

New Zealand weather and climate news

These clips are courtesy of MetService library

MetService

Brrrrr! Cold snap in store for Hawke's Bay after glorious weekend

New Zealand Herald

MetService meteorologist Andy Best said the region basked in 20C-plus all weekend, with steamy nights thrown in as well. But Best said the week ...

Extreme weather linked to greater public trust in science, survey shows

Seeing is believing when it comes to climate change and it's changing people's minds, writes Amber-Leigh Woolf.

The tangible evidence of climate change, in the form of extreme weather events, has seen a boost in the public's trust in science, an Auckland University professor says.

Trampers' risk-taking criticised

An eight-strong group of mainly student trampers rescued in the Southern Alps at the weekend has been criticised for taking an unnecessary risk by proceeding with the tramp despite knowing adverse weather was forecast.

The eight trampers, forced to hunker down in blizzard conditions in the Southern Alps, knew the weather was expected to turn bad.

MetOcean

New developments on the New Zealand Ocean Operational Forecast System presented at FOO19

Last week, MetOcean's Research and Development Science Team Leader, Dr João Marcos Souza, presented the latest developments on MetOcean's operational forecast system and on Moana Project at The Australian Forum for Operational Oceanography 2019 (FOO 2019).

Climate change, pollution threaten NZ's marine environment

Climate change, pollution and over-fishing are causing irreversible damage to New Zealand's marine environment, a new report reveals.

Niwa principal scientist Dr Matt Pinkerton said the report - a joint project by the Ministry for the Environment and Stats NZ - should be a call to arms to protect the environment, before it's too late.

Achieving a safe and just future for the ocean economy

much attention has been given to the growth of the 'Blue Economy' -- a term which refers to the sustainable use of ocean and marine resources for economic growth, jobs, and improved livelihoods. Ocean resources are viewed as lucrative areas for increased investment, including in fisheries, aquaculture, bio-prospecting, renewable energy, oil and gas, and other businesses. Ensuring that socially equitable and sustainable development occurs should be the mandate of governments and industry, maintain an international group of researchers, led by UBC

NIWA

Photo essay: NIWA scientists turn wildlife photographers for photo competition

Being surrounded by animals comes with the territory for NIWA marine ecologist and scientific diver Richie Hughes.

Volcano alert

Underwater volcano eruption near Tonga could create a brand new island

Stuff.co.nz

GeoNet and the Wellington Volcanic Ash Advisory Centre, a department of MetService, have been monitoring the situation, but say there is currently no ...

Recent vivid sunsets possibly caused by volcanic eruptions

WLWT Cincinnati

Weather satellites captured the cloud, which got as high as 13 miles, according to a satellite blog. The volcanic aerosol layer forms in the stratosphere ...

Extreme weather (and other news) – Australia and Pacific

Severe weather season outlook for forecasts more heatwaves but fewer cyclones for Australia

NEWS.com.au

Australia's two main climate drivers are El Nino/La Nina in the Pacific Ocean and the Indian Ocean Dipole (IOD) to the west. The former is in neutral ...

Fiji Met's new coastal inundation forecasting (CIF) stands to be a lifesaver

Meteorologists predict 12 destructive tropical cyclones will strike some of the Pacific's most vulnerable nations in the 2019/2020 season - with one or two expected to hit Fiji. But Fiji Met's new coastal inundation forecasting (CIF) stands to be a lifesaver. T+T's Bapon Shm Fakhruddin, PhD is proud to have been part of the Coastal Inundation Forecasting Demonstration Project (CIFDP). This ground-breaking project has developed and implemented a Multi-Hazard Early Warning System that delivers an integrated approach to forecasting, monitoring and warning for coastal flooding, no matter what the cause - river or ocean. This means Fiji Met will be able to predict coastal and river flooding, delivering early warnings to at-risk communities and using real-time data to deliver critical updates aimed at saving more lives and livelihoods, while reducing property damage. The innovative CIFDP approach is unique, for the first time bringing together the hydrological, oceanographic and meteorological communities to develop enhanced capability for accessible, understandable and actionable warnings.

Emergency Operation Centre opened in Niue

Niue's newly built National Emergency Operation Centre was officially opened this week.

Niue Premier Sir Toke Talagi and Pacific Community representative Taito Nakalevu presided over the opening

International news and research

Senate Bill Would Open Some Weather Agency Models to the Public

Nextgov

That policy required the U.S. Weather Research Program to establish an Earth Prediction Innovation Center, which was designed to bring commercial ...

