

New Zealand weather and climate news

Following clips are courtesy of MetService

MetService

Wind knocks out power to hundreds in Wairarapa, Wellington hit hard

Metservice said that for the country it looked like an "unsettled looking week ahead".

Meteorologist John Law said the strongest wind in Wellington was Remutaka summit at 133kmh.

<https://www.stuff.co.nz/dominion-post/104062933/wind-knocks-out-power-to-hundreds-in-wairarapa-wellington-hit-hard>

Gales portent of stormy week

MetService meteorologist Brian Mercer said the strongest recorded wind speed in Otago and Southland was a 120kmh gust at Mid Dome, between Lumsden and Athol.

<https://www.odt.co.nz/news/dunedin/gales-portent-stormy-week>

South bears brunt of wintry storm

The weakening front behind all of the severe weather was slowly making its way up the North Island today, MetService meteorologist Stephen Glassey said.

<https://www.odt.co.nz/news/national/south-bears-brunt-winty-storm>

Lightning strikes, low snow in south, with more wild weather to come

After that the thunderstorm activity moved to the lower North Island, with around 700 lightning strikes counted in the four hours to 5am Monday, mostly in northern Wellington, Kāpiti Coast and Taranaki, MetService meteorologist Stephen Glassey said

<https://www.stuff.co.nz/national/104061387/lightning-strikes-continue-overnight-low-snow-in-south-more-wild-weather-to-come>

Heavy rain, severe gales and thunderstorms: The weather's ramping up

At the same time, thunderstorms were concentrated on the very south west of the South Island and around Stewart Island.

MetService duty meteorologist Angus Hines said the weather was "still in the ramping up stage at the moment.

<https://www.stuff.co.nz/national/104051331/heavy-rain-severe-gales-and-thunderstorms-the-weather-ramping-up>

'Terrifying': Lightning hits two Queenstown bound flights

Two Air New Zealand flights have been struck by lightning today on their way to Queenstown.

<https://www.odt.co.nz/regions/queenstown/terrifying-lightning-hits-two-queenstown-bound-flights>

MetOcean

Sea change for Toowoomba weather expert

A TOOWOOMBA climatologist is about to get up close with the North Atlantic Ocean to try and figure out how ocean currents impact global weather.

<https://www.thechronicle.com.au/news/sea-change-toowoomba-weather-expert/3417338/>

Extreme weather (and other news) – Australia and Pacific

Climate change is one of Australia's biggest national security risks

Climate change poses a “current and existential national security risk” to Australia, according to a Senate inquiry.

The Senate report indicated that the Asia-Pacific region is “most vulnerable” to risks associated with climate change, that could increase the potential for conflict.

Australia is among the most vulnerable countries to climate change in the developed world.

<https://www.businessinsider.com.au/climate-change-national-security-risk-australia-2018-5?r=US&IR=T>

NZ signals long-term Pacific climate change strategy

New Zealand's Foreign Affairs Minister says the government has agreed to a long term approach to assist Pacific Island states in meeting the challenges of climate change.

<https://www.radionz.co.nz/international/pacific-news/357672/nz-signals-long-term-pacific-climate-change-strategy>

Bureau of Meteorology impacted by internet service providers' move to wireless frequency

The Bureau of Meteorology's (BOM) ability to accurately measure the weather could be affected by plans to move some wireless internet service providers onto its radar frequency.

<http://www.abc.net.au/news/2018-05-16/bom--radio-frequency-government-sell-off/9767000>

Expanded WiFi network and humidity-detecting smart sensors fit Darwin budget bill

As anyone who has suffered through a dreaded Territory build-up can attest to, the humidity will have you going troppo.

