

New Zealand weather and climate news

Courtesy of MetService library

MetService mentions

Christchurch to shed 14 degrees off daily high tomorrow as southerly sweeps in

MetService forecasts Christchurch residents could see a 14-degree drop from today's 33-degree high, down to just 19 degrees. It's similar news for ...

Canterbury fire crews on high alert as Christchurch reaches 'well above average' temperatures

Stuff.co.nz

... and rising winds on Wednesday were “perfect storm conditions for a bad fire”, a **Fire and Emergency New Zealand** (Fenz) spokesperson said.

Warm spell across Aotearoa to linger in the north, as rain arrives in the south

Stuff.co.nz

MetService warns north to northwest gales could rise to severe gale gusting 120kmh at times.

High winds, temperatures reaching 31C in parts of South Island

New Zealand Herald

According to **Metservice**, the city reached temperatures of 30.9C at about 1.30pm on Tuesday. That compares to the coldest place, Nugget Point in ...

Christchurch sweltering as temperature hits 30.9 deg C

Otago Daily Times

MetService meteorologist Alwyn Bakker said a foehn wind is responsible for the warmer weather. "That is when you get a strong northwest flow over the ...

New Zealand weather: Summer heat expected to continue through final February week

Newshub

In a weather update on Monday, **MetService** said there's a blocking high over the country which will provide a few more days of warm and dry ...

MetOcean

Ocean Warming Predicted to Amplify Tropical Rainfall Extremes

SciTechDaily

The El Niño-Southern Oscillation (ENSO) is the most energetic naturally occurring year-to-year variation of ocean temperature and rainfall on our ...

WMO

UN Security Council debates climate change

More collective action is needed to address the risks climate change poses to global peace and security, United Nations Secretary-General António Guterres told a high-level Security Council debate on...

2020 China Climate Bulletin: above normal temperature and precipitation - China Meteorological Administration

In 2020, both China's annual mean air temperature and precipitation were above normal, according to a new update from 2020 China Climate Bulletin which was released by China Meteorological...

Extreme weather hits USA, Europe

Large swathes of North America have been gripped by cold and heavy snowfall, causing loss of life, major traffic chaos and power outages for millions of people. The prolonged freeze, which saw many...

Extreme weather (and other news) – Antarctica and offshore

The Forgotten Islands: Pest control plan halted by Covid-19

They are known as the “Forgotten Islands”, uninhabited because of their remote, hostile landscape and harsh climate.

International news and research

Future ocean warming boosts tropical rainfall extremes

Climate models predict that the difference between El Niño and La Niña related tropical rainfall will increase over the next 80 years, even though the temperature difference between El Niño and La Niña may change only very little in response to global warming. A new study uncovers the reasons for this surprising fact.

Aviation

Runway risk: managing climate-based aviation turbulence with innovative data

Geospatial World

This natural human behavior will soon have to be replicated in **aviation**; airlines may have to start moving towards **weather**-centric operations in the ...

SmarkSky Lands \$32M in Additional Funding

Aviation International News

SmartSky's Skytelligence provides a framework that enables app developers to access aviation, **flight**, **weather** data, and other related information to ...

Climate change / global warming

Managed retreats by whom and how? Identifying and delineating governance modalities,

Christina Hanna, Iain White, Bruce C. Glavovic,

Climate Risk Management, Volume 31, 2021, 100278,

ISSN 2212-0963,

<https://doi.org/10.1016/j.crm.2021.100278>.

(<https://www.sciencedirect.com/science/article/pii/S2212096321000073>)

Abstract: Managed retreat has become a compelling policy imperative as climate change exacerbates socio-natural hazard risks and imminent harm looms for exposed communities. Retreats may be initiated over different times and scales using various instruments by actors, from the state to the private sector and civil society. However, in the absence of a coherent strategic vision, guiding frameworks, and capacity to manage retreats, at-risk communities, their elected representatives, policy makers, and planners are compelled to embark on retreat governance experiments. Consequently, retreat is perceived as a ‘high regrets’ policy imperative with potentially adverse impacts for community wellbeing, as well as political and professional risks. To help translate managed retreat rhetoric into reality, this paper presents a governance framework that acknowledges the multiplicity of ‘managed retreats.’ Using examples from Aotearoa-New Zealand, we identify and delineate retreat modalities and clarify terminology, converging our framework with the international mobility literature to harness the valuable lessons from decades of human mobility practice.

Communications/social media

As weather becomes more unpredictable, meteorologists retool their messaging

Houston Chronicle

Matt Lanza finds it liberating to not pretend to have all the answers. He spent the early part of his career as a TV **meteorologist** in upstate New York, ...

Energy and Mining

Meridian Energy announces country's second largest windfarm

Power company Meridian Energy has posted a lower underlying half year profit on the back of lower sales and electricity generation, as it announced a major new wind farm.

Innovation, Technologies and AI

Microsoft awarded UK Met Office supercomputing contract, Atos claims in legal challenge

DatacenterDynamics

Microsoft has seemingly been awarded the contract for the **Met Office's** new £1.2 billion supercomputer, with Atos is filing a legal challenge against the ...