Debunking The Myth Of Earthquake Weather

Forbes

This is a good time for your friendly Meteorologist to remind you that we can not forecast #earthquakes and there is no such thing as #earthquake ...

Strong storms generating earthquake-like seismic activity

Researcher have uncovered a new geophysical phenomenon where a hurricane or other strong storm can spark seismic events in the nearby ocean as strong as a 3.5 magnitude earthquake.

How to track a typhoon: Forecasters on front line of extreme weather

KXLY Spokane

How to track a typhoon: Forecasters on front line of extreme weather ... The Tai Mo Shan Weather Radar is contained in a giant white sphere perched ...

Satellites record second lowest Arctic sea ice extent since 1979

UN Environment (press release)

The yearly cycle of the build-up and melting of Arctic sea ice is one of the earth's vital signs and a key climate variable monitored by scientists.

FY20 Appropriations Bills: National Oceanic and Atmospheric Administration

FYI: Science Policy News

Notably, the House proposes to significantly expand weather and climate ... Detailed figures for research, forecasting, and satellite programs are ...

NASA's ICON is on a mission to investigate the ionosphere

Axios

The bottom line: Space weather poses a major threat to people living in space and satellites in orbit, so the data ICON gathers about the way the ...

Forecasting rain more accurately with GPS-based system

OpenGov Asia

Although the technology could be applied almost anywhere, it was ... Weather forecasting is dependent on accurate atmospheric observations, but the ...

5G network

European risk report flags 5G security challenges

European Union Member States have published a joint risk assessment report into 5G technology which highlights increased security risks that will require a new approach to securing telecoms infrastructure.

Advertising/promotion

Firefly Partners with AccuWeather to Deliver Most Dynamic Campaigns Ever Available in Out-of ...

WebWire (press release)

... digital media company that provides highly accurate commercial weather forecasting services to a worldwide audience in a highly scalable manner.

Art/s

Screening at the British Film Festival – Lighthouse Petone

BFF The Aeronauts

· Petone: 03 Nov 2019

Runtime: 101 min

GENRES: Biography, Adventure, Drama, Action, Thriller, Festival

In 1862, daredevil balloon pilot Amelia Wren (Felicity Jones) teams up with pioneering meteorologist James Glaisher (Eddie Redmayne) to advance human knowledge of the weather and fly higher than anyone in history. While breaking records and advancing scientific discovery, their voyage to the very edge of existence helps the unlikely pair find their place in the world they have left far below them. But they face physical and emotional challenges in the thin air, as the ascent becomes a fight for survival.

<https://www.lighthousecinema.co.nz/schedule/film/bff-the-aeronauts/>

Aviation

Jetstar confirms plans to quit regional New Zealand routes

Jetstar has confirmed it will cease its regional services in New Zealand at the end of November 2019.

Massey University opens new state-of-the-art aviation centre

Voxy

Massey University's new state-of-the-art aviation centre was officially opened by Transport Minister Phil Twyford today. The 2200 square-metre ...

Business/Insurance

Can Insurance Companies Weather The Storm? What Climate Change Means For The Industry

WBUR

The Economist finance correspondent Matthieu Favas (@MatthieuFavas) recently wrote about the issue in an article titled "Changing Weather Could ...

Weather Forecaster Moji's Listing Plan Rejected

Caixin Global

The operator one of China's largest weather forecasting apps, Beijing Moji Fengyun Technology Co. Ltd., has had its share market listing plan rejected ...

The Weather Channel is Partnering With The New Streaming Service Quibi

Cord Cutters News, LLC

As the nation's leading weather network we share that curiosity and are excited to be partnering with such a cutting edge platform as Quibi," said Tom ...

IBM's The Weather Company ramps up engagement with Govt, private sector

The Hindu BusinessLine

The Weather Company, an IBM business, is bringing together IBM's advanced Artificial Intelligence (AI) and cloud capabilities and its own high volume ...

Quibi signs The Weather Channel on exclusive contract

Rapid TV News

“As the nation's leading weather network we share that curiosity and are excited to be partnering with such a cutting edge platform as Quibi.”

Why government weather forecasts shouldn't be political

Washington Post

Inside the National Weather Service (NWS), top officials down the line to weather ... While we may take weather forecasts for granted today, Americans 150 ... shipping industry, which had become a disastrously dangerous business.

How the weather can ruin your business

The Sydney Morning Herald

There wouldn't be many entrepreneurial risks as perilous as those dependent on the weather. Surely owners of an ice cream parlour are nervous in ...

Infrastructure upgrades and weather warnings concern us all

Business Day

Beyond climate-smart investment, business leaders should be exerting maximum pressure on those with political power to invest in infrastructure.

