

## **New Zealand weather and climate news**

Courtesy of MetService Library

### **MetService**

#### **Temperatures in Napier and Hastings soar higher than Rarotonga**

New Zealand Herald

MetService meteorologist Andy Best said Rarotonga's high depended on a lot of factors including sea temperature, and this week Napier and Hastings ...

#### **Strong winds of up to 120kmh, heavy rain watch issued for Auckland**

Stuff.co.nz

MetService has issued a strong wind warning and heavy rain watch for Auckland and Northland, starting on Monday, with fears winds could get up to ...

#### **Heavy rain and strong winds - it's a wet welcome back to school for the North Island**

New Zealand Herald

MetService meteorologist Stephen Glassey said the low-pressure system was currently making its way towards the North Island and will hit Northland ...

#### **Heavy rain and strong winds to kick off Hawke's Bay's week**

New Zealand Herald

MetService meteorologist Stephen Glassey said that up until late Wednesday night Hawke's Bay will be in store for some miserable weather and ...

#### **Weather: Rain, sometimes heavy, and strong winds from the east forecast for top of the North Island**

Don't leave the house without an umbrella.

Rain - heavy at times - is set to hit the top half of the North Island including in and around Auckland, Waikato and parts of the Bay of Plenty.

#### **New Zealanders warned to prepare as cyclone season bears down on the country**

Newshub

Tropical cyclone season is bearing down on New Zealand, and MetService is warning Kiwis to make sure they are prepared. Between nine and 12 ...

## **WMO**

### **Tokyo Typhoon Center 30th anniversary marks achievements and challenges**

Dramatic improvements in satellite technology, forecasts and early warnings have helped save hundreds of thousands of lives from tropical cyclones. But the increasing societal impacts as a result of...

### **Arctic research project successfully launched**

The most ambitious Arctic research expedition ever undertaken has got off to a successful start. Frozen in the Arctic sea ice, scientists from 17 nations will conduct research at the epicentre of...  
Extreme weather (and other news) – Antarctica and offshore

### **Rare warming over Antarctica reveals power of stratospheric models**

Nature.com

At the first signs of this event, known as sudden stratospheric warming, Eun-Pa Lim, a climate scientist at the Australian Bureau of Meteorology in ...

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

### **Typhoon Hagibis: Death toll in Japan climbs to 35 after storm unleashes widespread flooding**

Japan dispatched tens of thousands of troops and rescue workers Sunday after a typhoon unleashed widespread flooding and left 35 people dead and 17 missing.

Extreme weather (and other news) – Americas and Europe

### **Do heatwaves kill in Britain? Yes, say Office for National Statistics figures**

Telegraph.co.uk

Recent figures released by The Met Office also showed the hottest 10 years in Britain since records began in 1884 have all occurred since 2002.

### **Kent weather: This is what Met Office says about 'coldest Kent winter in nearly 60 years'**

Kent Live

The Met Office has passed its judgement on Kent's winter weather forecast. Reports from the weekend suggested we could be set for a sudden cold ...

[London weather: Met Office has its say on whether London will see snow this month](#)

MyLondon

Reports suggesting the country could be hit by some "extreme cold weather" as early as this month might be not be true, according to the Met Office.

### **New Zealand research**

[Nasa scientist working with team on modelling events](#)

Alexandra's scientific community is small, but has a global impact, a Nasa scientist says.

"I think they are very smart people, very capable," Dr Larry Thomason said.

Working together to demonstrate the impact of research

The Ministry of Business, Innovation and Employment has published a position paper today on demonstrating the impact of research.

The paper, developed after extensive consultation with the research, science and innovation system, encourages public research organisations to place greater emphasis on demonstrating the value of research to the public.

View the paper and a summary infographic:

[The Impact of Research: Position paper - October 2019 \[PDF 1.5MB\]](#)

[A framework for the impact of research \[PDF 670KB\]](#)

### **International news and research**

[3 breathtaking photos from Croatia selected for 70th WMO calendar](#)

Croatia Week

6 October 2019 – Three breathtaking photos shot in Croatia have been selected for the special 70th edition of the World Meteorological Organization's ...

How long has the science of forecasting weather been around?

Irish Times

Folklore about how to predict the weather based on observations of, ... For European governments in particular, the central importance of shipping to

'Internationally, core weather forecasting is always done by national weather services'

Down To Earth Magazine

'Internationally, core weather forecasting is always done by national ... How many weather products and services is the IMD offering the private sector ... the South China Sea, north east Pacific Ocean and the equatorial south Pacific.

Women meteorologists make headway in weather forecasting

Saudi Gazette

Women meteorologists make headway in weather forecasting ... Al-Azmi, the first Saudi woman to specialize in meteorology, stated through she was a ...

