

New Zealand weather and climate news

Courtesy of MetService Library

MetService

Bitter cold moves onto lower south, gales in the east

MetService meteorologist **Angus Hines** said a front expected to move onto the lower South Island on Tuesday evening marked a pocket of air that was even colder than over the past few days.

<https://www.stuff.co.nz/national/107341443/bitter-cold-moves-onto-lower-south-gales-in-the-east>

Snow to hit the south - MetService

Time for an update on that snow forecast down south. Meteorologist **Peter Little** spoke to Kate Pereyra-Garcia

<https://www.radionz.co.nz/national/programmes/morningreport/audio/2018663827/snow-to-hit-the-south-metservice>

Temperamental temperatures part and parcel of spring in Hawke's Bay

MetService meteorologist **Peter Little** said Hawke's Bay would avoid the worst of the storm which is sweeping the South Island, however expect temperatures to drop, especially on Tuesday

https://www.nzherald.co.nz/hawkes-bay-today/news/article.cfm?c_id=1503462&objectid=12130307

Skiers excited by late flurry of spring snow on Mt Taranaki

The MetService said snow could fall down to 800m in some areas again over night on Tuesday but was forecasting the cold snap would be finished by the end of the week.

<https://www.stuff.co.nz/taranaki-daily-news/news/107347323/skiers-excited-by-late-flurry-of-spring-snow-on-mt-taranaki>

More wild winds but blast set to ease

A strong, cold southwest flow covered the country, with the worst of the wintry showers affecting the far south, MetService meteorologist Stephen Glassey said.

<https://www.odt.co.nz/news/dunedin/more-wild-winds-blast-set-ease>

Farmers warned about stock as spring storm hits

MetService has issued a new severe weather warning, predicting gales for parts of the lower South Island as well as central Hawke's Bay and Tararua District.

<https://www.msn.com/en-nz/news/national/farmers-warned-about-stock-as-spring-storm-hits/ar-AAABVkh>

Spring storm brings snow to 200m in south, cold arriving in North Island later

"It's a story of the snow gradually going to lower through the course of the day," MetService lead meteorologist Mark Todd said around 5am on Monday. "It's started at high levels already."

<https://www.stuff.co.nz/national/107313823/spring-storm-brings-snow-to-200m-in-south-cold-arriving-in-north-island-later>

Wintry blast about to hit

MetService meteorologist Peter Little said a complex trough was moving on to the South Island last night, while a low-pressure system would deepen east of the country today.

<https://www.odt.co.nz/news/dunedin/wintry-blast-about-hit>

Why can we smell the rain before it actually arrives? A weather expert explains

It's a phenomenon called petrichor, and we're instinctually programmed to love it, MetService meteorologist Georgina Griffiths told TVNZ1's Breakfast today as she answered a question from a viewer.

<https://www.tvnz.co.nz/one-news/new-zealand/why-can-we-smell-rain-before-actually-arrives-weather-expert-explains>

It must be spring - fine weekend for many but another snowy, cold snap looms

Not unlike the week just gone, snow is expected to fall to low levels in the south from Sunday evening. MetService meteorologist Mark Bowe said conditions would be "winter-like", with a

cold front expected to move onto the lower South Island on Sunday evening bringing "very cold" air behind it.

<https://www.stuff.co.nz/national/107260200/it-must-be-spring--fine-weekend-for-many-but-another-snowy-cold-snap-looms>

Thursday afternoon fog blankets Timaru

MetService meteorologist Mark Bowe said colder air coming over warmer seas had caused the fog.

<https://www.stuff.co.nz/timaru-herald/news/107231701/thursday-afternoon-fog-blankets-timaru>

Pest control companies prepare for summer infestation of flies

Kiwi's are being urged to brace themselves for a plague of flies this summer - and they're being told there's little that can be done to stop it.

Numbers of the little black pests are already high, thanks to the warmer than average winter, and according to those in the Taranaki's pest control industry it's likely to get worse.

<https://www.stuff.co.nz/national/107207966/pest-control-companies-prepare-for-summer-infestation-of-flies>

NIWA

Busy season for NIWA scientists in Antarctica

The new science season at Antarctica is just a few days away from opening and NIWA researchers are busy packing containers and shipping them to the ice where they will be reunited with them in the coming months.

<http://www.scoop.co.nz/stories/SC1809/S00038/busy-season-for-niwa-scientists-in-antarctica.htm>

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

Want to tell NZ about Antarctic science ... from Antarctica?