Clouds

Tiny particles lead to brighter clouds in the tropics

Global airborne mission finds a belt of particle formation is brightening clouds

Energy and Mining

South Island dry weather hits Contact's Q1 performance

New Zealand Herald

South Island dry weather hits Contact's Q1 performance ... The company has extensive thermal and geothermal assets in the North Island and gas

Farming/horticulture/Aquaculture

Fans get to work as spring frosts threaten precious grapes

Vineyard frost fans have been doing their bit to protect one of Marlborough's biggest money spinners after a few cold starts in October.

The fans, which pull warm air down onto the vines, are used when grapes start to bud - as a spring frost can lead to crop loss.

Climate Lessons: How climate change affects New Zealand wine

In Climate Lessons, a scientist explains what their research has taught them about climate change.

We all know that plants need soil, water, and sunlight to grow; and usually they grow better when it's warmer – but not too hot! – and they have plenty of water and nutrients from the soil. As anyone with a vegetable garden knows, it only takes small changes in temperature, soil, nutrients and water to impact on homegrown peas and potatoes.

The makeup of mariculture: Global trends in seafood farming

The process of farming seafood in the ocean, known as mariculture, is a growing trend yet little is known about the trajectories of its development. That's why a team of researchers set out to shed some light on the industry.

History

100 Year-Old Meteorological Column Restored on Vítězné náměstí

Prague Morning

After World War II, the advent of more modern technologies halted the development of these weather stations. Eventually, most of them gradually ...

Satellites and radar

Space radar keeps satellites safer

A state-of-the-art radar has catapulted Central Otago into New Zealand's \$1.8 billion space industry.

The Kiwi Space Radar - built by California-based LeoLabs in Naseby in the past year - was opened yesterday in front of an international audience that heard New Zealand's space sector was growing rapidly in size and value.

Vietnam awards weather satellite deal to NEC and Sumitomo

Nikkei Asian Review

HANOI -- Japan's NEC and Sumitomo Corp. agreed Friday to a contract to develop a satellite for the Vietnamese government that will help predict ...

Space weather

Space Weather Aviation Forecasting on a Global Scale

Eos

On November 7, 2019, in response to an International Civil Aviation Organization (ICAO) mandate, the world's major space weather centers will start ...

Radar in Central Otago will help reveal size of space junk problem

Satellite collisions should become less common thanks to a radar station that has been built on a farm near Naseby in Central Otago to track hundreds of thousands of pieces of space junk.

Transport/roading/shipping/freight

Panels on roads to display weather info by QCAA

Gulf Times

QCAA pays particular attention to meteorology, providing it with the ... form of reports issued by the authorities responsible for air traffic, air navigation, ...

The Most Dangerous Transportation Weather Hazard

Forbes

Tornadoes and hurricanes, for example, are identified and tracked through technological advances in Doppler Radar and satellite imagery.

Water

Surge in deaths on the water prompts inaugural Water Safety Month

New Zealand Herald

Transport Minister Phil Twyford this morning joined representatives of the Safer Boating Forum in Auckland to launch the new initiative. Maritime NZ ...

Weather in pictures

Whopping willy-willy: A huge dusty willy-willy was spotted spiraling high against the brilliant blue sky in Exmouth in Western Australia this week.

Cloud seeding / Geoengineering

The gift that keeps on giving

Bangkok Post

The method, dubbed the "Royal Rainmaking Technology", involves the chemical "seeding" of the atmosphere to trigger the formation of rain clouds, ...

Library

Here's How: Strengthen Your Google Fu

Do you know how to get the most out of Google Search? Sometimes the standard search strategy – “just type in a few words” – doesn’t yield the optimal results. You may get too many results, or marginally relevant ones. The true disciples of “Google Fu” know the following secret ways to get exactly what they want from the world’s largest search engine. Read on to learn the secrets of the masters...

Journal and articles online

Dealing with inconsistent weather warnings: effects on warning quality and intended actions

Philippe Weyrich, Anna Scolobig, Anthony Patt

Pages: 569-583 | First Published: 04 February 2019

Multiple, public and private, weather providers disseminate warning information such as that shown in the image. However, these warnings are currently very inconsistent in visualization and message content, which has negative effects on message quality and decision-making as people choose not to respond to the information because of the ambiguity. Thus, more enhanced collaboration and co-operation is needed between public and private providers to guarantee that more consistent information is being disseminated in a warning situation.

