

## New Zealand weather and climate news

### *MetService mentions*

#### Vietnam, New Zealand sign MoU on providing weather-related data

New Straits Times Online

Vietnam's HYMETEC signed a MoU with New Zealand's MetService to work closely on providing weather-related information for broadcast and online ...

#### Funding two bodies to produce the same weather forecast

There are storm clouds hanging over the future of New Zealand's weather forecasting services.

#### STOP: DOC launches new warnings on Tongariro Alpine Crossing amid concerns

"In the last seven years, we've grown from a search and rescue one in every 5000 participants that are going on the Tongariro Alpine Crossing to now ...

#### Wild weather working its way up South Island

MetService meteorologist Angus Hines said the front went through Oamaru about 4pm, causing temperatures to drop from 22C to 9.6C within an hour

#### South cops more wild weather

Otago Daily Times

MetService said there was a moderate risk of thunderstorms from Clutha to Christchurch through the afternoon, which could be accompanied by brief ...

#### Stars align in Wairarapa for astro-tourism business

Stuff.co.nz

Whitby estimated that they would get clear weather 60 per cent of the time and the dry air in that part of the country also helped viewing clarity.

#### Hot weather: Bay temperatures to jump close to 30C this weekend

New Zealand Herald

MetService meteorologist Peter Little said the weather coming to the Bay was looking "pretty nice" and would be a pleasant treat after a cold October.

## *MetOcean*

### Alice Goward-Brown joins MetOcean Solutions

We are delighted to welcome Dr Alice Goward-Brown to MetOcean Solutions. Alice is a physical oceanographer and will be joining our marine project consultancy team, based in New Plymouth.

### Dr Ocean Mercier - Moana Project Researcher- awarded 2019 Callaghan Medal

Congratulations to Dr Ocean Mercier who last week was awarded the Callaghan Medal from the Royal Society Te Apārangi for her pioneering work to engage audiences in science and mātauranga Māori.

### Fugro enters Korean offshore wind market

reNEWS

... UST21's local hydrography capacity to provide site characterisation services, including geotechnical, geophysical and offshore metocean solutions.

### GLOBAL: Enginei EFMS portal adds metocean map overlays

Bunkerspot

Royston's Enginei electronic fuel management system now includes detailed map overlays from Tidetech to facilitate more accurate vessel tracking ...

### Research on large storm waves could help lessen their impact on coasts

An international team of researchers has analyzed months of data of large nearshore waves to provide new insights that could help improve the designs of a variety of coastal structures from seaports to seawalls to better withstand destructive waves.

### Water Safety NZ partners with Māori to save lives

On average Māori account for over 20 percent of all preventable and non-preventable drowning fatalities, despite comprising only 15 percent of the nation's population. To stem the tide of tragedy, Water Safety New Zealand (Haumarū Wai O Aotearoa) knows that working with Māori is key. To fund their partnerships, ACC have granted Water Safety \$1 million for a two year pilot scheme.

### Uni students invent buoy to detect riptides

Victoria University students Chamonix Stuart & Hannah Tilsley have designed a system to help prevent drownings in rip currents.

#### Engineer EFMS Portal Incorporates Detailed Metocean Map Overlays

Hellenic Shipping News Worldwide

Metocean map overlays showing air temperature, cloud cover, sea currents, wind speed and direction, and wind conditions are now fully integrated ...

### **WMO**

#### High Mountain Summit seeks to boost climate and disaster resilience

The world's highest peaks, ranging from the Andes to the Alps and the Third Pole to the tropics, are being hit hard by climate change, and the impacts of this are cascading down to some of Earth's...

#### WMO-IMO Symposium addresses extreme maritime weather

WMO and the International Maritime Organization (IMO) held the first joint Symposium on Extreme Maritime Weather: Towards Safety of Life at Sea and a Sustainable Blue Economy Antarctic ozone hole is smallest on record

In 2019, the hole that developed in the ozone layer over Antarctica was the smallest on record since the ozone hole was first discovered, according to U.S. scientists.

#### WMO calls for protection of radio frequencies vital to weather forecasts

Posted:

The World Meteorological Organization is calling on governments to protect radio frequencies allocated to Earth observation services which are vital for weather forecasts and long-term climate change...