Want to tell New Zealand about Antarctic science ... from Antarctica?

If you're an educator, journalist, artist or influencer and want to tell New Zealanders about Antarctic science and why it's important ... read on!

<http://www.scoop.co.nz/stories/SC1809/S00034/want-to-tell-nz-about-antarctic-science-from-antarctica.htm>

Antarctica warming could fuel disastrous sea-level rise, study finds

Temperatures not much warmer than the planet is experiencing now were sufficient to melt a major part of the East Antarctic ice sheet in Earth's past, scientists reported Wednesday, including during one era about 125,000 years ago when sea levels were as much as 20 to 30 feet higher than they are now.

https://www.nzherald.co.nz/climate-change/news/article.cfm?c_id=26&objectid=12129204&ref=rss

Extreme weather (and other news) – Australia and Pacific

Horizon to horizon: a Pacific Island country guide to creating long term climate resilience, net zero emissions development and a sustainable future (added to Koha)

26 Sep 2018

[Meg Argyriou](#), [Sharna Nolan](#), [Dani Robertson](#)

[ClimateWorks Australia](#)

In addition to their Nationally Determined Contributions (NDCs), the Paris Agreement invited countries to submit long term low GHG emissions development strategies (LT-LEDS) by 2020. These strategies will provide countries with the opportunity to address three pressing and interrelated policy areas; ambitious GHG mitigation, adaptation and climate resilient development. For Pacific Island countries this is particularly relevant. Exposed to extreme weather events and significant climate impacts, many Pacific Island countries have small, open economies, a narrow resource base and the challenges of geographic remoteness. And so any workable Pacific pathway needs to deliver multiple solutions through a more holistic approach.

Ideally therefore, LT-LEDS should support Pacific Island country leaders in the development of an integrated strategy to design and implement a mid-century net zero or very low greenhouse gas emissions pathway that also supports poverty reduction, climate resilience and other sustainable development objectives.

This guide seeks to do just that. It presents an illustrative planning process that aims to support the achievement of mid-century ambitious climate action alongside other socio-economic goals. It is specifically tailored to Pacific Island country audiences, but is also informed by the experience of country teams involved in the Deep Decarbonization Pathway Project, a global collaborative seeking to demonstrate how developed and developing countries can all successfully transition to very low carbon economies, while maintaining economic growth and achieving other sustainable development outcomes. The guide is also designed to complement the '2050 Pathways: A Handbook' and 'Why develop 2050 pathways?' fact sheet, both developed by the 2050 Pathways Platform.

<https://climateworks.com.au/sites/default/files/documents/publications/climateworksaustralia-h2h-guide-2018.pdf>

El Niño highly likely in Northern Pacific this year - forecasters

There is a high probability of a new El Niño taking hold in the north Pacific later this year, according to US weather forecasters.

<https://www.radionz.co.nz/international/pacific-news/367161/el-nino-highly-likely-in-northern-pacific-this-year-forecasters>

Pre-season cyclone forms near Solomon Islands

A tropical storm near Solomon Islands has intensified into a cyclone - the first of the season for the South Pacific.

Cyclone season in this part of the world does not usually begin until November.

<https://www.radionz.co.nz/international/pacific-news/367377/pre-season-cyclone-forms-near-solomon-islands>

Vanuatu launches new Dept of Climate Change

The Vanuatu government is working towards setting up its first Department of Climate Change and Disaster Risk Reduction.

<https://www.radionz.co.nz/international/pacific-news/367254/vanuatu-launches-new-dept-of-climate-change>

PM announces increase in climate change funding for Pacific

Prime Minister Jacinda Ardern has announced a boost in funding for Pacific countries to help them adapt to climate change.

<https://www.radionz.co.nz/news/political/367194/pm-announces-increase-in-climate-change-funding-for-pacific>

Preventing disaster in the Pacific Islands: the battle against climate disruption

10 Sep 2018

[Lea Merone](#), [Peter Tait](#)

[Australian and New Zealand Journal of Public Health](#)

Global warming owing to greenhouse gas (GHG) emissions is irrefutable. This has clear effects on human health.¹ The effects of global warming and climate disruption are only two of a series of issues facing Pacific Island nations. Increasing GHGs and planetary temperatures, rising sea levels and extreme weather events are potentially catastrophic for these low-lying Islands.² Despite their predicament, the nations of the Pacific are taking action to mitigate their risks and prepare for what they must do to survive physically and culturally.

