

New Zealand weather and climate news

Courtesy of MetService Library

MetService mentions

Auckland would be under water restrictions if it weren't for the Covid-19 lockdown

The head of Watercare says if New Zealand wasn't in the Covid-19 lockdown, mandatory water restrictions would have been introduced for Auckland due to the low levels in region's dams.

Slow Moving Front To Dominate The Weather Up To The Weekend

Scoop.co.nz

MetService Meteorologist April Clark says, The ... A slow-moving front, currently sitting over Fiordland, sluggishly moves north tomorrow (Tuesday) to sit ...

Dry weather and coronavirus restrictions heaping pressure on Nelson farmers

The combination of dry weather and coronavirus restrictions is heaping pressure on Tasman's pastoral farmers heading into winter.

Your weather: Last of the sun before Easter storms hit and Cyclone Harold hammers Pacific

New Zealand Herald

Metservice forecaster Sonja Farmer says we're in for a few good days before heavy rain ushers in the long weekend. A front moves northwards across ...

MetOcean

Infoplaza Marine Weather provides DSME with validated global wind and wave database

Hellenic Shipping News Worldwide

The metocean database, containing wind and wave data, will be used by DSME for the planning and design of marine and offshore projects.

Climate change: Northland's marine species to feel the heat from the 2030s

If our greenhouse emissions continue to soar, Northland's marine life will face extreme temperatures on an average day in the 2030s – which could lead entire ecosystems to collapse, new research warns.

NIWA

NIWA's Hotspot Watch

A weekly update describing soil moisture patterns across the country to show where dry to extremely dry conditions are occurring or imminent. Regions experiencing significant soil moisture deficits are deemed “hotspots”. Persistent hotspot regions have the potential to develop into drought.

WMO

Switzerland announces funding for WMO humanitarian support mechanism

Posted:

New Swiss government funding will enable the World Meteorological Organization to provide United Nations agencies and humanitarian actors with new services for optimising emergency response,...

International community marks World Health Day

Posted:

On World Health Day, WMO joins the global community in paying tribute to the work of all health professionals who are at the forefront of the COVID-19 response. WMO and National Meteorological and...

Extreme weather (and other news) – Australia and Pacific

Satellite Imagery Shows How Tropical Cyclone Harold Quickly Intensified and Pummeled Vanuatu

The Weather Channel

The Weather Company's primary journalistic mission is to report on breaking weather news, the environment and the importance of science to our lives.

Pictures of devastation emerge from cyclone-ravaged Vanuatu and Fiji

As the winds finally died down on Wednesday morning, the people of northern Vanuatu emerged to scenes of devastation.

NZ ready to assist as Cyclone Harold moves through Fiji

New Zealand says it is ready to assist Fiji and Vanuatu as Cyclone Harold continues to cause havoc across the two countries

Cyclone Harold damage becoming clearer

News is only just starting to emerge of the devastation of Vanuatu's northern islands, which were hit by Category 5 Cyclone Harold on Monday.

TC Harold strengthens overnight to a category 5

Severe Tropical Cyclone Harold strengthened to a category 5 cyclone overnight as it moves away from Fiji and headed to the Tonga group with wind gusts of 285km/h.

Extreme weather (and other news) – Americas and Europe

Met Éireann to include north in weather warnings

The Irish News

In a proposal to the UK Met Office, Cusack said: "It would be very unusual if not unique for one National Meteorological Service (NMS) to display the ...

UK mini heatwave beats highs in Costa del Sol, Athens and Lisbon as mercury soars past 19.8C

Evening Standard

The Met Office confirmed that the mercury had hit 19.8C in London, trumping conditions in the Costa del Sol and the Greek capital Athens.

UK wind warning: Freezing chill to lash Britain before 24C Easter heat arrives

Express.co.uk

Met Office forecaster Steven Keates told Sun Online: "There's a chance we will see higher temperatures of 23C or 24C on Wednesday and Thursday ...

Hayfever warning: Britain's sufferers facing year of hell for allergy

Express.co.uk

The Met Office says a cold week delayed tree pollen release, meaning a “more intense” and condensed season as temperatures soar for many this week ...

