

New Zealand weather and climate news

MetService focus

After the spring warmth, cold and wet weather is on its way

Wednesday may have been warm for much of New Zealand, but it's not going to last.

A front is looming for New Zealand, forecast to bring snow down to 800m in Southland, Fiordland and Clutha on Thursday morning, before moving upwards towards Christchurch.

<https://www.stuff.co.nz/national/108090712/after-the-spring-warmth-cold-and-wet-weather-is-on-its-way>

Palmerston North is already using water stored for summer

Palmerston North and Manawatū are drying out at a time when it should be lush, prompting fears of a repeat of last year's scorching start to summer.

<https://www.stuff.co.nz/manawatu-standard/news/108072435/Palmerston-North-is-already-using-water-stored-for-summer>

Pōhutukawa bloom early in north, thanks to warmer-than-usual winter

New Zealand's Christmas tree, the pōhutukawa, is blooming early in the upper North Island, thanks mainly to a warm winter.

Traditionally, early pōhutukawa blossoms were believed to predict a good summer, but that's a myth, according to a conservation group.

<https://www.stuff.co.nz/national/108030449/P-hutukawa-bloom-early-in-north-thanks-to-warmer-than-usual-winter>

South continues spring into summer

MetService meteorologist Nick Zachar said apart from a little early morning cloud, most spots around the country were in for another fine day.

<https://www.odt.co.nz/regions/south-continues-spring-summer>

Canterbury faced the heat today, but rain coming

Temperatures were eight degrees above the October average, reaching 26 degrees in parts of Canterbury today.

<https://www.radionz.co.nz/news/national/369282/canterbury-faced-the-heat-today-but-rain-coming>

Cracking end to holiday weekend

MetService meteorologist James Millward said the high pressure ridge had brought warm, settled weather to much of the country.

<https://www.odt.co.nz/news/national/cracking-end-holiday-weekend>

Temperatures drop sharply as cold front moves up country

Temperatures are dropping sharply in the South Island as a cold front moves north, with some places expected to be up to 20 degrees Celsius cooler than Wednesday.

<https://www.stuff.co.nz/national/108090712/after-the-spring-warmth-cold-and-wet-weather-is-on-its-way>

NIWA

Big dry forecasted in Waikato for the early summer

Waikato farmland is looking lush and green right now, but new predictions from Niwa suggest it won't last.

Early indications suggest it will be dry in the upper North Island with lower than usual rainfall for November and December.

<https://www.stuff.co.nz/business/farming/107886817/big-dry-forecasted-in-waikato-for-the-early-summer>

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

Collaborating under the ice

Ian Hawes has spent 40 years diving in Antarctica to gain an understanding of how inland and coastal aquatic ecosystems work. Now, he is sharing his knowledge with Korea's Antarctic programme.

<http://www.scoop.co.nz/stories/SC1810/S00074/collaborating-under-the-ice.htm>

Mystery of a massive monolithic iceberg spotted by NASA in Antarctica

A strange gigantic 'monolith' iceberg has been spotted by NASA scientists flying over Antarctica.

The rectangular berg was spotted off the east coast of the Antarctic Peninsula, near the Larsen C ice shelf.

https://www.nzherald.co.nz/environment/news/article.cfm?c_id=39&objectid=12147083&ref=rss

Climate change: Nauru's life on the frontlines

International perceptions of the Pacific Island nation of Nauru are dominated by two interrelated stories. Until the turn of the century, it was the dramatic boom and bust of Nauru's phosphate mine, and the mismanagement of its considerable wealth, that captured global attention.

<https://theconversation.com/climate-change-naurus-life-on-the-frontlines-105219>

Extreme weather (and other news) – Australia and Pacific

Geelong renewable energy hub to support region's wind farms

A NEW renewable energy hub in Geelong will support two new major wind farm projects in western Victoria.

Minister for Energy Lily D'Ambrosio visited Geelong last week to reveal details on the Vestas Renewable Energy Hub (VREH), which will build turbines for the 180 megawatt (MW) Berrybank Wind Farm and the 336MW Dundonnell Wind Farm.

<https://freelocalnews.com.au/surfcoasttimes/news/geelong-renewable-energy-hub-to-support-regions-wind-farms/>

BOM crowdsources weather data to track and predict storms

Citizens app launched to fill data void.