<http://www.abc.net.au/news/2018-05-16/smart-sensors-and-wifi-feature-in-darwin-council-budget-plan/9767642>

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

Better scope, accuracy in China's weather forecasts

China has improved the scope and accuracy in forecasting and monitoring extreme weather conditions including typhoons, floods and droughts, thanks to years of research and a complete weather monitoring system, experts said Friday.

http://www.china.org.cn/china/2018-05/19/content_51409185.htm

Africa's Answer to Climate and Weather Challenges: The Africa Hydromet Program

While Africa accounts for 4% of global greenhouse gas emissions, the continent is most vulnerable to the impacts of climate change and disasters

Although natural disasters are challenging to predict, hydromet services can help plan for impending disasters and prepare for risks

To tackle this challenge, the Africa Hydromet Program is set up to provide reliable, modern, and real-time weather, water, and climate information and services to everyone in Africa, supporting communities and countries towards meeting their climate resilience and economic development goals

<https://reliefweb.int/report/world/africa-s-answer-climate-and-weather-challenges-africa-hydromet-program>

One Dead as Tropical Cyclone Sagar Brings Life-Threatening Flood Threat to Somalia, Djibouti, Yemen

Tropical Cyclone Sagar has made landfall in Somalia.

Sagar's main threat is dangerous flash flooding in the deserts of southern Yemen, northern Somalia and Djibouti this weekend.

<https://weather.com/storms/hurricane/news/2018-05-17-tropical-cyclone-sagar-gulf-of-aden-yemen-somalia-djibouti>

Singapore set for third straight haze-free year

Singapore looks set to see a third straight year with no haze, due in part to Indonesia's sustained efforts at curbing fires and preventing their spread.

<https://www.straitstimes.com/singapore/environment/spore-set-for-third-straight-haze-free-year>

Sandstorm paints midday sky with Mars-like glow in southern Iraq

A severe sandstorm struck al-Muthanna province in southern Iraq on Friday, engulfing the landscape in a red dust.

<http://www.abc.net.au/news/2018-05-12/dust-storm-turns-iraqi-city-red/9754274>

3 killed, over 8,000 hit by severe weather in Sri Lanka

Three people were killed and over 8,000 affected as heavy rains and strong winds lashed across Sri Lanka, prompting disaster management officials to be on alert for possible evacuations, the [Disaster Management Centre](#) said on Sunday.

http://www.business-standard.com/article/news-ians/3-killed-over-8-000-hit-by-severe-weather-in-sri-lanka-118052000392_1.html

Extreme weather (and other news) – Americas and Europe

Britain to bask in one of the warmest summers since 2010

After a wobbly start to warm weather this spring, the summer season is predicted to be one of the warmest in the past eight years for Britain.

<https://www.accuweather.com/en/weather-news/britain-to-bask-in-one-of-the-warmest-summer-since-2010/70004931>

2018 Germany summer forecast: Heat waves, severe storms to highlight turbulent season

The unseasonable warmth that has graced Germany in April and May is a sign of things to come for the upcoming summer season.

<https://www.accuweather.com/en/weather-news/2018-germany-summer-forecast-heat-waves-severe-storms-to-highlight-turbulent-season/70004929>

International news and research

RainCube Ready For Launch

The next cargo resupply mission to the International Space Station will be carrying among its supplies and experiments three cereal box-sized satellites that will be used to test and demonstrate the next generation of Earth-observing technology.

<http://spaceref.com/nasa-hack-space/raincube-ready-for-launch.html>

Boulder's UCAR enters partnership boosting India weather forecasting

The Boulder-based University Corporation for Atmospheric Research has announced a new partnership with Skymet Weather Services to provide India with more detailed and accurate weather forecasts.

http://www.dailycamera.com/news/boulder/ci_31880999/boulders-ucar-enters-partnership-boosting-india-weather-forecasting

Ukraine became a leader of the weather anomalies

The us space Agency NASA made a map of climate change

Abrupt climate changes on the planet are being felt in all corners of the world. In some regions it gets too hot, and in those where it has never seen winter sleep in the snow.