International news and research

Coronavirus pandemic affecting the Earth's movement

The coronavirus disease (COVID-19) global pandemic has changed many things across the globe bringing chaos to lives and economies. However, efforts to curb the spread of the virus, have lowered pollution levels, carbon emissions, and oceans and rivers appear cleaner. Now, it seems that the lockdown efforts have also affected the planet's movement.

The fire at Chernobyl cannot be put out: Meteorologists have assessed the risks for Russia

The Times Hub

... that the air movement from the fire in the Chernobyl exclusion zone will occur in the South-Eastern and southern directions,” – noted meteorologists.

Supercomputer studying climate change now available for COVID-19 scientists

AccuWeather.com

The specialized version of AccuWeather's SkyGuard warning service includes advanced warnings for the threat of lightning, wind gusts, flash flooding ...

Air quality / air pollution

Link between air pollution and coronavirus mortality in Italy could be possible

A group of scientists has found another small piece in the puzzle of understanding COVID-19. Looking for reasons why the mortality rate is up to 12% in the northern part of Italy and only

approx. 4.5% in the rest of the country, they found a probable correlation between air pollution and mortality in two of the worst affected regions in northern Italy.

Aviation

Coronavirus: Airways may permanently close 7 regional towers

Airways is proposing to permanently close seven regional air traffic control towers due to Covid-19 travel restrictions, with job cuts expected if it goes ahead.

Air New Zealand Board Appointments

Air New Zealand is appointing two outstanding business leaders to its Board of Directors.

Airlines using passenger planes to fly cargo as coronavirus restrictions bite

What do you do with your planes when you have no passengers to fill the seats? Fill them with cargo instead.

As travel restrictions bite airlines around the world in an effort to contain the spread of coronavirus, some carriers have opted to use the empty space in their passenger cabins by filing them with cargo.

Coronavirus: NZ opens itself to transit passengers in push to get Kiwis home

New Zealand will open its international airports to transiting air passengers in the hope of helping Kiwis stuck overseas.

Global Airline Industry May Now Need A \$1 Trillion Bailout

Forbes

There are ongoing lobbying calls from aviation bodies and airlines themselves that are seeking government bailouts and subsidies to weather the ...

Air New Zealand offers charter service to keep up with cargo demands

Air New Zealand is stepping up its air cargo services to help make sure freight keeps moving during the coronavirus lockdown.

Air traffic plummets by 85%

Flight data shows air traffic has dropped 85% in the past seven days, compared with the same week last year.

Cash-strapped airlines can't afford refunds, says IATA

Global airlines warned that 25 million jobs across the world could be at risk from the coronavirus air travel downturn, and held out against offering refunds to passengers as cash runs out.

Rocket Lab releases footage of it snagging a dummy rocket at 5000ft

Rocket Lab has revealed it dropped and caught a mock-up of one of its rockets using two helicopters over the ocean off the North Island last month, releasing footage of the trial on YouTube.

Covid-19 / Business

Coronavirus: Auckland Airport looks to strengthen its balance sheet with \$1.2 billion capital raise

Auckland International Airport is wanting to raise up to \$1.2 billion to help it through the coronavirus pandemic.

Wellington Airport runway extension will be 'back on agenda' once Covid-19 fog clears

The majority owner of Wellington Airport, NZX-listed company Infratil, hasn't abandoned hope of one day extending the airport's runway, despite the havoc wreaked on the travel industry by the coronavirus pandemic.

Taranaki's economy forecast to take years to recover from coronavirus crisis

When Arun Chaudhari made a brutally honest prediction about the effect of the coronavirus crisis on the Taranaki economy he faced criticism, but his chilling forecast is coming true.

Almost 200 construction projects impacted by Covid-19, new report says

About 200 construction projects have been impacted by Covid 19 so far, according to a new report by building research firm Pacifecon.

Covid-19: How New Zealand's level 4 lockdown might end

It's the question on everyone's mind - so RNZ asked experts how and when the level 4 restrictions might be lifted.

Covid-19 / Remote working

Coronavirus means working from home — and more video calls. Here's how to make them less painful

For many of us lucky enough to still have a job, video calls are suddenly a huge part of work.

It's not new technology. And it's not new to most workplaces.

Covid-19 / Wellbeing

Coronavirus: New Zealand has 1106 Covid-19 cases

When asked how the onset of winter in New Zealand might affect the virus, Bloomfield said he initially believed there had been no evidence about seasonality.

