

New Zealand weather and climate news

Courtesy of MetService

MetService focus

Rain, gales move in for long weekend in north, as late autumn sunshine recedes

Hamilton had its coldest point of the year with the temperature dropping to -2.6 degrees Celsius overnight. It looked to be getting fog and freezing temperatures together on Thursday morning, MetService meteorologist **April Clark** said.

<https://www.stuff.co.nz/national/104348888/rain-gales-move-in-for-long-weekend-in-north-as-late-autumn-sunshine-recedes>

The ‘interesting’ case of the Tauranga contrail

“I consulted with a fellow forecaster **Ross Marsden** and that looks like a contrail for sure, though maybe not an exhaust contrail,” says senior communications meteorologist **Lisa Murray**.

<https://sunlive.co.nz/news/180753-the-interesting-case-of-tauranga-contrail.html>

MetOcean

'Rare' tropical Aussie grouper spotted in New Zealand waters after summer's marine heatwave

A Queensland grouper was spotted swimming at Northland's Deep Water Cove, more than 3000 kilometres from its Aussie home, on Sunday.

Paihia Dive skipper and diving instructor Ben Brodie, 27, was guiding divers around the HMNZS Canterbury wreck when he spotted the rare tropical fish.

<https://www.stuff.co.nz/environment/104306474/rare-tropical-aussie-grouper-spotted-in-new-zealand-waters-after-summers-marine-heatwave>

Extreme weather (and other news) – Antarctica and offshore islands

How Ross Island tells the story of climate change in Antarctica

News of summer heatwaves at home was sombrely received by scientists in Antarctica, where signs of climate change will have a global impact.

[Read more here](#)

Extreme weather (and other news) – Australia and Pacific

Push to embed climate change prep in Pacific

The Secretariat of the Pacific Regional Environment Programme, or SPREP, says climate change adaptation and disaster preparation needs to be incorporated into national development planning.

<https://www.radionz.co.nz/international/pacific-news/358607/push-to-embed-climate-change-prep-in-pacific>

Volcanic haze from Hawaii reaches CNMI and Guam

Volcanic haze from Hawaii's Kilauea volcano has now reached the Northern Marianas and Guam, over 6,000 kilometres away.

<https://www.radionz.co.nz/international/pacific-news/358553/volcanic-haze-from-hawaii-reaches-cnmi-and-guam>

Southern ocean 'big swell' studied in Samoa

A training and consultation workshop focusing on ocean data applications has helped build ocean science capacity and has kick-started discussions to improve national oceanographic services.

http://sobserver.ws/en/29_05_2018/local/33560/Southern-ocean-%E2%80%98big-swell%E2%80%99-studied-in-Samoa.htm

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

Thunderstorm kills 40 in Bihar, UP, Jharkhand; heat wave rattles Delhi-NCR

Heatwave is likely to persist in North India, while southwest monsoon hit Kerala on Tuesday. Catch all the weather updates on Business Standard

[Read more here](#)

Deadly-thunderstorms-test-indias-weather-warning-system/

To control the damage, India needs a better weather warning system and widespread awareness of safety measures

<http://indiaclimatedialogue.net/2018/05/28/deadly-thunderstorms-test-indias-weather-warning-system/>

China floods to hit US economy: Climate effects through trade chains

Fluvial floods will increase due to human-made climate change, in particular in China. This might raise direct and indirect economic losses along the global supply and trade chains. The US is susceptible to indirect climate-related economic losses due to its negative trade balance with China. Trump's tariffs might further reduce the resilience of the US economy.

<https://www.sciencedaily.com/releases/2018/05/180528151920.htm>

Thailand Enters Monsoon Season: Officials

BANGKOK — Get that umbrella ready because the rainy season has officially begun, the national weather agency said Monday.

<http://www.khaosodenglish.com/news/2018/05/28/thailand-enters-monsoon-season-officials/>

Extreme weather (and other news) – Americas and Europe

'Brexit is a disaster' – experts debate the latest economic data

Two former members of Bank of England's interest rate-setting committee examine why UK growth lags its EU rivals

<https://www.theguardian.com/business/2018/may/29/brexit-disaster-economic-data-uk-eu>

Baltimore community devastated after 'once every 1,000-year' flooding

Flash flooding has caused major damage in Baltimore, sending cars floating down streets.

<http://www.abc.net.au/news/2018-05-28/baltimore-floods-state-of-emergency-declared/9808448>

International news and research

How far to go for satellite cloud image forecasting into operation

Cloud is a tracer for a variety of significant weather changes. Cloud images obtained from satellite remote sensing are of great help to weather forecasters in understanding the past and present weather processes in a macroscopic way. Forecasts directly made out of satellite cloud images are what meteorologists and forecasters dream about. Recent studies have shown that it has become possible to produce satellite cloud image forecasts for the next few, dozens, or even tens of hours.

https://www.eurekalert.org/pub_releases/2018-05/scp-hft051518.php

Business development / commodities / infrastructure etc

Competitors

Tower Insurance's earnings hit by weather claims

Insurance company Tower has posted a bigger first half loss as its earnings were hit by bad weather claims and an arbitration decision.