Researchers from Monash University and the ARC Centre of Excellence Climate Extremes and Bureau of Meteorology are trying to localise their understanding of storms, tornadoes and floods with a citizen science app for self-reporting weather observations.

<https://www.itnews.com.au/news/bom-crowdsources-weather-data-to-track-and-predict-storms-514073>

Strengthening hydrometeorological and early warning services in the Pacific

Pacific countries presented the status of progress in the development of their early warning systems as part of a three-year project entitled "[Strengthening Hydro-meteorological and Early Warning Services in the Pacific](#)".

<https://reliefweb.int/report/tonga/strengthening-hydrometeorological-and-early-warning-services-pacific>

Helping farmers in distress doesn't help them be the best: the drought relief dilemma

Two years ago we were celebrating [just about the best year for farmers ever](#). Now many farmers – particularly in New South Wales and southern Queensland – are in the grip of drought.

[Read more here](#)

Storm wipes Hawaiian island off map

For climate scientist Chip Fletcher it was a "holy s... moment".

Just days after one of the most powerful hurricanes ever to hit the Pacific, one remote Hawaiian archipelago was all but gone.

<https://www.stuff.co.nz/travel/news/108093462/storm-wipes-hawaiian-island-off-map>

Man killed by lightning near Dubbo, as electrical storms lash Sydney

A man has died after being struck by lightning at Geurie, near Dubbo, in New South Wales' central west, as thunderstorms lashed large areas of the state.

<https://www.abc.net.au/news/2018-10-20/man-killed-by-lightning-near-dubbo-as-storms-lash-nsw/10400080>

Dracula's weatherman flees cold climates to face the Queensland sun

Gabriel Branescu speaks four languages, has lived on four continents, guided Soviet-made MiG fighter jets on sorties over Eastern Europe and safely landed expeditioners on an ice runway at Casey Station in Antarctica.

<https://www.abc.net.au/news/2018-10-20/draculas-weatherman-transylvania-antarctic-brisbane/10388066>

Emergency declaration approved in CNMI for Super Typhoon Yutu

The US president Donald Trump has approved an emergency declaration for the Northern Marianas as it braces for Super Typhoon Yutu.

<https://www.radionz.co.nz/international/pacific-news/369379/emergency-declaration-approved-in-cnmi-for-super-typhoon-yutu>

Samoa warned to take precautions amid storm threat

Samoans are being warned to take precautions over the next few days as the country continues to experience heavy and frequent rainfall.

<https://www.radionz.co.nz/international/pacific-news/369371/samoa-warned-to-take-precautions-amid-storm-threat>

Usamate talks climate change, adverse effects

MINISTER for Employment Jone Usamate says the effects of climate change combined with El Nino events and other natural occurrences such as hurricanes will produce adverse effects.

<https://www.fijitimes.com/usamate-talks-climate-change-adverse-effects/>

Bureau of Meteorology hits out at 'inaccurate' reports of local forecasting changes

The Bureau of Meteorology (BOM) provides arguably Australia's most popular government service, so perhaps it is unsurprising suggestions of major changes to its forecasting prompted plenty of concern.

<https://www.abc.net.au/news/2018-10-22/bureau-meteorology-hits-out-inaccurate-reports-local-forecasting/10404016>

BOM not turfing local meteorologists

Rumours that the Bureau of Meteorology is turfing local forecasters are untrue, the agency's head says.

<https://www.newcastlestar.com.au/story/5714303/bom-not-turfing-local-meteorologists/>

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

UAE launches local marine weather service

Site displays weather warnings and data of use to seafarers or recreational divers

<https://www.thenational.ae/uae/environment/uae-launches-local-marine-weather-service-1.783260>

Africa-focused weather forecasting company raises US\$1.1m funding

Swedish weather forecasting company Ignitia, which has operations in Ghana, Mali and Nigeria, has raised US\$1.1m in Series A funding to expand its presence on the continent.

<http://www.itwebafrica.com/business-intelligence/507-africa/245023-africa-focused-weather-forecasting-company-raises-us11m-funding>

Cherry blossom trees bloom early in Japan, recent typhoons may be to blame

Cherry blossom trees are blooming several seasons earlier than normal in Japan.