Energy and Mining

Covid-19: Global fuel glut will cost NZ companies millions

Fuel sales have dropped dramatically and stocks are building up, creating pressure on storage facilities globally and in New Zealand.

Households to be paid for daytime green electricity use during lockdown

The Guardian

Fall in energy use combined with bright, breezy weather leads to lowest ... The coronavirus has caused the UK's demand for electricity to fall by ..

Todd secures onshore Taranaki permit in New Zealand

Hydrocarbons Technology

In August 2017, Todd Energy acquired 50% of onshore natural gas-condensate field Kapuni in the Taranaki Basin from Shell, making the company the ...

Oil majors raise \$32bn of debt to weather crisis

Financial Times

Companies that have tapped the bond market since mid-March include ExxonMobil of the US, Royal Dutch Shell, UK-based BP, Norway's Equinor and ..

Oil firm must clean up before leaving Taranaki, says High Court

The High Court has ruled against a Singaporean firm which wants to disconnect its oil production vessel from the abandoned Tui oil field in offshore of Taranaki and leave capped pipelines on the ocean floor.

Pohokura Gas Supply Back Online - Great News For New Zealand

Natural gas from the Pohokura field is once again helping keep the lights on for New Zealand, thanks to outstanding speedy work by field operator OMV.

Fire

Climate Change Has Doubled Riskiest Fire Days in California

The extreme conditions that are ripe for wildfires will only increase if warming continues unabated

Infrastructure

Cook Strait sewage-dump suggestion labelled 'environmental vandalism'

A proposal to dump Wellington's sewage in Cook Strait has been labelled "environmental vandalism" by the man who stopped the discharge decades ago.

Infratil cuts profit outlook in response to Covid-19 pandemic

Infratil has cut the top end of profit outlook by \$55 million in response to the Covid-19 emergency.

Lightning

Lightning Diverter Market Foraying into Emerging Economies 2019-2028

Jewish Life News (press release) (blog)

Asia-Pacific (Vietnam, China, Malaysia, Japan, Philippines, Korea, Thailand, India, Indonesia, and Australia). Key Areas of Focus in this Lightning ...

Tourism

Government plans major shake up for the tourism industry post-Covid-19

The tourism industry is in for a major shake up as the Government plans how it will operate post-Covid-19.

Transport/roading/shipping/freight

Coronavirus pandemic adds a major blow to struggling shipping industry

Hellenic Shipping News Worldwide

Major mining disasters in Brazil and then weather-related disruptions in ... Maersk of Denmark, which made 2019 earnings forecast of \$5.5 billion in ...

High-Tech Ghost Ships Will Set Sail sans Sailors

Maritime technology groups are building robotic vessels to cross the oceans

El Nino / La Nina

Adding a pinch of salt to El Niño models

When modeling the El Niño-Southern Oscillation (ENSO) ocean-climate cycle, adding satellite sea surface salinity -- or saltiness -- data significantly improves model accuracy, according to a new study.

Climate change / global warming

Addressing climate change in a post-pandemic world

A ferocious pandemic is sweeping the globe, threatening lives and livelihoods at an alarming rate. As infection and death rates continue to rise, resident movement is restricted, economic

activity is curtailed, governments resort to extraordinary measures, and individuals and corporations scramble to adjust

Indigenous knowledge could reveal ways to weather climate change on islands

Some islands have such low elevation, that mere inches of sea-level rise will flood them, but higher, larger islands will also be affected by changes in climate and an understanding of ancient practices in times of climate change might help populations survive, according to researchers.

Things to entertain

Easter treats to make during lockdown

Nothing else reminds us of Easter more than the smell of fresh hot cross buns and sweet treats.