<http://micetimes.asia/ukraine-became-a-leader-of-the-weather-anomalies/>

NOAA reports increasing global temperature in its 400 months global report

NASA's National Oceanic and Atmospheric Administration (NOAA) recently published the records of temperature for last 400 months which is more than 33 years where the Earth's temperature has been above average. Earth has reached a milestone in terms of temperature difference which was reflected in the April edition of monthly global climate report by NOAA. The report states that the month of April 2018 had been the third-highest temperatures of any April ever since NOAA started collecting the temperature related data in 1880.

<https://www.sciexaminer.com/news/environment/noaa-reports-growing-global-temperature-400-months-global-report-4938.html>

What are weather models, exactly, and how do they work?

Weather forecasters often discuss the models they use to help predict the weather. But what are these models? How do they work? And what are their strengths and weaknesses?

[Read more here](#)

National Hurricane Center gives sneak peek of newly improved technology

Enhanced technology looks to improve hurricane tracking

The National Hurricane Center is using newly improved technology to warn of major storms as Floridians brace for another active hurricane season set to begin in just a few days. The center is using data collected by planes and satellites to shrink the cone of uncertainty and extend forecasts to 72 hours before a storm, providing a whole additional day to prepare.

<http://zlotonews.com/national-hurricane-center-gives-sneak-peek-of-newly-improved-technology/>

Greater science investment to protect and grow New Zealand wealth and wellbeing

Anthony Scott, chief executive of Science New Zealand, the peak body for the Crown Research Institutes (CRIs), says the investment in science research announced today will help protect the environment, grow New Zealand's national and regional prosperity, and enhance New Zealand's contribution to global issues such as climate change, food security and digital science.

<http://www.scoop.co.nz/stories/SC1805/S00045/greater-science-investment-to-grow-nz-wealth-and-wellbeing.htm>

WMO

WMO launches Arctic Regional Climate Centre Network

First ever Pan-Arctic Regional Climate Outlook Forum provides predictions for summer season

A new Pan-Arctic Climate Outlook Forum has met for the first time to provide predictions for the forthcoming summer season as part of an international drive to improve weather, climate and sea ice forecasts in a region undergoing rapid environmental change.

[Read more here](#)

Communications/social media

Weathering the storm: on-the-ground reporting key

HOUGHTON — While no storm chasing is necessary, Upper Peninsula residents form an important part of weather monitoring and storm response.

<http://www.mininggazette.com/news/features/2018/05/weathering-the-storm-on-the-ground-reporting-key/>

Energy and Mining

Hydro assets benefit generator

Trustpower benefits from owning a larger number of small hydro electricity assets spread across New Zealand, Morningstar analyst Adrian Aitkins says.

<https://www.odt.co.nz/business/hydro-assets-benefit-generator>

UK GAS-Contracts dip on warmer weather, price premium over Europe

British wholesale gas prices fell on Friday as warmer weather forecasts for early next week reduced heating demand, domestic output rose and exports to mainland Europe fell.

<https://www.hellenicshippingnews.com/uk-gas-contracts-dip-on-warmer-weather-price-premium-over-europe/>

Health

Report links health to climate change

Climate change could massively impact the health sector, according to a new report.

<http://www.radionz.co.nz/news/national/357810/report-links-health-to-climate-change>

Patient at high risk of heart attack should be warned by text when cold weather is on the way

Smartphone messages should be sent to high risk cardiovascular patients when adverse weather conditions are predicted, say researchers, who found heart attacks were more common during cold snaps.

<https://www.nursingtimes.net/news/research-and-innovation/high-risk-heart-patients-should-be-warned-when-cold-weather-on-way/7024568.article>

Lightning

Ghostly 'Lightning' Waves Discovered Inside a Nuclear Reactor

Mysterious, ghostlike "whistler waves" that are normally created by lightning could protect nuclear fusion reactors from runaway electrons, new research suggests.