Objective verification of global in-flight icing forecasts using satellite observations: Verification of WAFS icing forecasts using satellite observations

Rebecca L. Bowyer, Philip G. Gill

Pages: 610-619 | First Published: 22 February 2019

An objective verification framework was developed to verify routinely icing potential forecasts using a satellite-derived icing potential product as a source of truth data. To allow a fair comparison, the multilevel forecasts are processed into a single field in order to replicate best the satellite observations. Using this framework verification results of the mean icing forecasts issued by WAFS London over a 12-month period show skill but significant over-forecasting of icing events.

Storm naming and forecast communication: A case study of Storm Doris

Andrew J. Charlton-Perez, Danica Vukadinovic Greetham, Rebecca Hemingway

Pages: 682-697 | First Published: 22 March 2019

The present study analyses one of the first storms to be given a name by the Met Office and Met Eireann, Storm Doris, in order to understand how this storm was communicated in the traditional and social media. An example of the growth of large, weakly connected social networks discussing the storm is shown (derived from Twitter data). The quantity of information shared about the storm shows the usefulness of storm names as both a communication and a research tool.

Collecting and processing of barometric data from smartphones for potential use in numerical weather prediction data assimilation

Kasper S. Hintz, Henrik Vedel, Eigil Kaas

Pages: 733-746 | First Published: 01 May 2019

Some smartphones have built-in barometric sensors and thereby contribute to the potentially vast amount of crowd-sourced data available for the atmospheric sciences. This study presents a novel approach for collecting smartphone pressure observations (SPOs). Over 5,000 observations per hour were collected during a period of 2 months. A screening system dedicated to SPOs is presented and SPOs are assimilated using the HARMONIE 3DVar assimilation system. It is shown that the bias of surface pressure decreases when SPOs are included in the analysis.

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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.

October 22, 2019

News

What's a stormquake? Scientists identify a new phenomena on the ocean floor

October 18, 2019 - Mic

In a paper published this week in Geophysical Research Letters, scientists highlighted the discovery of a strange phenomenon of storms that are so powerful and intense that they literally shake the ocean floor.

Read MORE

A vast heat wave is endangering sea life in the Pacific Ocean. Is this the wave of the future?

October 17, 2019 - MSN.com

A vast region of unusually warm water has formed in the northeastern Pacific Ocean, and scientists are worried that it could devastate sea life in the area and fuel the formation of harmful algal blooms.

Read MORE

Debunking The Myth Of Earthquake Weather

October 22, 2019 - Forbes

There is no such thing as "earthquake weather."

Read MORE

Destructive Dallas tornado lifts debris 20,000 feet high

October 21, 2019 - The Washington Post

The twister's 140 mph winds carved a path of heavy damage amidst a regional severe weather outbreak.

Read MORE

NASA-NOAA satellite finds overshooting tops, gravity waves in Tropical Storm Nestor

October 19, 2019 - Phys.org

NASA-NOAA's Suomi NPP satellite provided night-time and infrared views of developing Tropical Storm Nestor in the Gulf of Mexico and found over-shooting cloud tops and gravity waves.

University of Alabama part of tornado research project - Yellowhammer News

October 20, 2019 - Yellowhammer News

Students at the University of Alabama will observe nearby volunteer households to record how people react to severe weather events.

Read MORE

Federal action plan focused on improving water prediction for Western U.S.

October 18, 2019 - NOAA

Knowing where, when, and how much precipitation in a particular valley, mountain, lake, or river will become available for use to the people living there promotes efficiency as water managers will be able to more effectively prepare and meet the various water users' needs and obligations.

[Read MORE](#)

[Facing unbearable heat, Qatar has begun to air condition the outdoors](#)

October 17, 2019 - SFGate

It was 116 degrees Fahrenheit (46.7 degrees Celsius) in the shade outside the new Al Janoub soccer stadium, and the air felt to air-conditioning expert Saud Ghani as if God had pointed "a giant hair dryer" at Qatar.

[Read MORE](#)

[ABB helping the world obtain a deeper understanding of galaxy evolution](#)

October 17, 2019 - Markets Insider- Business Insider

ABB Canada has won a \$1.75 million contract for the development of a scanning mechanism for the Canadian Space Agency (CSA) which could potentially contribute to space exploration.

[Read MORE](#)

[Indian capital's air quality plunges despite new measures](#)

October 16, 2019 - ABC News - [Go.com](#)

The Indian capital's air quality levels plunged to "poor" on Wednesday, a day after the government initiated stricter measures to fight chronic air pollution.

[Read MORE](#)

American Meteorological Society

My latest WeatherEye from John Maunder

<https://www.sunlive.co.nz/blogs/13936-do-solar-magnetic-variations-affect-climate.html>

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