Journal and articles online

Impact of Doppler Radar Wind Observations on Australian High-Resolution Numerical Weather Prediction

Susan Rennie, Lawrence Rikus, Nathan Eizenberg, Peter Steinle, and Monika Krysta

Comparison of Lightning Forecasts from the High-Resolution Rapid Refresh Model to Geostationary Lightning Mapper Observations

Brian K. Blaylock and John D. Horel

Characterizing and Constraining Uncertainty Associated with Surface and Boundary Layer Turbulent Fluxes in Simulations of Lake-Effect Snowfall

Justin R. Minder, W. Massey Bartolini, Christopher Spence, Newell R. Hedstrom, Peter D. Blanken, and John D. Lenters

A Statistical Model to Predict the Extratropical Transition of Tropical Cyclones

Melanie Bieli, Adam H. Sobel, Suzana J. Camargo, and Michael K. Tippett

Evaluation of Multimodel-Based Ensemble Forecasts for Clear-Air Turbulence

Dan-Bi Lee, Hye-Yeong Chun, and Jung-Hoon Kim

Characterization of Snowfall Rates, Totals, and Snow-to-Liquid Ratios in Electrified Snowfall Events Identified by the Geostationary Lightning Mapper

Sebastian S. Harkema, Emily B. Berndt, and Christopher J. Schultz

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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.

NCAR-operated supercomputer to join national COVID-19 computing consortium

NCAR/UCAR - April 6, 2020

The powerful system will be used to learn more about the deadly pandemic.

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

Forbes - April 2, 2020

Here are 6 online weather-climate resources that you might find useful for kids during the coronavirus shutdown.

Leading scientists say NOAA plan to improve U.S. weather forecasting is incomplete

The Washington Post - April 2, 2020

The latest U.S. government effort to better the nation's weather forecast modeling may not be adequate to achieve its intended goal, according to leading scientists in the weather community.

The World According to Weather Satellites

NASA - March 31, 2020

On April 1, 1960, NASA's first operational weather satellite, TIROS-1, launched from Cape Canaveral. This multimedia storymap looks at the value and importance of the nation's weather satellites and game-changing moments in their 60-year history.

The Arctic may influence Eurasian extreme weather events in just two to three weeks

EurekAlert! - April 2, 2020

Researchers argue more robust research techniques are needed to fully understand immediate Arctic impact.

Severe Weather May Impact COVID-19 Coronavirus Response Efforts

Forbes- April 3, 2020

There's no industry more vulnerable to severe weather right now than our hospitals and first responders.

Where the Most Weather Warnings Are Issued in the U.S.

The Weather Channel - April 6, 2020

The National Weather Service issues tens of thousands of weather warnings each year for severe thunderstorms, flooding, high winds, winter storms, tropical storms, coastal impacts and extremes in temperature. That prompted us to ask which areas of the country are warned most.

NASA, University of Nebraska Release New Global Groundwater Maps and U.S. Drought Forecasts

NASA - March 31, 2020

NASA researchers have developed new satellite-based, weekly global maps of soil moisture and groundwater wetness conditions and one to three-month U.S. forecasts of each product.

Oil Companies Are Collapsing, but Wind and Solar Energy Keep Growing

The New York Times - April 7, 2020

The renewable-energy business is expected to keep growing, though more slowly, in contrast to fossil fuel companies, which have been hammered by low oil and gas prices.

Wednesday, April 8, 2020 is #SafePlaceSelfie day!

National Weather Service - April 6, 2020

On April 8th, 2020, at 11:11am local time, please join the National Weather Service and its Weather-Ready Nation Ambassadors to take a "selfie" and post with the hashtag #SafePlaceSelfie.

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From John Maunder

My proposed new book.

When I was in Adelaide in January visiting my family on a very hot day (44 degrees C) my daughter Denise suggested that I write another book. She suggested a title *Climate the Truth*. I thought that was a very bold title but settled on *Fifteen Shades of Climate: The fall of the weather dice and the butterfly effect*. I am currently in discussions with the publishers in the UK (Routledge) of my other books to see if they wish to publish, but if that does not happen I have contacts in “self-publishing”. The book will be about 200 pages, and I have already written about 70 %. I attached the current “table of contents”. Please ignore the page numbers, these will be corrected when the final copy is produced.

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As you will appreciate, a book is really a personal viewpoint and I am sure you may think that there is too much emphasis on some items but not enough on other items. Never-the-less I would appreciate any comments you may have, especially about the items I written about in depth, and those that I have not written about. I should add that the aim of the book is to cover climate and not just climate change.

I trust this finds you fit and well. In our retirement village in Tauranga we are in lockdown and are not permitted to leave except for a walk around the complex or for a medical appointment. Possibly the ideal time to write a book.

Kind regards

John Munder (comments to john.maunder@gmail.com).

Thanks to our regular contributors.

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