<https://onlinelibrary.wiley.com/doi/full/10.1111/1753-6405.12823>

Climate change matters (SPREP)

<https://www.sprep.org/sites/default/files/documents/publications/CCM-Jan-Jul-2018.pdf>

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

Drought conditions in Australia spread north as Indonesia feels the bite of the big dry

The drought in Australia is having an impact on its neighbours, with 5 million people in Indonesia suffering from an extended dry season.

<http://www.abc.net.au/news/2018-09-20/drought-in-australia-spreading-to-indonesia/10249940>

Extreme is the new normal

That number almost tripled to 162 during 2001-2010. Since 1900, 45,11,979 people have died in extreme weather events in India. It is greater than the ...

https://www.downtoearth.org.in/dte-infographics/new_normal20180919/extreme_new_normal.html

How Typhoon Mangkhut and a stock market crash are connected

Richard Harris recounts the weekend just past. The information overload, panic, calm, storm and blame game: was Hong Kong hit by a super typhoon or a market crash?

<https://www.scmp.com/comment/insight-opinion/hong-kong/article/2165009/how-typhoon-mangkhut-and-stock-market-crash-are>

Extreme weather (and other news) – Americas and Europe

UK weather: Met Office says 'four months of snow' will not happen and autumn temperatures actually likely to increase

Forecasters are predicting a balmy rather than normal autumn this year, shooting down reports of spell of snow lasting as long as four months.

A Met Office spokeswoman said today that from September to November, the weather is likely to be warmer than average - not colder.

<https://www.standard.co.uk/news/uk/uk-weather-met-office-says-four-months-of-snow-will-not-happen-and-autumn-temperatures-actually-a3942831.html>

Extreme weather events will swamp emergency response

Our preparedness has improved, but unless politicians, particularly in the US, prioritise climate change action and carbon reductions, more catastrophe is inevitable, says Vinod Thomas.

<https://www.irishexaminer.com/breakingnews/views/analysis/extreme-weather-events-will-swamp-emergency-response-870409.html>

Weather & Sailing Conference Will Provide Answers for Irish Boat Enthusiasts

Ireland's weather fascinates everyone. But for boat enthusiasts, an informed insight into the workings of maritime meteorology anywhere in the world has many practical and often vital applications writes W M Nixon. With this in mind, Darryl Hughes (best known as owner-skipper

of the superbly-restored classic Tyrrell of Arklow-built ketch Maybird) had donned his other hat as co-ordinator of the Royal Institute of Navigation's Small Craft Group, and together with the Irish Meteorological Society with sponsorship by Dublin Port Company, he is organising a day-long Weather & Sailing Conference at the Royal Irish Yacht Club in Dun Laoghaire on Friday November 23rd 2018 from 9.00am until 5.30pm.

<https://afloat.ie/marine-environment/weather/item/40621-weather-sailing-conference-will-provide-answers-for-irish-boat-enthusiasts>

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

Rise in frequency of extreme weather incidence: Met official

Chandigarh, September 25

A three-day workshop on climate change began here on Tuesday. The workshop, being organised by the Centre for Media Studies (CMS) in partnership with the Union Ministry of Environment and Forests, Department of Science, Technology and Environment, Punjab, and German Agency for International Cooperation, aims at building the capacity of journalists at the local and regional level in Punjab.

<https://www.tribuneindia.com/news/chandigarh/rise-in-frequency-of-extreme-weather-incidence-met-official/658983.html>

Trami to remain a powerful typhoon as it slams Japan with wind, rain this week

Trami remains a powerful typhoon on Wednesday as it slowly meanders toward the Ryukyu Islands of Japan.

<https://www.accuweather.com/en/weather-news/dangerous-super-typhoon-trami-to-threaten-taiwan-japan-this-week/70006150>

Nigeria Needs 9,000 Weather Stations, Says NiMet

As a result of Nigeria's huge landmass, the Nigerian Meteorological Agency (NiMet) has said that to effectively cover the entire country, it will need not less than 9,000 weather stations.

