

New Zealand weather and climate news

Courtesy of **MetService Library**

MetService mentions

Muggy Conditions Remain For Upper North Island

Scoop.co.nz

MetService meteorologist April Clark says, “The front currently bringing rain to the lower North Island and upper South Island weakens as it moves north ...

Temperature plummets as rain arrives

Otago Daily Times

... the soggy morning conditions, and **Fire and Emergency New Zealand** welcomed the 17mm that fell in Dunedin from midnight to yesterday morning.

Labour Day weather: Cool temperatures and rain weather hits the south, sun shines on in the north

Stuff.co.nz

MetService meteorologist Tahlia Crabtree said it was going to be a “cooler day” for many in the south, especially those in the eastern regions which ...

Flood warning as rain swells Southland rivers

New Zealand Herald

MetService said the rain in Southland was expected to clear in the morning and fine spells to increase. Photo / Environment Southland. Environment ...

Sunny start to long weekend but cool change on the way

Otago Daily Times

MetService is predicting 25degC for Dunedin tomorrow, before a southerly change sends temperatures plunging - the city has a forecast high of just ...

Thunderstorms possible in Hawke's Bay this afternoon

TVNZ

Storms have been detected near the northern Ruahine Range and Kereru, according to **MetService**. The storms are expected to move northeast near ...

Canterbury set to reach 28C this Labour Weekend

Stuff.co.nz

MetService meteorologist Mmathapelo Makgabutlane said a high-pressure system from the west was bringing humid air mass to most of the country, ...

Your weather: Invercargill is the place to be today, great weather for most

New Zealand Herald

MetService meteorologist Alwyn Bakker says their forecasting predicts temperatures will reach as high as 22C in the afternoon, with mostly fine ...

Subtropical air brings a warm, humid long weekend - until the southerly arrives

Stuff.co.nz

MetService is forecasting a 14C difference for Dunedin between highs on Sunday and Monday – going from 25C to a chilly 11C on Monday with early ...

MetOcean

Sea-level rise global observing system proposed

Posted: 26 Oct 2020 01:44 PM PDT

A researcher proposes a new approach to monitoring global sea-level rise. Using the existing NOAA Global Drifter Program array of roughly 1,200 buoys that drift freely with ocean currents, he suggests adding additional instruments to record their height, or the 'level of the sea' they ride on, to collect long-term data on the average sea levels across the world's oceans.

GOOS Observations Coordination Group launches a new Ocean Observing System Report Card

India Education Diary

Motivated by the increasing importance of ocean knowledge for sustainable development as well as addressing climate-related trends, the Report Card ...

WMO

Multi-agency report highlights the current and future state of the climate in Africa

Posted:

Increasing temperatures and sea levels, changing precipitation patterns and more extreme weather are threatening human health and safety, food and water security and socio-economic development in...

South Asia Flash Flood Guidance System Launched

Posted:

The South Asia Flash Flood Guidance System (South Asia FFGS) has been officially launched, ushering in the prospect of improved early warnings for a major natural hazard in one of the world's most...

10th jubilee Homogenization Seminar at the Hungarian Meteorological Service

Posted:

The Hungarian Meteorological Service organized the jubilee 10th Seminar for Homogenization and Quality Control and 5th Conference on Spatial Interpolation Techniques in Climatology and Meteorology...

Ground-ocean-space observation experiment of typhoon successfully carried out - China Meteorological Administration

Posted:

On October 13, this year's 16th typhoon Nangka made landfall in coastal Qionghai, South China's Hainan province. Targeted at the generation and development of Nangka, a ground-ocean-space...

Ocean Observing System Report Card 2020

Posted:

The 2020 Ocean Observing System Report Card has been released, providing an update on the status of the Global Ocean Observing System (GOOS), including the impact of the Covid-19 pandemic on ocean...

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

Severe storms trigger flash flooding in south-east Queensland

9News

WeatherZone said satellite images showed a large mass of thunderstorms developing over inland areas of south-east Queensland around lunchtime.