Blooming of the Japanese national tree is typical in the springtime. However, NHK, Japan's national public broadcasting organization, has received 354 reports of blooming cherry blossom trees from western Japan to the northernmost part of the country, as of Oct. 14.

<https://www.accuweather.com/en/weather-news/cherry-blossom-trees-bloom-early-in-japan-recent-typhoons-may-be-to-blame/70006415>

Extreme weather (and other news) – Americas and Europe

Rome hailstorm traps dozens in their cars as extreme weather slams Italy

Dozens of people were trapped in their vehicles when roads in Rome were turned white by a severe hailstorm that hit the Italian capital.

Images on social media showed ice drifts from the storm trapping commuters and bringing the busy European city to a standstill.

<https://www.abc.net.au/news/2018-10-23/severe-hailstrom-in-rome-brings-city-to-a-halt/10418182>

Hurricane Willa Knocks Out Power, Cuts off Towns Along Mexico's Coast

Hurricane Willa knocked out power and cut off towns on Mexico's coast from the outside world.

No deaths were reported in the storm's immediate aftermath.

Thousands were ordered to evacuate Mexico's Pacific coast ahead of the storm.

More than 20 landslides were reported in Jalisco state on Tuesday.

<https://weather.com/storms/hurricane/news/2018-10-23-hurricane-willa-mexico-impacts>

Professor Penelope Endersby to be new Met Office Chief Executive

The Met Office is pleased to announce that Professor Penelope Endersby will be its new Chief Executive from December.

<https://www.metoffice.gov.uk/news/releases/2018/new-appointment>

International news and research

Designers are reinventing hurricane maps for an era of extreme weather

As climate dangers rise, researchers are testing new ways of communicating clearly about uncertainty.

<https://www.technologyreview.com/s/612302/designers-are-reinventing-hurricane-maps-for-an-era-of-extreme-weather/>

Strong Indian monsoons steer Atlantic hurricanes towards land, study finds

Strong monsoons in the Indian Ocean can induce easterly winds that push Atlantic Ocean hurricanes westward, increasing the likelihood they'll make landfall in the Americas, according to new research.

<https://www.sciencedaily.com/releases/2018/10/181023150032.htm>

Designers are reinventing hurricane maps for an era of extreme weather

As climate dangers rise, researchers are testing new ways of communicating clearly about uncertainty.

<https://www.technologyreview.com/s/612302/designers-are-reinventing-hurricane-maps-for-an-era-of-extreme-weather/>

Meet Our Meteorologists: Alexa Maines

Alexa Maines has been a meteorologist for two years and the Earth Networks Team is lucky to have her!

[Read more here](#)

Ensemble Forecasts Lead to Better Business Decisions

The skill of numerical weather forecasts (forecasting by computer) generally has been increasing since its inception. Even so, a numerical weather forecast for a particular place and time can be frustratingly wrong. One of the reasons for this is the errors in the initial conditions, which refers to the best-guess estimate of the state of the atmosphere at the time the computer forecast begins.

<https://blog.weatherops.com/ensemble-forecasts-lead-to-better-business-decisions>

Why it's still impossible to get long-range weather forecasts right

Tabloids love publishing sensational and extreme long-term weather forecasts. It's understandable – but the wild predictions hide a bigger problem

<https://www.wired.co.uk/article/long-range-weather-forecast-uk>

9 Investigates: How Wind Farms Interfere With Weather Radars

MINCO, Oklahoma - Ray Clifton has been tending the garden at his home in rural Caddo County since well before any wind turbines started going up nearby. And when, at first, they did come, he didn't sweat it.

"It's like most things," Clifton said in a recent interview. "You don't know what's going on at the time. It's not a big deal, it's just progress."

<http://www.news9.com/story/39309620/9-investigates-wind-farms-and-radar-interference>

Catastrophic 'Tornado Alley' may be moving east

The country's Tornado Alley — a twister-heavy area typically associated with the Great Plains— is now shifting eastward, an alarming new study found.

<https://nypost.com/2018/10/17/catastrophic-tornado-alley-may-be-moving-east/>

Wind farms and reducing hurricane precipitation

New research reveals an unexpected benefit of large-scale offshore wind farms: the ability to lessen precipitation from hurricanes.

