

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

Courtesy of MetService Library

### **MetService mentions**

#### **Next week in lockdown may include some rain**

The weekend should be fine for most of New Zealand as the clock goes back in the early hours of Sunday morning ending daylight saving.

#### **Three-month weather outlook mostly warmer and drier**

Otago Daily Times

"Even with oceanic Enso-neutral conditions, the atmosphere is expected to lean in an El Nino-like direction from April to June, resulting in more ...

#### **Drier, warmer outlook to end of June**

Gisborne Herald

Both agencies confirm El Nino/La Nina conditions are expected to remain neutral through winter.

### **MetOcean**

#### **DHI Backs APAC Offshore Wind with New Metocean Dataset**

Offshore WIND

The high-resolution hindcast metocean datasets comprise 40 years (1979-2019) of hourly wind, wave, current and water level data. The new datasets ...

#### **Wave rating website removes ratings to discourage surfers from going out on the water**

Stuff.co.nz

Dr Brett Beamsley, general manager of MetOcean Solutions, said the decision to remove the wave ratings was to try and stop enticing people to go on ...

## **WMO**

### **WMO's Hurricane Committee defers consideration of storm name retirement**

The annual week-long meeting of the World Meteorological Organization's Hurricane Committee, which reviews the previous season and prepares for the forthcoming one, was cancelled due to the COVID-19..

## **The Others**

### **Easter weather: Gale-force winds and squally showers ahead**

Hot cross buns will likely be enjoyed tucked up next to fire and hot cuppa as Easter Weekend looks to bring gale-force winds and "squally showers".

## **Extreme weather (and other news) – Australia and Pacific**

### **'Bad timing': Cyclone Harold likely to hit Vanuatu as category 5**

Vanuatu is bracing for a direct hit from the still intensifying Cyclone Harold, which is forecast to pass straight over the central islands, forcing the country to contend with dual emergencies.

### **Pacific economies hit hard: 'Unlike anything we have seen'**

Pacific economies will suffer a sharp fall as resource prices collapse and tourism numbers plummet to zero, but their remoteness could provide something of a buffer in what a World Bank economist called a 'double-edged sword' effect.

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

### **World Bank and Nepal Partner to Strengthen Climate and Disaster Risk Response**

KATHMANDU, March 30, 2020 – The Ministry of Finance signed a \$50 million (NPR 6 billion) financing agreement with the World Bank on March 27 for a contingent financing that can be availed in the case of a natural disaster or health emergency in the country. This operation aims to enhance the government capacity to manage the risk of climate change and natural disasters including disease outbreaks.

## **Extreme weather (and other news) – Americas and Europe**

Abnormally warm Gulf of Mexico could intensify the upcoming tornado and hurricane seasons

Water temperatures are running about three degrees above normal

International news and research

Happy Anniversary RMetS

Royal Meteorological Society

In the beginning On this day, 170 years ago (3 April 1850) the Royal Meteorological Society (RMetS) was founded by a small group of gentlemen who ...

The story of Surflin

SurferToday

Things changed a bit with the launch of NASA's first weather satellite in 1960, and then in the late 1970s when dozens of weather buoys were ...

The science of a storm: How a 2% tornado risk turned into seven twisters that killed 25 people and ...

AZCentral.com

And when the mounting concern by storm-monitoring meteorologists ... Hays State University and a meteorologist who studies tornado climatology.

How one of the worst tornado outbreaks in history led to meteorological innovation

Yahoo News

AccuWeather Senior Meteorologist Dan Kottlowski lived through the outbreak while attending college at Purdue University in West Lafayette, Indiana.

Leading scientists say NOAA plan to improve US weather forecasting is incomplete

Washington Post

... milestone in improving weather and climate services for the nation,” Peter Neilley, director of weather forecasting services at IBM, wrote in an email.

### New model helps explain seasonal variations in urban heat islands

Rising temperatures and shifting rainfall patterns linked to climate change may alter the seasonality of urban heat islands in coming decades. A new model simplifies predictions of 'urban heat islands' based on temperature, sunlight and rainfall.

## **Aviation**

### Ethics of Airline Bailouts in Spotlight With Virgin-Qantas Feud

Bloomberg

With demand all but gone, Qantas is hunkering down to weather the coronavirus crisis after a run of record profits. It has furloughed most staff and ...

### Coronavirus: American Airlines postpones launching Auckland and Christchurch routes

American Airlines has delayed the launch of two New Zealand routes, costing the tourism sector an estimated \$150 million in lost visitor spending.

### Air NZ slashes domestic flights by 95 percent

Air New Zealand is slashing its domestic operations in the wake of the Covid-19 outbreak.

### Coronavirus: New Plymouth Airport's \$28m new terminal to close after Air NZ pulls flights

Just over two weeks after it opened, New Plymouth Airport's \$28million new terminal is closing because of the coronavirus lockdown.

### Rocket Lab executive says company is well positioned to weather crisis

SpaceNews

“We were at the pad ready to launch the second NRO satellite days before the ... which is building a constellation of synthetic aperture radar satellites.

### Ballooning companies fear going under due to rising compliance costs

Hot air balloon operators say the future of the industry is under threat because of excessive recertification costs being imposed by the Civil Aviation Authority.

#### Loss of 600 jobs as Virgin Australia shuts its NZ operations

About 600 New Zealand-based jobs have been lost with the announcement Virgin Australia is shutting down its New Zealand operations, effective immediately.