Limerick businesses critical of colour-coded weather warning system

Limerick Leader

THERE have been calls in some business circles for Met Éireann to abolish its current system of colour-coded weather warnings. It follows the issuing ...

Heat waves could increase substantially in size by mid-century

Scientists found that by mid-century, in a middle greenhouse emissions scenario, the average size of heat waves could increase by 50%. Under high greenhouse gas concentrations, the average size could increase by 80% and the more extreme heat waves could more than double in size.

## **Others**

The weather forecasting systems market is projected to grow from an estimated USD 2.3 billion in ...

Yahoo Finance

Key players in the weather forecasting systems market are The Weather Company (US), Vaisala (Finland), Sutron Corporation (US), Campbell ...

### **Advertising/promotion**

What Do You Call A Holiday Retail Forecast That Ignores The Weather? Wrong

Forbes

“By adding weather into a demand forecast for seasonal product categories, we've seen companies increased forecast accuracy more than 20%.”.

Taxi-Top Startup Firefly Can Now Target Ads Based on Weather

Adweek

Taxi-Top Startup Firefly Can Now Target Ads Based on Weather ... “We're always all about bringing more innovation to this physical advertising space.

### **Aviation**

New Zealand's five most turbulent airports guarantee a bumpy landing

Stuff.co.nz

Murdoch, an aviation meteorologist, said low-level turbulence was similar to water flowing over rocks in a stream – the faster the flow, and the bigger ...

Aviation partnership makes Pacific airways safer

Scoop.co.nz

It also designed satellite-based approach procedures to improve the ability of aircraft to land safely, especially in poor weather. The safety of aviation ...

### **Business/Insurance**

## Costs of natural disasters are increasing at the high end

While the economic cost of natural disasters has not increased much on average, averages can be deceptive. The costs of major disasters like hurricanes Katrina, Maria and Dorian or the massive tornado swarms in the Midwest have increased to a disproportionately larger extent than those of lesser events, and these major disasters have become far more expensive, according to an international team of researchers.

## **Energy and Mining**

### The UK's National Grid says it can meet energy demand if no-deal Brexit occurs

E&T Magazine

While they reduced demand from LNG and other electricity supplies overall, weather conditions such as a lack of wind or sun on peak demand days ...

## **Fire**

### It's only October, so what's with all these bushfires? New research explains it

The Conversation AU

It confirms the strength of the relationship between climate drivers such as El Niño, climate change, and the Australian bushfire season.

## **Health**

### Climate impact: How the business of healthcare is changing with climate change

FierceHealthcare

And extreme weather and climate-related events can have lasting mental health consequences, particularly if they destroy livelihoods or require ...

## **Satellites and radar**

## Weather Radar Gaps: Why They Exist And The Related Risk Factors

Forbes

Weather Radar Gaps: Why They Exist And The Related Risk Factors ... With all of the technology and innovation available to us, why do these gaps in ...

## NOAA Seeks Fresh Tech Ideas for Weather Satellite Fleets

Nextgov

The agency that operates the nation's weather satellites wants to hear innovative technical ideas for how to enhance or improve their effectiveness.

## **Space weather**

### Europe eyes improved 'space weather' resilience

BBC News

This money is going principally to the Met Office, which is Britain's centre of excellence on the subject. The Exeter-based agency works closely with US ...

Transport/roading/shipping/freight

### Iteris ClearPath Weather Chosen by Colorado Department of Transportation for Road Maintenance ...

Yahoo Finance

... and forecast weather data through the ClearPath Weather platform,” said Ben Hershey, vice president, Agriculture and Weather Analytics at Iteris.

## **Water**

### We need to track the world’s water like we do weather (TED talk)

We need a global weather service for water, says entrepreneur and TED Fellow Sonaar Luthra. In a talk about environmental accountability, Luthra shows how we could forecast water shortages and risks with a global data collection effort -- just like we monitor the movement of storms -- and better listen to what the earth is telling us

## **Innovation and technologies and AI**

### Carrot Weather brings snarky forecasts to the Mac with macOS Catalina

With the launch of macOS Catalina comes the ability for iOS developers to port their apps to the Mac with Catalyst. The highly popular Carrot Weather is taking advantage of that right away with its Mac app now available.

Climate change / global warming / sea level rise

### Rod Carr appointed as chair of new Climate Change Commission

Former deputy Reserve Bank governor and University of Canterbury vice-chancellor Rod Carr has been appointed as the chair of the new Climate Change Commission.

### Climate Explained: Why some people still think climate change isn't real

Why do people still think climate change isn't real?

At its heart, climate change denial is a conflict between facts and values. People deny the climate crisis because, to them, it just feels wrong.