<https://www.thisdaylive.com/index.php/2018/09/25/nigeria-needs-9000-weather-stations-says-nimet/>

International news and research

Understory advances understanding of weather patterns

In 2005, I went to Louisiana to assist with Hurricane Katrina cleanup. From then on, I became interested in the economic impact of storms and the possibilities around helping people better prepare for and understand weather.

https://madison.com/wsj/business/technology/understory-advances-understanding-of-weather-patterns/article_b413279d-6c66-53b1-8a6b-20c48d7bea05.html

Eric Holthaus: Climate change washing away the world we once knew

Hurricane Florence is an almost impossibly rare threat. A storm this powerful is exceedingly rare so far north on the east coast of the United States.

https://www.nzherald.co.nz/climate-change/news/article.cfm?c_id=26&objectid=12124828&ref=rss

How a Category 6 hurricane could soon become reality

For now, Category 5 hurricanes are the baddest on the Saffir-Simpson scale — but experts warn that even more destructive storms may soon unleash their fury.

<https://nypost.com/2018/09/16/how-a-category-6-hurricane-could-soon-become-reality/>

Heat-related deaths likely to increase significantly as global temperatures rise, warn researchers

In a new article, experts argue that the world needs to keep global temperatures in check by meeting the goals set out in the Paris Agreement, or more people could die because of extreme temperatures.

<https://www.sciencedaily.com/releases/2018/09/180913082151.htm>

Fire weather prediction improving

Scientists have created a new fire-weather prediction tool that works with the same weather models that are used every day in fire weather forecasts, and thus can be applied anywhere in the world, regardless of fuel conditions or topography.

<https://www.sciencedaily.com/releases/2018/09/180912132702.htm>

How Meteorologists Solved A Historical Mystery

The meteorological observer had only been stationed at the Libyan trading center of El Azizia for two days on September 13, 1922, the day the temperature hit 58°C (136.4°F). He recorded the day's maximum temperature at the top edge of the slide on his Bellini-Six thermometer and wrote it down in the station's logbook -- apparently heedless of the fact that he'd been writing maximums and minimums in the wrong column. That was the least of the observer's errors, but it passed into history as the hottest recorded temperature ever recorded on Earth.

<https://www.forbes.com/sites/kionasmith/2018/09/14/how-meteorologists-solved-a-historical-mystery/#3ed560aa57ea>

The storm researchers on the watch as Hurricane Florence approaches

Nature talks to Rick Luetlich, whose team in North Carolina is busy trying to predict the impacts of a powerful — and unusual — tempest.

https://www.nature.com/articles/d41586-018-06684-8?utm_source=briefing-wk&utm_medium=email&utm_campaign=briefing&utm_content=20180914

Annual Seminar puts spotlight on Earth system data assimilation

In his welcome address, Director of Research Andy Brown noted that exciting developments in data assimilation are under way at leading numerical weather prediction centres.

Nineteen speakers presented progress and challenges in Earth system data assimilation at ECMWF's Annual Seminar from 10 to 13 September 2018. More than a hundred participants attended this flagship event in ECMWF's calendar.

<https://www.ecmwf.int/en/about/media-centre/news/2018/annual-seminar-puts-spotlight-earth-system-data-assimilation>

NASA balloon captures electric blue clouds during weather forecasting mission

The images of a thin group of seasonal electric blue clouds on the cusp of our atmosphere captured by a new NASA balloon mission may lead to improved weather forecasting, the US space agency has said.

<https://www.firstpost.com/tech/science/nasa-balloon-captures-electric-blue-clouds-during-weather-forecasting-mission-5237371.html>

The tropics are heating up again: Tropical Storm Kirk and Subtropical Storm Leslie form in the Atlantic

Following a brief lull in tropical weather across the Atlantic Basin, several areas of interest have developed this weekend, including the season's newest named storms.

<https://www.accuweather.com/en/weather-news/the-tropics-are-heating-up-again-tropical-storm-kirk-forms-in-eastern-atlantic/70006140>

Extra Arctic observations can improve predictability of tropical cyclones

Scientists have found that additional weather observations in the Arctic can help predict the track and intensity of tropical and mid-latitude cyclones more accurately, improving weather forecasting of extreme weather events.

<https://www.sciencedaily.com/releases/2018/09/180921092427.htm>

Three companies win NOAA commercial weather data pilot contracts

WASHINGTON — The National Oceanic and Atmospheric Administration awarded more than \$8 million in contracts this week to three companies in the second round of a commercial satellite weather data pilot program.