#### Papua New Guinea National Weather Service launched Strategic Plan

Posted:

Mr Roy Mumu, Secretary for the Department of Transport officially launched the National Weather Service's Strategic Plan (2019-2023). The launching event is part of the Second Workshop of the CREWS...

## **ECMWF**

Weather forecasts will be improved with exascale systems - Tiago Quintino from ECMWF explains ...

Primeur Magazine

Tiago Quintino explained in his presentation that ECMWF runs several simulation models that run weather forecasts on their supercomputer.

## **Volcano alert/watch**

Scientists keep close watch on White Island rumbles

Scientists are keeping a close eye on rumbles at New Zealand's most active volcano – with two key indicators of unrest at their highest level in three years.

## **Extreme weather (and other news) – Antarctica and offshore**

The Antarctic ozone hole is the smallest since it was discovered

WRAL.com

The ozone is monitored by NASA and NOAA through a variety of instruments, including satellites and weather balloons. NOAA's balloons carry ...

Extreme weather (and other news) – Australia and Pacific

Bureau of Meteorology continues security push

Computerworld Australia

The Bureau of Meteorology is working on integrating an upgrade to its HPC infrastructure into a major multi-year ICT transformation program that is ...

Sufferers of asthma and respiratory disease stuck indoors on windy days as NSW drought intensifies

People with asthma and respiratory diseases are advised to prepare for potentially more dust storms as the drought intensifies in parts of New South Wales.

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

Norway helps Vietnam improve marine forecast capacity

<http://en.vietnamplus.vn/> (press release)

According to Cuong, the VMHA and meteorological and hydrological stations in coastal areas have applied technologies to forecast tidal surges

Category 4 Kyarr is the strongest cyclone over the Arabian Sea in 12 years

Washington Post

The Indian Ocean beast — dubbed a top-tier “super cyclonic storm” by the India Meteorological Department — is the first storm of such intensity to rage ...

Why Fewer Typhoons Are Reaching Normally Hard-Hit Parts of Asia | Voice of America - English

Voice of America

Why Fewer Typhoons Are Reaching Normally Hard-Hit Parts of Asia ... Jason Nicholls, senior meteorologist with American forecasting service ...

### **International news and research**

New Navy Weather Models Will Revolutionize Forecasting

DVIDS (press release)

... breakthrough technologies into these models, which will improve the science of weather forecasting for many years. By coupling the Navy's weather, ...

'Climate change is happening': The storm chaser who defends science in the White House

Washington Examiner

It puts him at the heart of an administration frequently condemned as anti-science, a meteorologist and extreme weather expert working for a president ...

Satellite data used to calculate snow depth in mountain ranges

Bioscience engineers have developed a method to measure the snow depth in all mountain ranges in the Northern Hemisphere using satellites. This technique makes it possible to study areas that cannot be accessed for local measurements, such as the Himalayas.

### Climate warming promises more frequent extreme El Niño events

New research, based on 33 historical El Niño events from 1901 to 2017, show climate change effects have shifted the El Niño onset location from the eastern Pacific to the western Pacific and caused more frequent extreme El Niño events since the 1970's. Continued warming over the western Pacific warm pool, driven by anthropogenic climate change, promises conditions that will trigger more extreme events in the future.

### A Guide to Understanding Satellite Images of Hurricanes

WeatherNation

A Guide to Understanding Satellite Images of Hurricanes ... Institute for Meteorological Satellite Studies at the University of Wisconsin-Madison.

5G network

### Will 5G impact weather forecasting? A UN conference aims to find out

Android Central

... predictions than modern technology, a UN summit in Egypt is now convening to determine the future spectrum usage of 5G technology worldwide.

### Australian Mobile Carriers Won't Get Really Fast 5G Millimetre Wave Spectrum til mid 2021

Ausdroid

The Australian Federal government has commenced the process to auction spectrum in the 26 GHz band to support the next stage of 5G coverage ...

## **Aviation**

### New era for Air New Zealand's International Network

Air New Zealand is accelerating its ambitions for North America and will launch a non-stop service between Auckland and New York using its 787-9 Dreamliner in October 2020.

### Wellington Airport expansion plan baffles climate change experts

Despite messages to reduce air travel, Wellington Airport is planning for 25 per cent more flights by 2040.

