

New Zealand weather and climate news

Courtesy of MetService Library

MetService mentions

Heavy rain expected for parts of central, lower North Island overnight Wednesday into Thursday

Stuff.co.nz

MetService is also expecting periods of heavy rain through Thursday and until lunchtime Friday in Hawke's Bay. The rain was being brought by a front ...

A month of rain for parts of Hawke's Bay on Thursday with Wairoa in focus

New Zealand Herald

MetService meteorologist Mmathapelo Makgabutlane said people should expect rainfall to begin around the region from Wednesday night.

Extreme weather events predicted for Otago in long term finds climate change report

New Zealand Herald

Collaborative **innovation** across all sectors can assist climate change adaptation." The report mentions seven Kāi Tahu Rūnaka who represent the hapū ...

Meteorology and the America's Cup

SunLive

In New Zealand, the **Meteorological** Service has seconded one of the service's weather forecasters for many international yachting events including the ...

America's Cup: Last Cup for long time Team NZ weather guru

Sail World

Roger 'Clouds' Badham, Emirates Team **New Zealand's** trusted **weatherman** for 21 years, prefers not to go out on the water. From his vantage point up ...

Fine forecasting: super-technology speeding up America's Cup

Next-level weather forecasting is helping Emirates Team New Zealand steer a faster course, and helping the environment.

WMO

International Women's Day celebrates women in leadership

WMO highlights Flash Flood Guidance System gender survey WMO joins the rest of the world in celebrating International Women's Day, with a special case study on its Flash Flood Guidance System...

Flash Flood Guidance System promotes gender equality

To mark International Women's Day on 8 March 2021, WMO is showcasing the results of a special survey on Women in the Flash Flood Guidance System (FFGS) Project with Global Coverage. The Women in...

63rd issue of the TCC News - Japan Meteorological Agency

The Tokyo Climate Center (TCC) of the Japan Meteorological Agency (JMA) has released the 63rd issue of the TCC News on the TCC website. This issue covers: - The year 2020 tied with 2016 as the...

February: mixed temperatures highlight new "climate norms"

The northern hemisphere winter and southern hemisphere summer exhibited very mixed climate patterns, with below average temperatures in parts of the world. But the gradual introduction of updated...

Extreme weather (and other news) – Antarctica and offshore

Monitoring equipment on Raoul Island to be repaired after quake

Monitoring equipment on Raoul Island knocked out by Friday's 8.1 magnitude quake is likely to be back up and running by the end of this week.

Essential Tasks On The Raoul Radar For HMNZS Canterbury

Scoop.co.nz

Instead, small teams from MetService and GNS will undertake critical tasks only and return with the ship to New Zealand. A Navy Seasprite helicopter ...

Raoul Island tsunami monitoring equipment knocked out during Friday's earthquakes restored by ...

Stuff.co.nz

With the island uninhabited for now, and with the deadly December 2019 Whakaari/White Island eruption in mind, a health and safety review of DOC's ...

Navy ship heads to remote Raoul Island to check tsunami warning systems

Stuff.co.nz

MetService's network observations manager Steve Knowles said this will improve safety for the DoC staff who launch balloons on behalf of MetService.

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

Remote Kiribati island calls for help with water crisis

One of the most remote islands in the Pacific is pleading for help from New Zealand and Australia to deal with a water crisis.

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

How an unusually warm Indian Ocean caused flooding on Yangtze River

Phys.Org

Summer flooding in the region often follows **El Niño** events, the climate phenomenon that is associated with warm water in the eastern equatorial ...

International news and research

New Research: How sunlight, ocean turbulence could help **weather forecasting**

The Chief News

The new findings could have important implications for **weather forecasting** and climate modeling. Photo / Courtesy of OSU. In tropical oceans, a ...

New research shows hyperactive hurricane seasons may not end

KXAN.com

Similar to the **El Nino**/Southern Oscillation (ENSO), however the AMO lasting over the course of decades rather than a year or two like ENSO.