<https://www.livescience.com/62605-whistler-waves-nuclear-fusion-reactors.html>

Climate change / global warming / sea level rise

Portal gathers key actors to share and discover climate innovations

Are great climate adaptation ideas not reaching the market? A new portal bridges the gap between innovators and end users of products and services that reduce climate-related risks.

https://cordis.europa.eu/news/rcn/129405_en.html

Emergency preparedness / disaster planning / resilience

50 Years Ago: Inangahua Quake Jolted NZ Out of Complacency

Inangahua Quake Jolted NZ Out of Complacency

This week marks the 50th anniversary of the magnitude 7.1 Inangahua earthquake and scientists are among those reflecting on how much progress has been made in the world of earthquake science since 1968.

<http://www.scoop.co.nz/stories/SC1805/S00049/50-years-ago-inangahua-quake-jolted-nz-out-of-complacency.htm>

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

This Armada of Saildrones Could Conquer the Ocean

Bloomberg - 05/15/2018

two dozen saildrones in the next year for missions that include weather and climate change research. CSIRO just put three in the water off

Lead pollution in Greenland ice shows rise and fall of ancient European civilizations

ScienceDaily - 05/14/2018

said the study's lead author Joe McConnell, Ph.D., Research Professor of Hydrology at DRI. "We found that lead pollution in Greenland very

Last Year's Hurricane Season Was the Most Destructive on Record. This Year's Could Be Just as Bad.

Global Citizen - 05/14/2018

those still recovering from last year's storms — may need to brace themselves for another intense hurricane season, as forecasts predict "

Two Meteotsunamis Form on Lake Michigan in One Day

Weather Underground - 05/14/2018

a jetty in New Jersey during otherwise calm weather conditions. Scientists hope that with additional research a forecast and warning system

Listening to tornadoes could revolutionize how meteorologists forecast these monster storms

King5.com - 05/14/2018

has been investigated by scientists for decades, the Weather Channel said. This latest research was presented last week at a meeting of the

Dismal Western Snowpack is a Climate "Warning Sign"

Scientific American - 05/14/2018

have been some long-term declines in Sierra snowpack,” said UCLA climate scientist Neil Berg, one of the report’s authors, noting that this

Feature: Insurance turns to coral reefs and mangroves as ocean risks surge

Reuters US News - 05/14/2018

wrought by climate change. Warmer sea temperatures have led to more intense storms in the Atlantic Ocean, contributing to \$320 billion in

Space junk threatens our economic and national security. We need rules to head off chaos.

The Arizona Republic - 05/14/2018

at the mercy of gravity, radiation, space weather and other phenomena. The policy must ban overlapping constellations, literally keeping

Hot temperatures could mean swan song for tropical birds

Phys.org - 05/14/2018

of Windsor and University of Guelph in Canada, said the research showed that hot weather reduced the survival of tropical birds. "Our study

Why Do People Believe in Weather Control Conspiracy Theories?

Observer - 05/14/2018

our minds, make us sick, and/or control the weather. The same goes for a research project in Alaska. Scientists set up a field of high-

5G spectrum changes could impact weather radars

ZDNet - 05/14/2018

auction on the 3.6GHz band could impact weather satellites across most of the nation, the Bureau of Meteorology (BoM) has said. "The Bureau

Kids in hot cars: Look before you lock to prevent a tragedy

WHNT.com - 05/13/2018

without the air conditioning running. Research conducted by meteorologist Jan Null and the Department of Meteorology and Climate Science at

Unusual weather event created due to Texas wildfire

WMC Action News 5 - 05/13/2018

burned more than 70 square miles of land in Texas. Due to the intense heat of the storm, a pyrocumulus cloud, also called a fire clouds or

A Massive, Record-Breaking Ocean Wave Reaching 78.1 Feet In Height Has Just Struck Close To New Zealand

The Inquisitr News - 05/12/2018

72.3 feet (22.03 meters) in height in Tasmania. The intense storm that has lashed the Southern Ocean around New Zealand and Campbell Island

New ocean layer discovered

Geographical - 05/11/2018

Methane, Climate Change, and Our Uncertain Future

Eos - Earth and Space Science News - 05/11/2018

Methane is generally considered secondary to carbon dioxide in its importance to climate change, but what role might methane play in the future if global temperatures continue to rise?