### Predicting the impact of climate change on bridge safety

Climate change will increase the frequency and intensity of natural hazards like flooding. In turn, floodwaters erode a bridge's foundation, creating scour holes that compromise the integrity of the structure. But to date, it's been possible to quantify that scour risk. A new model developed by civil engineering researchers takes a holistic approach combining climatology, hydrology, structural engineering, and risk assessment to determine the effects of climate change on bridges.

### Believing in climate change doesn't mean you are preparing for climate change

Researchers found that although coastal homeowners may perceive a worsening of climate change-related hazards, these attitudes are largely unrelated to a homeowner's expectations of actual home damage.

## **Cloud seeding / Geoengineering**

### UAE reveals more cloud seeding details, shares new photo

Khaleej Times

"NCM has conducted eight cloud seeding operations since Friday, and the amount of rainfall water stored in the UAE's dams during the last two days ...

Conferences and professional development

1 October - The 13th Fire and Forest Meteorology Symposium is now accepting abstract submissions!

15 November - Abstract submission deadline for 34th Conference on Hurricanes and Tropical Meteorology.

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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.

October 15, 2019

How to track a typhoon: The forecasters on the front line of extreme weather

October 14, 2019 - CNN.com International

Weather radars and parachute drops may not be enough to protect this city from the next typhoon.

Read MORE

NASA launches long-delay ICON space weather satellites to study the Earth's ionosphere

October 10, 2019 - Newsbeezer - zimbabwe

A long-awaited NASA mission to study the upper Earth's atmosphere has finally started after years of delays.

Read MORE

See satellite images of 'mid-latitude cyclone' that whipped winds, rain, snow across Michigan

October 14, 2019 - MLive.com

Satellite images shared by the Cooperative Institute for Meteorological Satellite Studies (CIMSS) at the University of Wisconsin-Madison show the mid-latitude cyclone that hung over parts of the United States and Canada influencing Great Lakes region weather throughout the weekend.

[Read MORE](#)

### [Solar Storms Can Devastate Entire Civilizations](#)

October 12, 2019 - OilPrice.com

Solar storms, whose more scientific name is coronal mass ejections, were until recently believed to be a rare occurrence—only happening once every couple of centuries or so.

[Read MORE](#)

### [Hydrologic simulation models that inform policy decisions are difficult to interpret](#)

October 12, 2019 - Phys.org

Hydrologic models that simulate and predict water flow are used to estimate how natural systems respond to different scenarios such as changes in climate, land use, and soil management.

[Read MORE](#)

### [Typhoon, Cyclone or Hurricane? Different Names for the Same Storms](#)

October 12, 2019 - MSN.com

What is the difference between a typhoon, a hurricane and a cyclone? It comes down only to the storm's location.

[Read MORE](#)

### [NRL launches space weather instrument on NASA satellite](#)

October 11, 2019 - EurekAlert!

A U.S. Naval Research Laboratory (NRL) instrument aboard NASA's Ionospheric Connection Explorer (ICON) satellite will deliver unprecedented information to help scientists investigate how both terrestrial and solar weather impact the ionosphere, the ionized region of Earth's upper atmosphere.

[Read MORE](#)

### [Florida mangroves reveal complex relationship between climate and natural systems](#)

October 11, 2019 - Phys.org

A new study led by UCLA's Kyle Cavanaugh of how Florida's mangroves and salt marshes are affected by changes in climate, both man-made and natural, illustrates the complex interplay between our changing climate and living natural systems.

[Read MORE](#)

### [NASA-NOAA's Suomi NPP satellite needed 3 orbits to see all of Super Typhoon Hagibis](#)

October 10, 2019 - Phys.org

NASA-NOAA's Suomi NPP satellite provided forecasters with a composite visible image of the very large Super Typhoon Hagibis in the Northwestern Pacific Ocean on Oct. 10.

[Read MORE](#)

### [NASA's Cyclone Global Navigation Satellite System Aids Hurricane Forecasts](#)

October 9, 2019 - SciTech Daily

Eight briefcase-size satellites flying in a row may be key to improving forecasts of a hurricane's wind speed – detecting whether it will make landfall as a Category 1 or a Category 5.

[Read MORE](#)

A Trillion Dollar Storm Looms For Earth And It's Not A Hurricane

October 10, 2019 - Forbes

What is space weather, and how is a trillion dollar storm even possible?

Read MORE

NOAA Seeks Fresh Tech Ideas for Weather Satellite Fleets

October 9, 2019 – Next gov

The nation's weather agency is looking for new tech ideas that could beef up its data collection and forecasting efforts.

Read MORE

American Meteorological Society

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**My latest WeatherEye from John Maunder**

<https://www.sunlive.co.nz/blogs/13900-tauranga-september-average-afternoon-temperatures-19132019.html>

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