Torrential rain, golf-ball sized hail hits **Australia's** east coast

The Australian

Torrential rain and gale-force winds battered parts of **Australia's** east coast on Monday after a weekend of severe storms — including **lightning** strikes ...

2.2 million **lightning** strikes: storms battering east coast

Noosa News

2.2 million **lightning** strikes: storms battering east coast ... More than 2.24 million **lightning** strikes were recorded across **Australia** in the past 48 hours.

Bureau of **Meteorology** shuts oldest data centre after 46 years

iTnews

It previously housed the bureau's important operational computer systems, including those for **meteorological** modelling, thought to be worth around ...

Bureau of **Meteorology** radar rollout concerns outback Queensland residents as La Niña looms

ABC News

"There's been a layer of complexity with COVID in bringing things in from overseas." The Bureau of **Meteorology** doppler in Mount Isa. Richmond and ...

EFL And IFC Sign Agreement For Pacific's Largest Solar Project

Suva, Fiji, October 21, 2020- A landmark agreement between Energy Fiji Limited (EFL) and IFC to deliver the largest solar project of its kind in the Pacific to date has been hailed a transformative step that will take the island nation closer to its ...

Suva, Fiji, October 21, 2020- A landmark agreement between Energy Fiji Limited (EFL) and IFC to deliver the largest solar project of its kind in the Pacific to date has been hailed a transformative step that will take the island nation closer to its goal of sourcing 100 percent of its energy needs from renewable sources.

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

Typhoon slams Philippines

Castanet.net

... guard barred ships and ferry boats from venturing into rough seas, officials said. Some of the **ports** were later reopened as the **weather** cleared.

To tackle flash floods & issue advance warnings, IMD launches guidance system for South Asia

The Indian Express

The India **Meteorological** Department (IMD) on Friday launched the South Asian Flash Flood Guidance System (FFGS), which is aimed at helping ...

Singapore least affected by **climate** change in APAC: study

Singapore Business Review

Vietnam and **Thailand** were found to be the top two most affected APAC countries by **climate** change, followed by the Philippines, India, and Australia.

Extreme weather (and other news) – Americas and Europe

UK snow forecast: Britain bracing for snow as Scandinavian cold snap hits -long-range maps

Daily Express

BRITAIN is bracing for wintry conditions including some snowfall to hit next month, the **Met Office** has warned, as bitterly cold Scandinavian air moves ...

Met Office warns developers to plan for extreme **weather**

ENDS Report

Met Office warns developers to plan for extreme **weather** ... while **insurers** warn that the number of UK storms have soared over the past decade.

International news and research

Greenhouse effect of clouds instrumental in origin of tropical storms

Posted: 26 Oct 2020 12:40 PM PDT

With the tropical storm season in the Atlantic Ocean underway and already well into the Greek alphabet for naming, better storm track prediction has allowed timely evacuations and preparations. However, the formation and intensification of these storms remains challenging to predict, according to an international team of researchers who are studying the origin of tropical cyclones.

Seabirds Anticipate Typhoons to Help Migrations

Terns seem to pass through just after powerful typhoons

Migrating terns may alter their flight plans based on a keen sense of approaching typhoons, escaping the brunt of the storms but still benefiting from feeding opportunities in their wakes.

Macro photography reveals remarkable complexities of snowflake structures

The Weather Network

They're everyone's favourite snowflakes. As cold and snowy weather has descended upon parts of western Canada in recent days, these delicate little ...

Computer model can predict when tornadoes hit the UK

The Irish News

Met Office chief meteorologist, Paul Davies, said: “By explaining, for the first time, how and why tornadoes form in a given weather system, ..

Planners 'must prepare' for weather extremes - **Met Office**

BBC News

The **Met Office** is launching a tool to help planners prepare for further extremes of rainfall and high temperatures. It warns that wild weather in the ...

Predicting tornadoes on UK cold fronts **for** the first time

Phys.Org

Weather forecasters can more accurately predict when a tornado is likely to hit the UK thanks to a new tool devised **in** a partnership between the ..