BASF and Salient Predictions agreement pairs long-range weather forecasting with digital farming

Successful Farming

Salient Predictions' **technology** provides **weather forecasting** almost 12 months in advance with double the accuracy of current services.

Siemens MindSphere, IBM form partnership to target edge computing, industrial IoT

ZDNet

Siemens Digital Industries Software will build on **IBM's** hybrid cloud architecture and MindSphere will be available on-premise for customers.

MOU signed with global space tech experts, Hackathon announced

24 February 2021

A memorandum of understanding (MOU) has been signed between the Ministry of Business, Innovation & Employment (MBIE) and global space and data analytics company Maxar Technologies.

Space weather

Jumble of space junk threatens weather forecasts and banking

The Times

The London-based company, which **insures** satellites and rocket launches, is calling for greater regulation to prevent debris being created in the first ...

Transport/roading/shipping/freight

3 - 4 minute loss of propulsion led to Maersk Eindhoven losing 260 containers

Seatrade Maritime News

... said the **vessel** lost propulsion power for 3-4 minutes 45km north of Japan. ... Maersk Eindhoven loses 'several hundred' containers in heavy **weather** on ... by engine failure rather than solely the prevailing **weather conditions**.

Citizen science / crowd sourcing

Traditional hydrologic models may misidentify snow as rain, new **citizen science** data shows

EurekAlert

Reno, Nev. (Feb. 22, 2021)- Normally, we think of the freezing point of water as 32°F - but in the world of **weather** forecasting and hydrologic prediction ...

Odd spot

'Crop circles' frozen into surface of Alabama creek have **meteorologists**, social media baffled

Magnolia State Live

Mysterious swirls found on a frozen Alabama creek have **meteorologists** across the country debate how the hypnotic swirls came to be. Images of the ice ...

Journal and articles online

Water and atmosphere (NIWA)

The February 2021 edition of NIWA's flagship publication, Water & Atmosphere.

Queen of the critters

From sky to server

A job for the buoys

Norse goddess reveals seabed secrets

The future shape of water

Keeping tabs on muddy waters

Integrated Analysis of Multisensor Datasets and Oil Drift Simulations—A Free-Floating Oil Experiment in the Open Ocean

Camilla Brekke, Martine M. Espeseth, Knut-Frode Dagestad, Johannes Röhrs, Lars Robert Hole, Andreas Reigber

e2020JC016499 | First Published: 11 December 2020

Key Points

Characterizing free-floating mineral and soybean oil spills through integration of drift simulations, remote sensing, and in situ data

Dynamics of oil spill extent and its evolution over time are accurately resolved by numerical modeling

For thin oil films, optical and radar imagery show different detection capabilities

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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.

Extreme Winter Weather Causes U.S. Blackouts

NASA Earth Observatory - February 16, 2021

A potent arctic weather system chilled much of the United States with frigid weather in mid-February 2021, shattering low-temperature records in the middle of the country.

Texas winter storms brought such unusual cold that it confused the weather satellites

Business Insider - February 17, 2021

The severe winter storm raging through the southern US brought such extreme cold that it confused weather satellites monitoring the situation.

We're Less Than 100 Days From the 2021 Atlantic Hurricane Season – Here Are This Year's Names

The Weather Channel - February 22, 2021

The 2021 Atlantic hurricane season is less than 100 days away, a fact that's perhaps hard to believe given the recent winter siege across the country and the record-smashing 2020 season.

Record cold, intense storms and tornadoes amid global warming: Could there be a connection?

USA Today - February 17, 2021

The U.S. has endured a wild stretch of harsh winter weather lately thanks to an invasion of the infamous polar vortex. It may be counterintuitive, but could global warming have caused this?

The story of Charles E. Anderson and the Tuskegee Airmen

WTMJ-TV - February 21, 2021

The Tuskegee Airmen, known for the painted red tails of the P-51 Mustangs they flew in World War II, are the first Black aviators in the U.S. Army Air Corps.

High-Performance Supercontainers Show Promise for Earth System Prediction

NASA NCCS - February 20, 2021

Using a NASA Center for Climate Simulation (NCCS) supercomputer and other high-performance computing (HPC) platforms, the multi-agency Joint Center for Satellite Data Assimilation (JCSDA) successfully demonstrated software “supercontainers” for its next-generation Joint Effort for Data assimilation Integration (JEDI) system.

Scientists probe Antarctic waters to see effect of massive iceberg breakup

Yahoo! News - February 17, 2021

British scientists have launched submersible gliders near a massive iceberg breakup in the far southern Atlantic Ocean to see what effect the melting freshwater has on the surrounding salty sea.

How a shoebox-size weather satellite defied expectations before crashing to Earth

News4JAX - February 16, 2021

NASA’s RainCube satellite proved big size not always better.

The Energy Sector Must Prepare for More Extreme Weather

WIRED - February 22, 2021

Energy plants, like those in Texas, don't guard against events that are perceived to be exceedingly rare. That's no longer an option.

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Weather Eye with John Maunder

<https://www.theweekendsun.co.nz/lps/2098-an-eye-weather.html>

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