<https://spacenews.com/three-companies-win-noaa-commercial-weather-data-pilot-contracts/>

Meteorologists Pushing To Change Hurricane Rating System

RENTON, N.J. (CBS/AP) — Many meteorologists and scientists want a change to the hurricane rating system to reflect the real risks of a storm.

<https://philadelphia.cbslocal.com/2018/09/19/meteorologists-pushing-to-change-hurricane-rating-system/>

When minutes matter: AccuWeather experts explain the importance of pinpointed tornado warnings

On a warm and humid day in September 2001, ordinary campus life changed dramatically in a matter of minutes as an unusually strong tornado struck the University of Maryland, attended by over 30,000 students concentrated on a 2 square-mile campus. Sadly, two students were killed as the destructive tornado hit the campus.

<https://www.accuweather.com/en/weather-news/when-minutes-matter-accuweather-experts-explain-the-importance-of-pinned-tornado-warnings/70006112>

Business development / commodities / infrastructure etc

Cedric Stephens | Psychology offers valuable insights into risky behaviours

Long lines of traffic on Mandela Highway. Columnist Cedric Stephens argues that on that thoroughfare where extensive road works are under way and warning signs are posted, most drivers appear oblivious of the need to exercise caution.

Evan Thompson is an expert on local weather. He heads the Meteorological Service of Jamaica. The Met Service collects, analyses and interprets weather data like rainfall or its absence, temperature, wind direction and speed and sea level pressure.

<http://jamaica-gleaner.com/article/business/20180923/cedric-stephens-psychology-offers-valuable-insights-risky-behaviours>

Analytic Partners Launches Weather-Influenced Demand Forecasting Solution

Helio provides forward looking insights leveraging weather data to enable better informed decision making on media & marketing, sales, DTC, supply chain and finance issues

<https://markets.businessinsider.com/news/stocks/analytic-partners-launches-weather-influenced-demand-forecasting-solution-1027563078>

How some music festivals insure themselves against bad weather (and other surprises)

This isn't just a lesson learned from Pilgrimage. Many concerts and live events have been cancelled this year for a variety of reasons. For weather cancellations like Pilgrimage, when making the call organizers must take into consideration the whole ecosystem: Will the event compromise capacity for law enforcement and emergency officials? Will traveling or attending patrons be put in danger?

<https://www.bizjournals.com/nashville/news/2018/09/25/how-some-music-festivals-insure-themselves-against.html>

Deal changes outlook for BBC weather forecaster MeteoGroup

The Swiss owner of DTN is to buy MeteoGroup, which supplies weather data to the BBC and BA, Sky News understands.

<https://news.sky.com/story/deal-changes-outlook-for-bbc-weather-forecaster-meteogroup-11506750>

Weather forecaster MeteoGroup to be sold to Swiss firm

TBG AG is buying the company from General Atlantic.

<https://www.independent.ie/world-news/weather-forecaster-meteogroup-to-be-sold-to-swiss-firm-37348042.html>

How AccuWeather minimizes profit loss for organizations

Ahead of Innovation Enterprise's Controller Summit, we sat down with Glen Parrillo, Controller at AccuWeather

<https://channels.theinnovationenterprise.com/articles/how-accuweather-minimize-profit-loss-for-organizations>

Aviation

More than half of all travel insurance claims in Australia are for delayed flights - as the worst airlines for cancellations are revealed

54% of travel insurance claims were due to delayed domestic flights

Virgin Australia Regional Airlines & Tigerair Australia had highest cancellations

Trips disruption claims to US was 19%, 20% to Asia, and 28% to other regions

InsureandGo suggested tips to protect your travels from out-of-pocket expenses

<https://www.dailymail.co.uk/news/article-6204075/54-travel-insurance-claims-Australia-delayed-flights.html>

Communications/social media

The Boy Who Cried Wolf, or why some publications keep predicting 'doom and gloom'

It's that time of the year again. You know that winter is coming when The Express publishes the same fake harsh weather winter forecast as last year. And the year before. And the year before that ...

<https://www.meteogroup.com/blog/boy-who-cried-wolf-or-why-some-publications-keep-predicting-doom-and-gloom>

Feds working to iron out kinks in public alert system

OTTAWA — Officials behind the country's system to alert mobile devices about impending natural disasters say there are still several kinks in the system to iron out, even as the alerts are being credited with saving lives just last week.