### DFW Airport, American Airlines Offering Non-Stop Service To New Zealand

CBS Dallas / Fort Worth

Today DFW Airport and American Airlines announced the addition of non-stop service to Auckland, New Zealand. Katie Johnston reports. 6 hours ago ...

### **Business/Insurance**

#### Why weather now means business and how it affects you

Down To Earth Magazine

Every day at Weather Co's office in Brookhaven, in the US state of Georgia, some 600 meteorologists, data analysts and a supercomputer analyse ...

### **Farming/horticulture/Aquaculture**

#### Horticulture NZ already working with growers on climate

Horticulture New Zealand has welcomed the Government's endorsement of the Primary Sector Climate Change Commitment, saying it has already started working with its growers on the challenges associated with climate change.

Health

#### Los Alamos AI model wins flu forecasting challenge

EurekAlert (press release)

"Accurately forecasting diseases is similar to weather forecasting in that you need to feed computer models large amounts of data so they can 'learn' ...

### **History**

#### Decades of detailed weather reports pulled from old maritime logs

National Geographic

Decades of detailed weather reports pulled from old maritime logs ... of the Old Weather: Arctic project, a citizen science-fuelled effort to digitise and .....

### **Satellites and radar**

Weather Cannot Hide From Honeywell's New Advanced Radar System

PRNewswire (press release)

The latest, most advanced addition to the IntuVue family expands Honeywell's advanced weather radar capabilities to more aircraft, helping pilots ...

### **Transport/roading/shipping/freight**

Colorado to use hyperlocal weather forecasting for road maintenance operations

Traffic Technology Today

The cloud-based platform will provide CDOT decision makers with an easy-to-use display for effectively managing road weather issues.

### **Weather in pictures**

Satellite captures rarely seen atmospheric gravity wave phenomenon off WA's north

Satellite images have captured a usually invisible phenomenon known as atmospheric gravity waves pulsing through clouds off Western Australia's north-west.

Met Office explains reason behind rare 'upside-down rainbow' seen over Hull

HullLive

A rare 'upside-down rainbow' has been spotted in the sky above Hull. Lee Middleton was walking near Swinderby Garth in Bransholme on Tuesday ...

Stunning skylines and lighting storms feature in Weather Photographer of the Year 2019

Yahoo New Zealand News

The winning entries in the Weather Photographer of the Year 2019 competition showcase the most amazing pictures of skylines, lightning storms and ...

### **Climate change / global warming / sea level rise**

Why we won't be heading into an ice age any time soon

Professor James Renwick from the School of Geography, Environment, and Earth Sciences explains the science behind the warming and cooling of Earth and how it relates to current climate change.

Climate explained: how volcanoes influence climate and how their emissions compare to what we produce

Everyone is going on about reducing our carbon footprint, zero emissions, planting sustainable crops for biodiesel etc. Is it true what the internet posts say that a volcano eruption for a few weeks will make all our efforts null and void?

Homes of 240,000 Kiwis in way of worst case 2100 sea level rise, study indicates

Sea level rise could be affecting the homes of around quarter of a million New Zealanders by the end of the century, in a possible worst case scenario, according to US researchers.

Climate change a financial and investment risk - report

A report from a group of business leaders has found climate change has become a financial and investment risk, which requires strong leadership and urgent attention.

The Government plans to pass a law requiring companies to disclose climate-change risks

Listed New Zealand companies could soon be required by law to make any climate change-related risks to their businesses known to their shareholders.

### **Cloud seeding / Geoengineering**

China has built up its muscle on how to turn weather into a weapon. Can India match up to it?

Defence Aviation Post

Just before the opening ceremony of the Beijing Olympics in 2008, China's weather-modification office — yes, the Chinese have something like that ...

Te reo

Digital platform to ease access of te reo Māori for 21st century conversations

New Zealanders could soon be saying 'kia ora' to their smartphone voice assistants, like Siri and Alexa, thanks to new funding from the government.

**Emergency preparedness / disaster planning / resilience**

Tasman forest fire review proposes recommendations to Fire and Emergency

Fire and Emergency New Zealand should develop a nationally consistent framework for tactical fire planning, an independent review of the Tasman forest fire response has recommended.