<https://www.radionz.co.nz/news/business/358481/tower-insurance-s-earnings-hit-by-weather-claims>

Aviation

Can technology help make air travel less bumpy?

WHILE flying, pilots face various obstacles, including busy airspace and mountainous terrain. However, adverse weather is considered one of the biggest challenges for a pilot, as it can greatly affect flight safety and efficiency during all phases of flight.

<http://techwireasia.com/2018/05/can-technology-help-make-air-travel-less-bumpy/>

Aviation industry to grow 6.5-7% in 2018

KUALA LUMPUR: The Malaysian Aviation Commission (MAVCOM) is optimistic of continued positive industry performance in 2018 and expects a growth of 6.5 to seven per cent, which will see Malaysia surpassing the 100 million passenger mark for the first time

Read more at <https://www.thestar.com.my/business/business-news/2018/05/28/aviation-industry-to-grow-6-5-7pc-in-2018/#ysv8Zx0BYTpFy7Bt.99>

Communications/social media

A Long List of Social Media Statistics that You Need to Know in 2018

Social media statistics are a marketer's best friend. They tell you how people are using each network and highlight new tactics, technologies, and trends to consider.

The problem is, social media is always changing. From year to year, the popularities of various platforms rise and fall, and what was relevant in 2015 may no longer be so.

[Read more here](#)

Energy and Mining

IoT and Machine Learning Are "Refueling" The Oil And Gas Industry

The oil and gas industry has been on a roller coaster ride over the last few years. Falling prices have squeezed cash flows and forced companies to reconsider their exploration and production strategy. Today, oil and gas companies are grappling with a major challenge: How to use technology to better address fluctuations in demand and pricing. While oil and gas companies have been slower to adopt new technologies, these companies also recognize that to compete and win in the digital age they must transform their business models, processes, and IT operations. Benjamin Beberness, vice president and global head of the Oil and Gas Industry Business Unit at

SAP, recently spoke on the [S.M.A.C. Talk Technology Podcast](#) about the importance of machine learning to the oil and gas industry.

<http://www.digitalistmag.com/iot/2018/05/15/iot-machine-learning-are-refueling-oil-gas-industry-06166677>

Transport/roading/shipping/freight

Amid Ice Melt, New Shipping Lanes Are Drawn Up off Alaska

Special protections have also been granted for wildlife and coastal communities potentially threatened by oil spills

[Read more here](#)

Cyber security and IoT

IT and people issues top risk concerns of NZ boards: Institute of Directors

Boards see cyber as the number one external risk and the number one emerging risk, while loss of a key person is the largest internal risk, according to 2018 Directors' Risk Survey report

[Read more here](#)

Innovation and technologies

Exclusive: Weather app Poncho has been acquired by a boutique beverage company

The weather bot is being scooped up by Dirty Lemon and is shutting down its service.

<https://www.fastcompany.com/40578222/exclusive-weather-app-poncho-has-been-acquired-by-a-boutique-beverage-company>

Timetable accelerated for rural broadband and mobile coverage: Minister Clare Curran

“I want people to know they don't have to wait until the end of 2022.”

[Read more here](#)

Politics and govt

NZIER expects growth to remain reasonably solid, Quarterly Predictions - June 2018

The New Zealand economic outlook remains positive even as population growth continues to slow, as detailed in the latest NZIER *Quarterly Predictions*. NZIER forecasts annual growth in GDP per capita to lift to around 2 percent by 2022.

[Read more here](#)

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. Searchable archives are [available online](#).

[NASA satellite captures photo of bizarre circle of clouds](#)

Watts Up With That - 05/29/2018

weird. While clouds are an important topic of research for climatologists and meteorologists, sometimes the atmosphere churns up peculiar-

[Flash Flood Tears Through Maryland Town For Second Time In Two Years](#)

KPBS - 05/28/2018

had endured other floods in the past. Rain storms in the area have been growing more intense in recent years, according to an expert who

[Scientists predict 10 to 16 named storms this hurricane season](#)

The Seattle Times - 05/27/2018

certain areas are compromised from last year's storms, and that makes hurricane preparedness even more important this year," said Gerry Bell

[With new massive pumps online, New Orleans levee system faces 2018 hurricane season](#)

NOLA.com - 05/27/2018

our way. NOAA's Climate Prediction Center is forecasting a 75-percent chance that this hurricane season will have near- or above-normal

[Wildfire Study Looks Into Native Plants For Faster Recovery](#)

California Patch.com - 05/25/2018

following the 2007 fire near Santiago Canyon and the 2011-2015 California drought. Research was made possible, in part, by 10 years of

[All the Storm Names for 2018 Atlantic Hurricane Season](#)

Pop Culture - 05/25/2018

hurricane season of 2017 demonstrated the necessity for prompt and accurate hurricane forecasts.”