The pull of Jupiter and Venus on Earth causes major climate events

Big Think - 05/11/2018

Earth's orbit around the sun is almost a perfectly circular one. That is, except every 405,000 years, when the gravitational pull of massive Jupiter and Venus yanks the earth's orbit into an ellipse of about 5°, producing the Milankovitch cycles that cause the planet's glacial and interglacial

Largest wave ever recorded

News4Jax - 05/11/2018

Wind patterns and atmospheric pressure in the North Atlantic lead to intense extra-tropical storms, often called "bombs" which are prime

NASA Spacecraft Find New Phenomenon In Earth's Magnetic Field

I4U News - 05/10/2018

such phenomena affect Earth's atmosphere. As intense solar wind can trigger magnetic storms on Earth and disrupt GPS satellites and ground

Record Heat In The Gulf Fueled Hurricane Harvey's Deluge

KPBS - 05/10/2018

years. He adds that a warming planet will set the stage for more-intense and wetter storms. Copyright 2018 NPR. To see more, visit <http://>

Record concentration of microplastic discovered in Arctic sea ice, study says

Accuweather.com - 05/10/2018

Conversely, this means that sea ice transports large quantities of microplastic to the waters off the northeast coast of Greenland, according to the press release.

The Race to Save Arctic Cities As Permafrost Melts

CityLab - 05/10/2018

As the ground shifts beneath their feet, officials in Canada's Nunavut turn to creative engineering to save scarce homes—and plan for a future built on bedrock.

Astronomers Spot Gas-Giant Exoplanet With Atmosphere Free of Clouds

Interesting Engineering - 05/10/2018

Scientists detected a cloud-free planet dubbed hot Saturn. The discovery will allow them to probe for elements such as water and carbon monoxide.

Alien Waters: Neighboring Seas Are Flowing into a Warming Arctic Ocean

Yale Environment 360 - 05/10/2018

being driven higher onto shallow sea shelves north of Alaska by increasingly intense storms. (The Arctic's extensive sea ice cover used to

El Niño pattern could emerge by 2018-19 winter: U.S. forecaster

Reuters - 05/10/2018

The last El Niño, a warming of ocean surface temperatures in the eastern and central Pacific that typically occurs every few years, was linked to crop damage, fires and flash floods in 2016.

Hurricane forecasts have gotten insanely better over the last 20 years

Ars Technica - 05/9/2018

-based National Hurricane Center, which provides official track and intensity forecasts for Atlantic and Eastern Pacific hurricanes, and

Laser Could Help Pilots 'See' Clear Air Turbulence Coming

Wltx.com - 05/9/2018

Pilots can avoid some turbulence, but clear air turbulence is currently undetectable. New technology being tested by Boeing may change that.

Is Earth the Only Planet With Tectonic Plates?

HowStuffWorks - 05/9/2018

Some scientists think the existence of plate tectonics could be a prerequisite for life. So do they exist on other planets outside of Earth?

Tiny fossils unlock clues to Earth's climate half a billion years ago

ScienceDaily - 05/9/2018

University of Leicester Summary: Scientists have quantified the temperature of Earth's oceans over half a billion years ago by combining fossil data and climate models. An international collaboration of scientists, led by the University of Leicester, has investigated Earth's climate over half a

Why does the corona sizzle at a million degrees

SpaceDaily.Com - 05/9/2018

A team of physicists, including NJIT's Gregory Fleishman, has discovered previously undetected energy in the Sun's coronal loops. The Sun's corona, invisible to the human eye except when it appears briefly as a fiery halo of plasma during a solar eclipse, remains a puzzle even to scientists who study it closely.