<https://www.timescolonist.com/feds-working-to-iron-out-kinks-in-public-alert-system-1.23442155>

Scientists in the age of 'fake news'

ESR's new Chief Scientist says at a time when there is an increasing distrust of experts, scientists have a responsibility to communicate in a simple and clear way. [Watch Brett Cowan talk on this interesting topic.](#)

<http://www.scoop.co.nz/stories/SC1809/S00037/scientists-in-the-age-of-fake-news.htm>

Clouds

Cloud classification of ground-based infrared images combining manifold and texture features by Qixiang Luo, Yong Meng, Lei Liu, Xiaofeng Zhao, and Zeming Zhou <https://www.atmos-meas-tech.net/11/5351/2018/>

Short Summary: In this paper, a novel cloud classification method is proposed to group images into five cloud types based on manifold and texture features. The proposed method is comprised of three stages: data pre-processing, feature extraction and classification. Compared to the recent cloud type recognition methods, the experimental results illustrate that the proposed method acquires a higher recognition rate with an increase of 2%-10% on the ground-based infrared datasets.

Energy and Mining

How will climate change stress the power grid? Hint: Look at dew point temperatures

A new study suggests the power industry is underestimating how climate change could affect the long-term demand for electricity in the United States. The research describes the limitations of prediction models used by electricity providers and regulators for medium- and long-term energy forecasting. It outlines a new model that includes key climate predictors that researchers say present a more accurate view of how climate change will alter future electricity demands.

<https://www.sciencedaily.com/releases/2018/09/180924144028.htm>

The promise of NZ Windfarms dissipates as it announces a major review

The new chairman of NZ Windfarms says the company has reached a turning point where it must evaluate its future because of the unpredictability of wind power.

<https://www.stuff.co.nz/business/107389651/the-promise-of-nz-windfarms-dissipates-as-it-announces-a-major-review>

History

Great Hurricane of '38 Took Residents by Surprise

Here's the story of its impact on Greenwich

http://www.connecticutmag.com/history/great-hurricane-of-took-residents-by-surprise/article_6a520b78-bdbd-11e8-b0cf-5307a0ccc905.html

Satellites and radar

Satellites provide sophisticated weather data

Weather forecasting took to new heights in the 1950s and '60s with the launch of weather satellites that were out of this world.

https://www.ktbs.com/news/satellites-provide-sophisticated-weather-data/article_65690c9c-bd22-11e8-aa69-13a4b108b675.html

Variety of satellites aid meteorologists in daily forecasting

Story Highlights

There are over 1,100 active weather satellites in space.

Some of the best views of clouds from space come from the visible spectrum, which can only be viewed during the daylight hours.

Some satellite information is collected and the information is then ingested into weather forecasting models that KTBS meteorologists use each day to bring viewers the most accurate forecast possible.

https://www.ktbs.com/news/arklatex-indepth/variety-of-satellites-aid-meteorologists-in-daily-forecasting/article_a5cd58ba-bb83-11e8-ae6f-2b5200c23773.html

New small satellite peers inside Hurricane Florence

A new experimental weather satellite no bigger than a cereal box got an inside look at Hurricane Florence in a test of technology that could influence the future of storm monitoring from space. The satellite took its first images of Hurricane Florence on Tuesday, Sept. 11, just hours after its instrument was turned on. Read more at: <https://phys.org/news/2018-09-small-satellite-peers-hurricane-florence.html#jCp>

Innovation and technologies (inc data and new products)

UK Met Office Chooses Cray AI Solution to Unlock Business Value From Weather Data

Weather Center to Use Cray Urika-XC AI and Analytics Software to Develop Tailored Forecasts and Specialized Commercial Weather Products

<https://www.nasdaq.com/press-release/uk-met-office-chooses-cray-ai-solution-to-unlock-business-value-from-weather-data-20180926-00623>

Weather in pictures

Niwa contest snappers capture NZ's wild beauty in these 14 stunning images

Once or twice a year, only when the tides and moon align in a particular way, brightly coloured jewel anemone spawn, sending trails into the ocean in a spectacle that few get to witness.

<https://www.stuff.co.nz/science/107374072/Niwa-contest-snappers-capture-NZs-wild-beauty-in-these-14-stunning-images>

Climate change / global warming / sea level rise

Research forecasts US among top nations to suffer economic damage from climate change

For the first time, researchers have developed a data set quantifying what the social cost of carbon -- the measure of the economic harm from carbon dioxide emissions -- will be for the globe's nearly 200 countries. Although much previous research has focused on how rich countries benefit from the fossil fuel economy, while damages accrue primarily to the developing world, the top three countries with the most to lose from climate change are the United States, India and Saudi Arabia -- three major world powers.