NASA Researchers Help Analyze a Historically Powerful, Costly Storm

NASA

In the fourth image, which comes from several NWS NEXRAD Doppler **weather radars**, the maroon and pink represent areas of high reflectivity, ...

Weather Reports That Scream

Business Jet Traveler

Competition for that attention is fierce. Private **weather-forecasting** companies, which now constitute a \$7 billion industry, are busily monetizing free data ...

How **meteorologists** play a role in fighting wildfires

WFAA.com

Meteorologists also play a crucial role in stopping the spread of wildfires. Author: wfaa.com. Published: 5:02 PM CDT October 19, 2020. Updated: ...

Top **Meteorologist** 'Ashamed' of Hong Kong Climate Policy

Bloomberg

Lam Chiu-ying spent half his life working for the Hong Kong government. Late last month, the 71-year-old **meteorologist** quit his job as the head of an ...

Tropical cyclones moving faster in recent decades

Posted: 19 Oct 2020 01:49 PM PDT

Tropical cyclones, regionally known as hurricanes or typhoons, have been moving across ocean basins faster since 1982, according to a new study.

Business/Insurance

APAC catastrophes outline importance of reinsurance

Insurance Business New Zealand

Over the past two years, the Asia-Pacific **insurance** industry has seen a slew of extreme **weather** events, compounded with the unprecedented ...

Look beyond reinsurance to mitigate **weather** risk, **insurers** told

Insurance News

S&P Global Ratings has urged Australian **insurers** to consider other measures such as government-backed schemes to cope with what is expected to ...

Climate change / global warming

Yellowstone's Old Faithful geyser could stop erupting, here's why

The Weather Network

Increasingly severe drought conditions are raising concerns that the famous geysers at Yellowstone National Park could erupt less frequently or stop ...

Swiss seniors sue government over climate change at European court

Retired women want more efforts to curb planet-heating emissions in Switzerland, where the climate is warming twice as fast as the global average

Covid-19 / Business

Working from home leaves ACC law unfit for purpose - lawyer

Employers could find themselves facing prosecution or hiked ACC levies as more of their workers decide to continue working from home, a retired lawyer and ACC expert says.

Energy and Mining

'Extreme **weather**, cyber-attacks and variable **electricity**' among key threats to wind **power**, finds IEA ...

Windpower Monthly

This has to include **demand** response and storage, as well as digitalisation and market interconnection, the paper said, adding: "Natural gas and coal ...

Health

Deadly bacteria lurk in coastal waters. Climate change increases the risks

Health workers see Vibrio as a rare danger, if they've heard of it at all. But it's already causing more cases of flesh-eating disease. And it's poised to get worse.

History

Canadian **Meteorological** Historical Photos / Photos historiques de la météorologie Canadienne

CMOS

Canadian **Meteorological** Historical Photos / Photos historiques de la météorologie Canadienne ... **Meteorologist** BSc Courses, redleaf.gif (1769 bytes) ...

Innovation and technologies and AI

NOAA and Google Collaborate to Enhance **Weather Forecasting** and Research with Artificial ...

PRNewswire

... of environmental and satellite **data** by leveraging Google Cloud's infrastructure and AI/ML know-how. All this will help improve **weather forecasting**, ...

Python developments enable easier access to weather and climate data

ECMWF

New Python packages and training with Jupyter notebooks are making it simpler to access and use vast weather and climate datasets from **ECMWF** ...

ECMWF Summer of Weather Code – a driver of innovation

ECMWF

For the past three years, summers at **ECMWF** have been full of coding, open-source developments and innovations: a chatbot to assist users in finding ...

Smart **weather** services at planning stage

SHINE

... **technologies** such as artificial intelligence, big data, cloud computing and machine learning. According to the Shanghai **Meteorological** Bureau, ...

Atos supercomputer boosts weather forecasting capacity for 'Croatian **Meteorological** and ...

