfrastructure. The hydrologic data service consists of the same 40- ...

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

Tasmania is home to some of the windiest places in the country. This is why

As a small, mountainous island Tasmania has many exposed coastal sites and elevated terrain.

It is at these locations that the windiest conditions are experienced.

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

Chiang Mai observes Royal Rainmaking Day

Pattaya Mail

He read research work on meteorology and weather modification, which he found useful for combating weather change. In 1955, when the King ...

Infrawatch blames Philippine dam operators for Cagayan, Isabela floods

The widespread flooding in Cagayan that gripped the Philippines this weekend is partly being blamed on the massive release of water from Magat Dam.

Extreme weather (and other news) – Americas and Europe

Hurricane Iota bashes Nicaragua, Honduras after Eta floods

Hurricane Iota battered Nicaragua's Caribbean coast and flooded some stretches of neighbouring Honduras that were still underwater from Hurricane Eta two weeks earlier, leaving authorities struggling to assess damage after communications were knocked out in some areas.

International news and research

Centuries of development led to modern meteorology

Concord Clayton Pioneer

Ancient Greek philosophers coined the term meteorology, which means “the study of things up there,” almost 2,500 years ago. But it wasn't until the ...

Hurricanes Eta and Iota brought disaster to Central America. Officials can't retire their names.

Washington Post

But the World Meteorological Organization ruled that Greek letters could never be retired, lest an irreplaceable chunk be taken out of the alphabet.

Humidity – the second pillar of climate change

Met Office

Kate Willett is a Met Office scientist and author of a new study looking at global humidity – the amount of water vapour held in the atmosphere as a gas.

Study reconstructs ancient storms to help predict changes in tropical cyclone hotspot

Posted: 16 Nov 2020 08:28 AM PST

New research reveals that tropical cyclones were actually more frequent in the southern Marshall Islands during the Little Ice Age, when temperatures in the Northern Hemisphere were cooler than they are today. This means that changes in atmospheric circulation, driven by differential ocean warming, heavily influence the location and intensity of tropical cyclones.

New method brings physics to deep learning to better simulate turbulence

Posted: 16 Nov 2020 04:57 AM PST

Deep learning, also called machine learning, reproduces data to model problem scenarios and offer solutions. However, some problems in physics are unknown or cannot be represented in detail mathematically on a computer. Researchers developed a new method that brings physics into the machine learning process to make better predictions. The researchers used turbulence to test their method.

New global forecast models now on PredictWind.com

Sail World

It is #2 behind the ECMWF for land based weather stations.

Today's weather is different than what our grandparents saw

The Weather Network

Environment and Climate Change Canada's David Phillips says that the weather we are experiencing is significantly different than what our ...

Aviation

NZ company aims to become 'Uber of aerial intelligence' with its solar-powered aircraft

Stuff.co.nz

Research, Science and Innovation Minister Megan Woods said New Zealand was the “ideal site” for developing an innovative unmanned aircraft ...

Business/Insurance

What does the RCEP mean for New Zealand?

Thirty percent of the world's population, 30 percent of the world's GDP - the Regional Economic Comprehensive Partnership covers a fair portion of the globe with fifteen countries - including New Zealand - signing the trade agreement over the weekend. But what exactly is it and what does it mean for Kiwis?

Climate change / global warming

Leaving the beach front - a political and financial nightmare

We're already bang-smack in the middle of one financial crisis, but another slow-burner is lurking in the background – the cost of which could dwarf the Covid-19 impact.

More than 4000 Nelson City properties included in new sea level rise hazard index

More than 4000 Nelson city properties could be at risk of a rise in sea level under new modelling predictions.

Communications/social media

Meteorologists that were nearly blown away on live TV

Nicki Swift

On one hand, many meteorologists dedicate a majority of their lives to reporting dangerous weather. When a devastating hurricane pops up and the rest ...

Covid-19 / Business

New Zealand's economic future: COVID-19 as a catalyst for innovation

Koi Tū: The Centre for Informed Futures

6 Nov 2020 | Report | Economics, Social issues

There is broad consensus that, in response to the COVID-19 pandemic, New Zealand should aim to protect its social cohesion and promote economic, social, cultural and environmental well-being. But how can we achieve these goals? This report assesses this challenge from an economic perspective.