<https://www.sciencedaily.com/releases/2018/09/180924112802.htm>

WMO

The second China-ASEAN Meteorological Forum held focusing on monitoring regional met disasters and information sharing - China Meteorological Administration

On the occasion of the 15th China-ASEAN Expo and the China-ASEAN Business and Investment Summit, the second China-ASEAN Meteorological Forum, which themed as "Monitor Regional Meteorological..."

[Read more here](#)

Aviation

Rocket Lab to launch satellite with 'defence' applications to tackle terrorism from Mahia

A satellite with "security and defence" applications, due to be launched from Mahia, is expected to help security services across the globe intercept secret radio transmissions from terrorists and drug smugglers.

https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12128659

Rocket Lab to Launch Kleos Satellites in mid-2019

U.S. orbital launch provider Rocket Lab signed a contract with Luxembourg-based satellite technology company Kleos Space to launch the scouting mission satellites, which will geolocate maritime radio to guard borders and protect assets.

<https://www.satellitetoday.com/launch/2018/09/20/rocket-lab-to-launch-kleos-satellites-in-mid-2019/>

CBS46 goes inside the world of a Delta Air Lines meteorologist

Atlanta-based Delta Air Lines has a large team of meteorologists based at their operations control center at Hartsfield-Jackson International Airport in Atlanta.

It is a true team effort to keep make sure flights arrive safely, whatever the weather.

https://www.cbs46.com/news/cbs-goes-inside-the-world-of-a-delta-air-lines/article_8e9b8f40-bcb9-11e8-80e5-2b1d44303988.html

History

BLUE PLAQUES: Benson's weather monitor William Henry Dines

It is nearly 80 years since the last weather report was made from Benson Observatory, which was made redundant in 1939 by the establishment of a weather station at [RAF Benson](#).

<https://www.oxfordtimes.co.uk/news/16893877.blue-plaques-bensons-weather-monitor-william-henry-dines/>

Innovation and technologies (inc data and new products)

We asked, you told us: Google just keeps taking over, including weather apps

Weather! You can look out your window, sure, but a good weather app to tell you the highs, lows, rain, wind, and sunshine, is part of what makes technology great.

One problem is that weather data is a little bit funky. Most weather apps (or their data service) can more or less agree on current observations, but who do you trust for forecasts? And why do some apps differ so much? And why do some countries and regions trust such different apps?

<http://www.newsdogshare.com/amp/article/5ba686b812313a2a9842cd02/>

Climate change / global warming / sea level rise

Climate change: we need to start moving people away from some coastal areas, warns scientist

We are all too familiar with images of flooding in low lying areas after heavy rainfall or houses destroyed by coastal erosion after a storm. For an increasing number of people, coastal flooding and erosion is a real threat to property, the local economy and, in some cases, life. Hurricane Florence, for example, is forcing more than a million people on the US East Coast to flee from their homes.

[Read more here](#)

Journal and articles online

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Journal of Applied Meteorology and Climatology - Volume: 57, Number: 9 (September 2018)

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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](#).

September 25, 2018

News

Airports at water's edge battle rising sea levels

September 25, 2018 - MPR News

and engineers say that will become more common as sea levels rise, storm surge and intense rain events worsen, and - in some areas - the

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The Energy 202: Something strange is happening with Arctic lakes

September 25, 2018 - The Washington Post

Tropical Storm Kirk and Subtropical Storm Leslie,” he writes. “Closer to home, though, a portion of what was once Hurricane Florence is

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Hurricane Florence, "Just a Cat 1," Reveals Flaw with Saffir-Simpson Scale

September 25, 2018 - The Washington Post

Florence was just a Category 1 storm when it made landfall on the beaches of North Carolina. But no one in the Carolinas today thinks of Florence as a small hurricane.

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Hurricane Communication Is as Complex as the Storms Themselves

September 25, 2018 - Scientific American

Wind intensity categories are a narrow and misleading gauge of hurricane-related risks.

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The Hunt for Better Climate Science

September 25, 2018 - Reuters

NASA scientists are mapping the loss of ice in Greenland, part of a cutting-edge effort to understand how warming oceans melt ice sheets.