The far-reaching effects of ocean floors on the sea surface

ScienceDaily - 05/9/2018

Technology. A similar jet formation mechanism was confirmed by the Meteorological Research Institute's community ocean model. "Because many

Air pollution, cold may pose threat to women's heart health: Study

UPI.com - 05/9/2018

said it's possible that exposure to air pollution coupled with colder weather might cause more inflammation or lead to an impaired blood

Sounds a Storm Emits May Help Detect Tornadoes, Researchers Say

Weather Underground - 05/9/2018

tornado that was not confirmed by the NWS. Right now, Doppler radar and storm spotters lead the way when it comes to real-time tornado

Powerful Hurricanes Intensify Faster Now Than 30 Years Ago in Parts of the Atlantic Basin, Study Finds

The Weather - 05/9/2018

2015. The data came from NOAA's National Hurricane Center and the U.S. Navy's Joint Typhoon Warning Center. The results showed the average

Fleet of spacecraft spot long-sought-after process in the Earth's magnetic field

EurekAlert! - 05/9/2018

can tell us a lot about space environments. Intense periods of solar wind also cause 'magnetic storms' on Earth that disrupt GPS satellites

Atmospheric seasons could signal alien life

ScienceDaily - 05/9/2018

Researchers are using seasonal changes in the Earth's atmosphere to guide their search for life outside the solar system

Trump White House quietly cancels NASA research verifying greenhouse gas cuts

Science - 05/9/2018

You can't manage what you don't measure. The adage is especially relevant for climate-warming greenhouse gases, which are crucial to manage—and challenging to measure. In recent years, though, satellite and aircraft instruments have begun monitoring carbon dioxide and methane remotely, and NASA's

While the U.S. shivered, the rest of the world simmered in planet's third-hottest April

The Denver Post - 05/8/2018

to the European Centre for Medium Range Weather Forecasts' Copernicus Climate Change Service that produced this global temperature analysis.

Unique Subtropical Cyclone Forms Off the Chilean Coast

Weather Underground - 05/8/2018

this week's cyclone. Researchers called it Subtropical Storm Katie. Tropical/subtropical cyclone tracks in the Pacific Ocean (Levi Cowan/

Due to climate change, hurricanes are raining harder and may be growing stronger faster

MSN.com - 05/8/2018

is driving trends in tropical Atlantic Ocean temperatures. Michael Mann, a climate scientist at Penn State, not involved in the study, has

Dust storms wreak havoc across India

Standard-Examiner - 05/8/2018

at Skymet Weather, told the Hindustan Times. "Dust storms are usually not this intense, nor do these systems cover such a large area." "

Humans have pushed Earth to a terrifying new milestone, and it could have deadly effects on our health

Business Insider - 05/8/2018

and emphysema. At the same time, non-ozone air pollution linked to warmer weather will increase rates of lung cancer, allergies and asthma,

Before Hurricane Harvey, Ocean Heat Was at Record Levels in the Gulf, Feeding Storm's Record Rain, Study Finds

The Weather - 05/8/2018

the latent heat released by the hurricane's rainfall along the Gulf Coast, concluding that the latent heat fueled the storm. "Without so

Kilauea Volcano: Facts About the 30-Year Eruption

LiveScience - 05/8/2018

in 1909. In 1919, Jagger convinced the National Weather Service to take over the pioneering research, and in 1924 the observatory was taken

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My latest Weather Eye from John Maunder

<https://www.sunlive.co.nz/blogs/12091-auranga-april-rainfalls-18982018.html>

<https://www.sunlive.co.nz/blogs/12061-auranga-april-average-afternoon-temperatures-19132018.html>

<https://www.sunlive.co.nz/blogs/12019-solar-activity-and-maunder-minimum.html>

<https://www.sunlive.co.nz/blogs/12004-tropospheric-temperatures-1979-to-march-2018.html>

<https://www.sunlive.co.nz/blogs/11947-tauranga-march-rainfalls-18982018.html>

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