[This Is What Earth Looked Like 2.4 Billion Years Ago](#)

Tech Times - 05/25/2018

Since the dawn of the planet, the Earth had been a giant ball of water surrounded by an atmosphere rich in methane. That was up until 2.4 billion years ago, when the first landmass abruptly rose from the depths of the ocean. Researchers at the University of Oregon say that changes in the mantle's

[Understanding Long Range Forecasting: The Fast and Slow](#)

Weather Nation - 05/25/2018

[Climate change may lead to bigger atmospheric rivers](#)

Phys.org - 05/25/2018

The results also show that the frequency of the most intense atmospheric river storms is projected to nearly double. Atmospheric rivers are

[Some desert creatures may be able to cope with climate change better than expected](#)

Phys.org - 05/25/2018

researchers at the Helmholtz Centre for Environmental Research then collated this information with weather conditions in the national park,

[The Best Place to Live Domestically as the World Warms](#)

The Good Men Project Magazine - 05/24/2018

governments are already gearing up to adapt to warmer temperatures, more intense storms, rising sea levels and other expected changes. On

[That Dinosaur-Killing Asteroid? It Triggered Global Warming, Too](#)

The Atlantic - 05/24/2018

as much as twice the warming as the Intergovernmental Panel on Climate Change currently forecasts for the end of the century. “Models are

[Giant clams tell the story of past typhoons](#)

ScienceDaily - 05/24/2018

Hokkaido University Summary: A highly precise method to determine past typhoon occurrences from giant clam shells has been developed, with the hope of using this method to predict future cyclone activity. A highly precise method to determine past typhoon occurrences from giant clam shells has been

['This Noise That Never Stops': Wind Farms Come to Brazil's Atlantic Coast](#)

The New York Times - 05/24/2018

On this part of the Atlantic coast, the wind blows constantly and in one direction consistently, giving Brazil a steady stream for energy production.

[Dusty rainfall records reveal new understanding of Earth's long-term climate](#)

Phys.org - 05/24/2018

Ancient rainfall records stretching 550,000 years into the past may upend scientists' understanding of what controls the Asian summer monsoon and other aspects of the Earth's long-term climate, reports a University of Arizona-led international team of researchers in the May 25 issue of the journal Science.

[Giant canyons discovered in Antarctica](#)

BBC News - 05/24/2018

Scientists have discovered three vast canyons in one of the last places to be explored on Earth - under the ice at the South Pole.

[Hawaii's Erupting Kilauea Volcano Is Now Spouting Blue Flames of Burning Methane](#)

Time Magazine - 05/24/2018

(HONOLULU) — Blue flames from burning methane are the latest natural phenomena being seen at the eruption of the Kilauea volcano in Hawaii. Nighttime photos released Wednesday by the U.S. Geological Survey show the flames spouting from cracks in the pavement in the Leilani Estates neighborhood

[New Evidence Points to an Unbroken, Million-Year-Long Ice Core in Antarctica](#)

Gizmodo - 05/24/2018

The proposed drilling site is near the Trans-Antarctic Mountains in eastern Antarctica. Photo: NOAA Imagine an unbroken chronological record, dating back a million years, of temperature and atmospheric conditions on Earth. Such a thing could indeed exist in the form of an ancient and undisturbed

[California scientists hope feeding cows seaweed will make them less gassy — which could be great news for the environment](#)

CNBC - 05/24/2018

Researchers in California are testing whether seaweed in cow diets can reduce climate pollutants. The state's livestock sector — mostly the dairy sector — is responsible for an estimated 55 percent of methane emissions in the state. Methane is created in cattle production when cows burp, fart and

[Seeing Green: A Stratospheric View of the 2017 Total Eclipse](#)

Eos - Earth and Space Science News - 05/24/2018

Airborne telescopes gave scientists a sky-high view of the 2017 Great American Eclipse as they took measurements that are difficult to obtain from the ground.

[Point patterns help to predict landslides](#)

Phys.org - 05/24/2018

data from a 2009 disaster in Messina, Italy, which followed an intense storm. The model generated highly accurate maps of the disaster zone.