Covid-19 / Wellbeing

Government agrees to buy 5 million Covid-19 vaccines for 2021 and 2022, once it passes testing

As many as five million people could have their Covid-19 jab by 2022, if the vaccine passes safety tests.

The Government has agreed to purchase a single-dose vaccine from Janssen Pharmaceutica once it finishes clinical trials and passes regulatory approvals. It is the latest announcement of agreements for the supply of Covid-19 vaccines, if they are proved to be safe and effective.

Fire

Effect of weather forecast errors on fire growth model projections

Trent D. Penman, Dan A. Ababei, Jane G. Cawson, Brett A. Cirulis, Thomas J. Duff, William Swedosh and James E. Hilton

Fire simulators inform critical decisions for communities during wildfires. The sensitivity of these models to input data uncertainty is unknown. Fire area is most sensitive to error in temperature and wind speed, whereas location is most sensitive to error in wind direction. On-ground intelligence is vital for accurate fire predictions.

Transport/roading/shipping/freight

Why Real-Time Data Matters to the Maritime Industry

Hellenic Shipping News Worldwide

Inefficient weather routing oftentimes leads to increased time spent at sea, which not only disrupts and delays the supply chain, but can also increase ...

5 ways weather impacts freight shipments

FreightWaves

Understanding how weather can affect freight shipment can help everyone in the supply chain plan ahead. The following are five ways weather can ...

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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.

[Provocative Idea For Naming Atlantic Hurricanes That Just Might Work](#)

Forbes - November 16, 2020

Meteorologists like me are sitting in awe of the rapid intensification of yet another Greek-letter major hurricane approaching Central America.

[Rising levels of carbon dioxide increasing extreme weather events in Australia, report finds](#)

The Guardian - November 12, 2020

Climate agencies say fossil fuel burning is driving the increase of dangerous bushfires and days of extreme heatwaves.

[Study reconstructs ancient storms to help predict changes in tropical cyclone hotspot](#)

ScienceDaily - November 16, 2020

New research reveals that tropical cyclones were actually more frequent in the southern Marshall Islands during the Little Ice Age, when temperatures in the Northern Hemisphere were cooler than they are today. This means that changes in atmospheric circulation, driven by differential ocean warming, heavily influence the location and intensity of tropical cyclones.

[Hurricane Iota Spreading Dangerous Flood Threat Across Central America After Category 4 Landfall](#)

The Weather Channel - November 17, 2020

Hurricane Iota is spreading a dangerous threat of flooding rainfall and damaging winds into Central America after making landfall in northern Nicaragua as a strong Category 4 late Monday night.

[The small satellite that's paying big dividends](#)

Phys.org - November 17, 2020

Think of the International Space Station, and most likely you imagine an orbiting laboratory, where scientists observe how plants, materials, and humans react to microgravity conditions. But during the past decade, the station has also served a very different role—that of being a business incubator. And this is one of its star products—the CubeSat.

[Drones Helping Scientists Understand Major Weather Events](#)

WeatherNation - November 16, 2020

Now, these drones are helping NOAA scientists get a better understanding of two major weather events: derechos and flooding.

Weather-proof chip aims to take self-driving tech, wireless communications to next level

ScienceDaily - November 12, 2020

A new device can overcome challenges like bad weather to deliver more secure, reliable communications. This could aid military communications in challenging areas, improve the ability of self-driving cars to see the environment around them and speed up wireless data for potential 6G networks.

After a busy summer, NOAA's hurricane gliders are returning home

NOAA - November 9, 2020

These gliders were deployed off the coasts of Puerto Rico, Dominican Republic, the U.S. Virgin Islands, the Gulf of Mexico, and the eastern U.S. to collect data for scientists to use to improve the accuracy of hurricane forecast models.

Lightning 'superbolts' can be 1,000 times brighter than ordinary flashes, study finds

The Washington Post - November 14, 2020

Fewer than 1 in 300 bolts are superbolts, but they strike with rare power.

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Weather Eye with John Maunder

see www.sunlive.co.nz/blogs/15142-global-temperatures-1996-october-2020.html

Read about John Maunder's latest book (#5)

“Fifteen shades of Climate...the fall of the weather dice and the butterfly effect “

www.amazon.com/dp/B08NDR1GFD?ref_=pe_3052080_397514860

Foreword by John Zillman