Atmospheric drying will lead to lower crop yields, shorter trees across the globe

Posted: 08 Mar 2021 08:19 AM PST

A global observation of an ongoing atmospheric drying -- known by scientists as a rise in vapor pressure deficit -- has been observed worldwide since the early 2000s. In recent years, this concerning phenomenon has been on the rise, and is predicted to amplify even more in the coming decades as climate change intensifies.

Northern Hemisphere summers may last nearly half the year by 2100

Posted: 08 Mar 2021 01:52 PM PST

Without efforts to mitigate climate change, summers spanning nearly six months may become the new normal by 2100 in the Northern Hemisphere, according to a new study. The change would likely have far-reaching impacts on agriculture, human health and the environment, according to the study authors.

Sea level rise up to four times global average for coastal communities

Posted: 08 Mar 2021 08:19 AM PST

New research shows that coastal populations are experiencing relative sea-level rise up to four times faster than the global average. The study is the first to analyze global sea-level rise combined with measurements of sinking land. The impacts are far larger than the global numbers reported by the Intergovernmental Panel on Climate Change (IPCC). The high rates of relative sea-level rise are most urgent in South, South East and East Asia.

Aviation

Aotearoa's unique role in the new space race

Stuff.co.nz

RocketLab, whose CEO is Kiwi Peter Beck, provides New Zealand with a launch facility capable of delivering payloads into orbit. Thanks to **Rocket Lab**, ...

IBM: Aviation industry must prepare for more intense and more frequent weather events

CAPA - Centre for Aviation

IBM aviation offering management leader Elizabeth Krajewski, speaking at CAPA Live March 2021, stated (10-Mar-2021) "science indicates that...

Communications/social media

Polygon Labs Announces Sophisticated New Functionality for Ipsum Weather Data Management ...

Creative Planet Network

Ipsum Weather provides a simple way for broadcasters to create **weather graphics** using Vizrt's graphics platform and workflow. The solution ...

Satellites and radar

Contract signed with EUMETSAT to build ESA Arctic **weather satellite**

Space Ref

With the need for **satellite** data to be received more frequently for faster **weather** forecasting updates in the Arctic, ESA has signed a contract with OHB ...

Transport/roading/shipping/freight

StormGeo launches Strategic Power Routing to maximize fuel savings for shippers

Hellenic Shipping News Worldwide

StormGeo, the leader in **weather** intelligence, **ship** routing and fleet ... of a **vessel** in varying **weather conditions** to enhance overall fuel efficiency and ...

Journal and articles online

Formation and maintenance of subsiding shells around non-precipitating and precipitating cumulus clouds

Julien Savre

Pages: 728-745 | First Published: 01 November 2020

Narrow “shells” of subsiding air generally form around cumulus clouds, but the mechanisms responsible for their formation and maintenance are still debated. In this study, the dynamics of these shells is investigated using a high-resolution simulation of idealized tropical convection. It is shown that in-shell subsiding motions are generally driven by buoyancy reversal. However, mechanical forcing contributes at least equally at the top of all convective clouds. In addition, it is found that buoyancy reversal due to evaporative cooling may be offset by the downward transport of warmer air from aloft through the subsiding shells.

Sub-km scale numerical weather prediction model simulations of radiation fog

Daniel K.E. Smith, Ian A. Renfrew, Stephen R. Dorling, Jeremy D. Price, Ian A. Boutle

Pages: 746-763 | First Published: 07 November 2020

Fog remains a challenge to forecast accurately using numerical weather prediction. We evaluate the performance of the Met Office Unified Model (MetUM) at both kilometre and sub-kilometre (sub-km) grid lengths. MetUM produces valleys that are too warm and hills that are too cold, leading to valleys that do not have enough fog and hills that have too much. The sub-km scale configurations generally outperform the km scale, but they are highly sensitive to the soil thermal conductivity.

=====
====-

Weather Eye with John Maunder

<https://www.sunlive.co.nz/blogs/15424-meteorology-and-americas-cup.html>

or

https://thebfd.co.nz/2021/03/10/meteorology-the-americas-cup/?utm_source=envelope&utm_medium=website&utm_campaign=SocialSnap