[NOAA studies "serious problem" with new GOES weather satellite](#)

MSN.com - 05/24/2018

of data that are used by meteorologists to track hurricanes and major storm systems and to generate the forecasts millions rely on. GOES-16

[Forecasters predict Central Pacific could see 6 hurricanes](#)

Chron.com - 05/23/2018

routes. El Nino conditions contribute to a higher volume of storms brewing. Ballard also said that intense, heavy rainfall in recent months

[Planet-Warming Gases Make Some Food Less Nutritious, Study Says](#)

Voice of America - 05/23/2018

Asia, the report said. While research has shown higher temperatures from climate change and weather extremes will cut food production,

[Determining effective methods of irrigation as water becomes increasingly scarce](#)

Phys.org - 05/23/2018

for sustaining conditions for human life. Knuth adds, "This research is important because drought is far-reaching and non-selective, making

[Tides and Waves Interact to Cause Hurricanes in Near-Space](#)

Eos - Earth and Space Science News - 05/23/2018

The interaction of tides and waves generated in the lower atmosphere can cause the mean zonal wind speed in the lower ionosphere to oscillate equivalent to a category 1 hurricane at Earth's surface.

[Streams may emit more carbon dioxide in a warmer climate](#)

ScienceDaily - 05/23/2018

Oregon State University Summary: Streams and rivers could pump carbon dioxide into the air at increasing rates if they continue to warm, potentially compounding the effects of global warming, a new worldwide analysis has shown. Streams and rivers could pump carbon dioxide into the air at

[World Needs to Set Rules for Geoengineering Experiments, Experts Say](#)

Scientific American - 05/23/2018

With interest in such research rising, and the risks uncertain, that conservation needs to start now

[Experts: "Alarming" drought conditions hit U.S. Southwest](#)

The Denver Post - 05/23/2018

Warmer-than-average temperatures haven't helped as the soil dries out and water demand increases.

[Volcano expert explains the science behind Kilauea's ongoing eruption](#)

NBCNEWS.com - 05/23/2018

expect to see. The advantage that meteorologists have is that the weather system is visible with satellite observations. You can see storms

[How one U.S. Army program changed the forecast in emergency preparedness](#)

The Baltimore Sun - 05/23/2018

in 2017, he spent 36 years helping the Army refine emergency preparedness weather capabilities into a sophisticated, state-of-the-art

[As more solar and wind come onto the grid, prices go down but new questions come up](#)

WTOP.com - 05/23/2018

most at midday, and falling off in the evening. Wind energy output depends on weather, seasons and geography. Solar is fairly predictable,

[AB 2681 will help cities identify structures that could fail in a major quake, helping to save lives, protect affordable housing, preserve economic stability and more](#)

AP (Hosted) - 05/22/2018

would require \$113 billion in reconstruction costs alone. These predictions surpass the impacts of Hurricane Katrina, one of the nation's

[Impact Of Overnight Heat Stress On Texas Winter Wheat](#)

Seeking Alpha - 05/22/2018

Images - Pixbay As recently as last year, research articles were published describing the impacts of drought and heat stress. In summary,

[What Happens If You Drive Into a Tornado? Take a Look.](#)

National Geographic - 05/22/2018

services work more closely to help establish a unified tornado database, improve forecasting and warning systems, and create preparedness

[Why the Projected Path For Hurricanes and Tropical Storms Doesn't Always Tell the Full Story](#)

The Weather - 05/22/2018

Three Changes Coming to National Hurricane Center Forecasts

[How the "Carbon Budget" Is Causing Problems](#)

Scientific American - 05/22/2018

—and larger—carbon budget as evidence that climate science is unreliable or that global warming is less of a problem than it was previously

[Grace mission launches to weigh Earth's water](#)

BBC News - 05/22/2018

A joint US-German mission has gone into orbit to weigh the water on Earth.

[A building El Niño in 2018 signals more extreme weather for 2019](#)

Grist - 05/22/2018

In case you couldn't get enough extreme weather, the next 12 months or so could bring even more scorching temps, punishing droughts, and unstoppable wildfires. It's still early, but odds are quickly rising that another El Niño — the periodic warming of the tropical Pacific Ocean — could be forming

[New network is installed to investigate space weather over South America](#)

EurekAlert! - 05/22/2018

province of Quebec and a major breakdown in satellite transmission, weather satellites and others. "Recent studies published in the journal

[Watch lightning roll across the US in a gorgeous time-lapse video from space](#)

Boy Genius Report - 05/22/2018

look at how dangerous a storm might become, allowing for more accurate warnings when intense lightning is present. When storms slow or stall

[Hurricane still ravaging mental health; Minnesota doctors call attention to Puerto Rican children's hidden scars](#)

Duluth News Tribune - 05/22/2018

A study released five years after Hurricane Katrina by the National Center for Disaster Preparedness found that more than 37 percent of

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