**Journal and articles online**

RESEARCH ARTICLES

Quantifying the potential for improved management of weather risk using sub-seasonal forecasting: The case of UK telecommunications infrastructure

David J. Brayshaw, Alan Halford, Stefan Smith, Kjeld Jensen

Version of Record online: 21 October 2019

In the United Kingdom, the telecommunication network provides an estimated net annual economic contribution of over £30 billion, yet it is exposed to considerable weather risk. This paper provides an end-to-end demonstration of the potential for skilful sub-seasonal meteorological forecasts to improve decision-making in telecommunication infrastructure management. Meteorological forecast skill is argued to be a necessary rather than a sufficient condition, with explicit modelling required to demonstrate utility to users in complex decision environments.

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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 29, 2019

News

[Are infamous Diablo winds responsible for recent wildfires?](#)

October 29, 2019 - San Francisco Chronicle

In recent years, autumn fires paired with strong winds have been even more relentless.

[Read MORE](#)

[Who has the advantage in colder weather -- the pitchers or the hitters?](#)

October 29, 2019 - Yahoo

Lower temperatures, humidity, barometric pressure, wind speed and altitude all can affect a baseball's trajectory, players' performances and the outcomes of games, according to research from a variety of sources, including the American Meteorological Society.

[Read MORE](#)

[NASA finds Arabian sea tropical cyclone Kyarr's heavy rainfall](#)

October 28, 2019 - Phys.org

Tropical Cyclone Kyarr is moving through the central Arabian Sea and NASA provided forecasters with an analysis of rainfall rates occurring in the powerful tropical cyclone.

[Read MORE](#)

[The False Comfort of Higher Seawalls](#)

October 29, 2019 - New Republic

What high-risk communities really need to do to protect themselves from catastrophe.

[Read MORE](#)

[California's getting scorched again. Here's how these fires compare to previous years](#)

October 28, 2019 - CNN.com International

In the past two years, California has experienced the deadliest and most destructive wildfires in its history, according to the California Department of Forestry and Fire Protection.

[Read MORE](#)

[Category 4 Kyarr is the strongest cyclone over the Arabian Sea in 12 years](#)

October 28, 2019 - SFGate

The Indian Ocean beast - dubbed a top-tier "super cyclonic storm" by the India Meteorological Department - is the first storm of such intensity to rage in the Arabian Sea in 12 years.

[Read MORE](#)

[Boulder's NCAR targets improved forecasting at Lake Victoria](#)

October 27, 2019 - Boulder DailyCamera.com

As many as 5,000 people each year lose their lives in severe weather on East Africa's Lake Victoria, and scientists at Boulder's National Center for Atmospheric Research are heading toward the finish line of a project aimed at changing that.

[Read MORE](#)

[Forecasters: Prepare for snow. Probably.](#)

October 26, 2019 - KOIN.com

Hightlights from the 27th Annual Winter Weather Forecast Conference, sponsored by the Oregon Chapter of the American Meteorological Society, which took place at OMSI on Saturday, October 26.

[Read MORE](#)

[Freshwater reserves under the sea](#)

October 24, 2019 - Phys.org

Research at Flinders University is investigating and locating vital freshwater hidden beneath the sea.

[Read MORE](#)

[NCAR Climate Model Dataset Available On The Cloud](#)

October 24, 2019 - UCAR

A significant portion of NCAR's CESM Large Ensemble project is now available on the cloud.

[Read MORE](#)

[Should some hurricanes be designated Category 6? Some forecasters say Dorian could've been.](#)

October 24, 2019 - The Post and Courier

If the traditional Saffir-Simpson scale of hurricane intensity were extended to its next logical step, Dorian, with winds reaching 185 miles per hour, would have qualified for the new category.

[Read MORE](#)

[Plant physiology will be major contributor to future river flooding](#)

October 24, 2019 - Watts Up With That

The next time a river overflows its banks, don't just blame the rain clouds. Earth system scientists from the University of California, Irvine have identified another culprit: leafy plants.

[Read MORE](#)

3 Reasons Tornado Threats Warrant Immediate TV Coverage

October 22, 2019 - Forbes

3 reasons an EF3 tornado always warrants coverage no matter what's on TV.

Read MORE

American Meteorological Society

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My latest WeatherEye from John Maunder

<https://www.sunlive.co.nz/blogs/13972-tropospheric-temperatures-1979-to-september-2019.html>

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Thanks to all our regular contributors