<https://www.sciencedaily.com/releases/2018/10/181017141024.htm>

Trump's claim about climate scientists is 'misleading and very damaging,' weather group says

In his [interview with Lesley Stahl on Sunday night](#), President Trump said that climate scientists who find that human activities are driving climate change have a "very big political agenda."

[Read more here](#)

WMO

Himawari-8 Conducts First Target Area Observation in Response to International User Request

- Japan Meteorological Agency

JMA's Himawari-8 meteorological satellite began conducting on-demand Target Area (TA) observation around Darwin in northern Australia at 06:30 UTC on 15 October 2018 in response to a request made by Australia's Bureau of Meteorology (BoM). This is the first operation of its kind to be performed under the new HimawariRequest service.

[Read more here](#)

WMO emphasizes adaptation at Chatham House conference

WMO Deputy Secretary-General Elena Manaenkova was one of the speakers at the annual Chatham House Climate Change Conference, with a presentation on a foundation for weather- and climate-resilient sustainable development.

[Read more here](#)

Regional Association for Asia Pacific focuses on resilience

The need to accelerate climate change adaptation and improve multi-hazard early warning systems to increase resilience to extreme weather took centre-stage at WMO's Regional Association for Asia and the Pacific (RAV), hosted by Tonga from 15-17 October.

[Read more here](#)

Strengthening hydrometeorological and early warning services in the Pacific

Strengthening Hydro-meteorological and Early Warning Services in the Pacific

Pacific countries presented the status of progress in the development of their early warning systems as part of a three-year project entitled "[Strengthening Hydro-meteorological and Early Warning Services in the Pacific](#)".

[Read more here](#)

Business development / commodities / infrastructure etc

Jacinda Ardern names Prime Minister's Business Advisory Council members

Some of the biggest names in New Zealand business will come together to advise Jacinda Ardern on how to supercharge the New Zealand economy

<https://www.stuff.co.nz/business/industries/107940528/Jacinda-Ardern-names-Prime-Minister-s-Business-Advisory-Council-members>

Lloyds' report ranks New Zealand second for natural disaster costs

New Zealand is in the unenviable club of 10 most at-risk nations when it comes to national disaster, behind only flood-prone Bangladesh.

<https://www.stuff.co.nz/business/money/108064804/lloyds-report-ranks-new-zealand-second-for-natural-disaster-costs>

UK insurtech Skyline to launch weather insurance in India; secures funding

London-based insurtech start-up Skyline Partners, a provider of tech-powered weather insurance solutions, has secured funding from MGA innovation hub OneAdvent to grow its business.

<https://www.intelligentinsurer.com/news/uk-insurtech-skyline-to-launch-weather-insurance-in-india-secures-funding-16756>

Air quality / air pollution

Home fires, exhaust fumes, blight NZ's air quality

Key Points:

Burning wood and coal accounts for a quarter of NZ emissions of harmful PM10.

Exhaust fumes make up nearly 40 per cent of human nitrous oxide, but levels falling in main centres.

Shipping, farming intensification and climate change also singled out in new report.

https://www.nzherald.co.nz/environment/news/article.cfm?c_id=39&objectid=12144454&ref=rss

Aviation

Rocket Lab expanding to US launchpad after success of NZ operation in Mahia

Rocket Lab says it will now send small satellites into orbit from the US state of Virginia, as well as from the Mahia Peninsula.

Peter Beck said yesterday NZT that it will build its launch pad at the Mid-Atlantic Regional Spaceport.

<https://www.tvnz.co.nz/one-news/new-zealand/rocket-lab-expanding-us-launchpad-after-success-nz-operation-in-mahia>

The science behind how Heathrow lands one plane every 45 seconds

Heathrow handles 475,000 planes every year, but the pressure is on to squeeze in even more landings. Getting that right – and doing so safely – is a precise science

<https://www.wired.co.uk/article/start-nats>

Fly My Sky flights between Whangārei and Auckland delayed

The Auckland airline offering cheaper flights between Whangārei and Auckland has put back its start date by a week.