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Attributing the Impact of Climate Change on Florence in Near Real Time

September 25, 2018 - NCAR & UCAR News

Experimental technique seeks to forecast hurricanes minus the climate change.

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Year-Round Fire Season Means Always Living 'Evacuation Ready'

September 25, 2018 - National Public Radio

"Wildfires do come with some warning, even though we don't think they do," he says. Warning signs The most obvious warning signs are high

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After the Storm, a Flood of Data

September 24, 2018 - CityLab

week could prove useful for longer-term emergency preparedness planning. After Hurricane Harvey, Esri analyzed cellphone location data to

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Missing weather buoys off SC coast 'a serious handicap' to hurricane forecasts

September 24, 2018 - The Post and Courier

Missing weather buoys off SC coast 'a serious handicap' to hurricane forecasts

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Hurricane Raises Questions About Rebuilding Along North Carolina's Coast

September 21, 2018 - The Epoch Times

that help stabilize the barrier islands, and cause more intense erosion when storms like Florence make landfall, scientists said. Developers

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Three NASA missions return first-light data

September 21, 2018 - Phys.org

footage of upper atmospheric weather similar to the very first terrestrial weather satellites," said Sarah Jones, GOLD mission scientist at

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New small satellite peers inside Hurricane Florence

September 21, 2018 - Phys.org

green areas highlight the extent of the rain being produced by the storm, with the most intense rain shown in yellow and red. The TEMPEST-D

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As typhoons get stronger, Asia must build better, experts say

September 21, 2018 - ReliefWeb

However, since the late 1970s, storms making landfall have become 15 percent more intense and their destructive power has increased by

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87 days of smog: Southern California just saw its longest streak of bad air in decades

September 21, 2018 - Los Angeles Times

Southern Californians might remember the summer of 2018 for its sweltering heat waves, record ocean temperatures and destructive wildfires.

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Scientists think a giant artificial wall propped up under Antarctica's ice sheets could stop catastrophic sea level rise

September 20, 2018 - Markets Insider- Business Insider

change would continue unabated. These include drought, ocean acidification, intense storms, and searing heat waves. Plus, as the world

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NASA Balloon Mission Captures Electric Blue Clouds

September 20, 2018 - NASA

including how they interact with Earth's atmosphere and weather — is a key part of NASA's heliophysics research, which employs a full squad

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A Year Later: A Look at Hurricane Maria and Its Aftermath

September 20, 2018 - NBC Washington

loss of power and communications as well as "limited local preparedness for a major hurricane." This study was not the only one published

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In Defense Of The Saffir-Simpson Scale

September 19, 2018 - Forbes

precipitation associated with tropical systems. As Hurricane Florence approached the Carolina coast, forecasts called for the storm to

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New study examines changing soil structures and influence on water resources in US

September 19, 2018 - Phys.org

subsurface water storage, water table fluctuations and flood events. Further, the research will yield community-accessible tools to

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Analysis: Most of Florence's victims have died in vehicles, on the road during the storm

September 19, 2018 - MSN.com

poor areas. A 2016 study published in the journal of the American Meteorological Society, written by officials from the National Hurricane

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AI could help to manage natural disasters – but only to an extent

September 19, 2018 - Phys.org

This is especially true of flood monitoring. My research demonstrated that AI could make mistakes in recognising flood scenes. However,

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What It's Like to Measure 34 Inches of Rain in a Hurricane

September 18, 2018 - The Weather

Few people on Earth can say they've measured almost 3 feet of rain from a single weather event. Becki Odum, who lives just north of Swansboro, North Carolina, is now part of that elite group.

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NASA's GOES satellite shows its power in Hurricane Florence

September 24, 2018 - AL.com

resolution and five times the data rate" of the previous generation of weather satellites, Marshall's Dr. Gary Jedlovec said while standing

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Learning to Cope with Stormwater in New Orleans

September 21, 2018 - Next City

them after they've already happened." As intense storms threaten to overwhelm storm drainage systems in communities across the nation, New

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World's Largest River Floods Five Times More Often Than It Used to

September 20, 2018 - EcoWatch

along Solimões River (Central Amazonia) during the record-breaking flood in 2012Jochen Schöngart / National Institute for Amazon Research

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My latest WeatherEye bu John Mounder : Sunspots-and-sun.

<https://www.sunlive.co.nz/blogs/12554-sunspots-and-sun.html>

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