### **Covid-19 / Business**

#### Coronavirus: Government says it has no plan B if lockdown fails to stamp out Covid-19

Health Director-General Ashley Bloomfield says the Government will keep the country or parts of it in lockdown for as long as possible to "stamp out" coronavirus.

#### Wellington City Council reveals proposed coronavirus economic recovery plan

Struggling Wellington businesses and homeowners are set for a rates reprieve that could cost tens of millions of dollars.

#### Covid-19: Major magazine publisher Bauer Media closing down

The publisher of some of the country's best known magazines has folded.

#### Govt announces new legislation to help companies during Covid-19 lockdown

Finance Minister Grant Robertson says companies struggling with issues caused by Covid-19 will be able to put some debt into hibernation, under new legislation unveiled today

#### Pressure on Government to bring forward capital projects as part of infrastructure injection

Stuff.co.nz

Transport Minister Phil Twyford said the Government was looking at transport projects across the country that could help create jobs as soon as ...

### Covid-19 / Wellbeing

#### Covid 19 coronavirus: NZ to find out this week if lockdown will be extended

New Zealand Herald

New Zealanders should know this week whether they will be kept in ... or need other help, you put search and rescue teams at risk and could burden ...

### Covid 19 coronavirus: New lockdown law officially bans swimming, hunting, surfing

New Zealand Herald

Everyone in New Zealand is to be isolated or quarantined at their current ... that could risk exposure to injury or require search and rescue services. "

### **Energy and Mining**

#### Mining company loses appeal to mine ironsands off Taranaki coast

A mining company has lost a bid to overturn a decision preventing it from mining millions of tonnes of ironsands off the coast of Taranaki.

#### Power consumption falls sharply with NZ in lockdown

Stuff.co.nz

Estimates compiled by Tesla and published in Energy News were that weather-adjusted demand fell by 15 per cent on the first two days of the ..

#### New Method to Make Energy Systems More Resilient

AZoCleantech

Predictions have been made that extreme weather events such as ... On one side is energy demand—there are different types of building needs, such ..

#### Offshore wind a potential source of energy

A new discussion paper highlights the potential of offshore wind for electricity generation in Taranaki.

#### Resource ministers unite to keep the sector operational

Australian Mining

“The commodities Australia mines keep the lights on here, they supply the essentials for major businesses like ... person required to be appointed under the coal mining safety and health act 1999; the mining and quarrying safety and ...

## **Fire**

Researchers forecast longer, more extreme wildfire seasons

A new study finds that autumn days with extreme fire weather have more than doubled in California since the early 1980s due to climate change. The results could contribute to more effective risk mitigation, land management and resource allocation.

## **History**

Modern meteorology was born 60 years ago today

Ars Technica

... nation's first weather satellite. During its 78 days of operation, TIROS-1 successfully monitored Earth's cloud cover and weather patterns from space

## **Tourism**

From hero to zero – what's the future for tourism?

Now travel within New Zealand is limited to essential personnel and fleeing foreign tourists catching repatriation flights home, and the swiftness and viciousness of the economic blow is sinking in.

'Most significant crisis in the history of travel': where to now for tourism?

The Sydney Morning Herald

"We didn't see any noticeable change after December's volcanic eruption on [New Zealand's] White Island. The bushfires obviously dampened ...

The status of two cruise ships still in New Zealand waters

Two luxury cruise ships are anchored off Auckland, weeks after the Government announced a ban.

But authorities aren't concerned, because the cruise ships were already in New Zealand waters when the ban was introduced and the vessels both disembarked passengers weeks ago. The ships are effectively sheltering off Auckland, with crew onboard, while a plan is being figured out.

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

Transport Agency was failing to deliver road projects before pandemic struck, documents show

The Transport Agency has not been able to keep pace with planned safety upgrades to the roading network, casting doubt over government plans to boost the economy with a raft of infrastructure projects.

Innovation and technologies and AI

Giant umbrellas shift from convenient canopy to sturdy storm shield

Posted: 02 Apr 2020 10:46 AM PDT

In a new approach to storm surge protection, a team has created a preliminary design for dual-purpose kinetic umbrellas that would provide shade during fair weather and could be tilted in advance of a storm to form a flood barrier. The researchers used computational modeling to begin evaluating the umbrellas' ability to withstand an acute storm surge.

### **Climate change / global warming**

Climate disasters increase risks of armed conflicts: New evidence

Posted: 02 Apr 2020 07:08 AM PDT

The risk for violent clashes increases after weather extremes such as droughts or floods hit people in vulnerable countries, an international team of scientists finds. Vulnerable countries are characterized by a large population, political exclusion of particular ethnic groups, and low development. The study combines global statistical analysis, observation data and regional case study assessments to yield new evidence for policy-makers

### **Lockdown entertainment**

6 Resources To Teach Kids About Weather And Climate During The Coronavirus Shutdown

Forbes

I first became interested in meteorology as a 6th grader after doing a ... AMS data suggests that many meteorologists become interested in the field in ...

**Journal and articles online**

Estimation of vertical structure of latent heat generated in thunderstorms using CloudSat radar

Kashyapa Naren Athreyas, Erry Gunawan, Bee Kiat Tay

e1902 | First Published: 30 March 2020

A method to estimate the latent heat of thunderstorms using CloudSat W-band radar.

The Bayesian Monte Carlo method used for estimation.

The RAMS-CRM used for building the thunderstorm database.

Use of multiscatter models to avoid overestimation of reflectivity when converting simulated data into the reflectivity database.

Validated in the Singapore region.

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John Maunder’s Weather eye

<https://www.sunlive.co.nz/blogs/14544-tauranga-march-rainfalls-18982020.html>

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