GlobeNewswire

In addition to medium-term and long-term forecasts, DHMZ **meteorologists** and hydrologists will be able to more accurately predict and determine the ...

Transport/roading/shipping/freight

Concerns KiwiRail plan will end the recreational use of Lambton Harbour

KiwiRail's plan to dock its new mega ferries in Wellington's inner harbour has a major problem - the city is too windy.

Journal and articles online

A dipole of tropical cyclone outgoing long-wave radiation

Mohan Smith, Ralf Toumi

Version of Record online: 09 October 2020

Tropical cyclones exhibit a large-scale dipole pattern in outgoing long-wave radiation fields, with low fluxes found near the cyclone centre and high fluxes positioned at large distances, northwest of the centre. Analysis of reanalysis data indicates that this pattern is caused by subsidence induced by the interaction between the cyclone and the environment. Additionally, it

is shown that the identification of this dipole signal can improve cyclone track forecasts in ensemble prediction systems.

Observations of air–sea heat fluxes in the southwestern Atlantic under high-frequency ocean and atmospheric perturbations

M. F. Santini, R. B. Souza, L. P. Pezzi, S. Swart

Version of Record online: 06 October 2020

Novel data from two research cruises performed in the southwestern Atlantic Ocean were used to describe the ocean–atmosphere latent- and sensible-heat fluxes. We found that these heat fluxes were modulated by high-frequency environmental changes in the atmosphere or in the ocean such as episodes of strong wind bursts, transient systems passage, or large differences between the SST and the air temperature at sea level.

Make your own met measurements: build a digital barometer for about £10

R. Giles Harrison

Version of Record online: 14 October 2020

Meteorological measurements need not always require expensive instrumentation. Modern electronic sensors are accurate and readily made to work with well-supported programmable electronic interfacing systems such as the Arduino series of devices. Construction of an atmospheric pressure display is outlined here, which also provides temperature and relative humidity measurements.

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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.

[Tropical Storm Zeta makes its way toward the US coast after slamming into Mexico as a hurricane](#)

CNN - October 27, 2020

After slamming into the Yucatán Peninsula in Mexico, Tropical Storm Zeta is heading toward the Gulf Coast—and residents are bracing for its impact.

Denver Weather: Record Lows Set Nearly 100 Years Ago May Fall By Tuesday

CBS4 – October 26, 2020

An unusually cold arctic air mass threatens to set at least three new record low temperatures in Denver over the next few days. Two of those records are nearly 100 years old.

Fight Against Colorado's 2 Largest-Ever Fires Continues, Aided By Snow

NPR – October 26, 2020

Weekend snowfall granted a reprieve against the two largest wildfires in Colorado history, which together have spread over more than 400,000 acres. But the fires continue to burn.

Globalized economy making water, energy and land insecurity worse: study

Phys.org - October 26, 2020

The first large-scale study of the risks that countries face from dependence on water, energy and land resources has found that globalisation may be decreasing, rather than increasing, the security of global supply chains.

New Space Weather Network Extends over Africa

Scientific American - November 2020 issue

A new network of dedicated antennas in Africa will lend insight into the havoc that storms of charged particles from the sun wreak on satellite and radio communications.

NASA telescope uncovers definitive evidence of water on the moon

CNET - October 26, 2020

A telescope in the back of a 747 finally puts to rest a longstanding question about lunar water.

Favorable weather likely for election day 2020 across the nation

MPRNews - October 26, 2020

Mild and dry weather could boost voter turnout.

Once in a blue moon: Get ready for a Halloween full moon

USA Today - October 26, 2020

For the first time in decades, there will be a full moon visible across the entire U.S. on Halloween night, Oct. 31.

Open cloud platform delivers water consumption models

GCN - October 20, 2020

Water managers and farmers in the West will soon be able to more accurately track water consumption by crops and other vegetation through a web application that uses data from satellites and weather stations.

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Weather Eye with John Maunder

<https://www.sunlive.co.nz/blogs/15103-the-southern-oscillation-index1880-2020.html>

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