<https://www.radionz.co.nz/news/business/369247/fly-my-sky-flights-between-whangarei-and-auckland-delayed>

Communications/social media

Penn State's 'Weather World' turns 35: 'A bunch of meteorologists do a TV show'

For 15 minutes every weekday the weather is the star.

For those 15 minutes, "a bunch of meteorologists do a TV show" that has a dedicated, loyal following of "weather weenies."

<https://www.pennlive.com/expo/life-and-culture/erry-2018/10/5f3d97a68447/penn-states-weather-world-turn.html>

How the Weather Channel's Immersive Visualizations Make Climate Change Visceral

Firestorm. Storm surge. EF-5 tornado. If you pay attention to the weather, these are undoubtedly terms you've heard, along with dire warnings from meteorologists to heed any and all evacuation warnings.

<https://earth.gizmodo.com/how-the-weather-channels-immersive-visualizations-make-1829870457?IR=T>

Energy and Mining

Weather risks forcing wind developers to strengthen project economics

Global sustainable energy consultancy, K2 Management, has launched a report titled, Pre-Construction Projects: The battle to reduce uncertainty and improve business case bankability, at the American Wind Energy Association (AWEA) Offshore WINDPOWER 2018 Conference, which kicked off this week in Washington, D.C. The report identifies major project development trends in the fast-growing renewables sector, based on data gathered from some of the most innovative wind and solar projects in North America and across the globe.

<https://www.windpowerengineering.com/business-news-projects/research-reports/weather-risks-forcing-wind-developers-to-strengthen-project-economics/>

South Africa gets two new wind farms in the Western Cape

The wind farms will feature 70 turbines with a hub height of 82 meters.

<https://www.thesouthafrican.com/south-africa-new-wind-farms-western-cape/>

Boost for \$325 million South Taranaki wind farm project

A massive, \$325 million windfarm with up to 48 turbines is set to go ahead in South Taranaki - more than a decade after it was first mooted.

<https://www.stuff.co.nz/taranaki-daily-news/news/107928174/boost-for-325-million-south-taranaki-wind-farm-project>

Lightning

Lightning can be deadly, but forecasters can't tell us where and when it will strike

It's one of the world's most dangerous weather phenomena, but you will never hear the word "lightning" mentioned in a forecast.

<https://www.abc.net.au/news/2018-10-18/why-lightning-is-so-difficult-to-forecast/10365414>

Satellites and radar

Space start-up wins entrepreneurship \$100k challenge

New satellite software being developed by University of Auckland students will simplify the process of sending satellites into space – and the space start-up has just received a \$25,000 boost from the University's entrepreneurship competition.

<http://www.scoop.co.nz/stories/SC1810/S00073/space-start-up-wins-entrepreneurship-100k-challenge.htm>

When flying into a hurricane won't work, meteorologists use these high-tech alternatives

Satellites provide a safe and accurate alternative.

<https://www.popsci.com/technology-meteorologists-track-hurricanes?dom=rss-default&src=syn>

Transport/roading/shipping/freight

Ōtaki to north of Levin highway gets green light following Government review

A new state highway between Ōtaki and north of Levin has been given the green light, ending a year of speculation about whether it would go ahead.

<https://www.stuff.co.nz/dominion-post/108083156/taki-to-north-of-Levin-highway-gets-green-light-following-Government-review>

Big Norwegian visitor docks at Port Taranaki for gas pipeline repairs

Shell Taranaki is about to start major repairs to a troublesome gas pipeline off the Taranaki coast.

<https://www.stuff.co.nz/business/108019247/big-norwegian-visitor-docks-at-port-taranaki-for-gas-pipeline-repairs>

Coming soon to the Himalayas, the world's highest rail line

At 5,360 metres above sea level, India will be building the world's highest rail line. Besides being the world's highest railway track, the Bilaspur-Manali-Leh rail line will be equipped with other facilities for the first time in India.

<https://qrius.com/indias-bilaspur-manali-leh-rail-line-to-be-worlds-highest-at-5360-meters-above-sea-level/>

Innovation and technologies (inc data and new products)

Track the weather wherever you are with 13abc's new First Warning Weather app

13abc has launched a brand new weather app. The new 13abc First Warning Weather App offers a more powerful way to track severe storms, get alerts where you are, or just plan your day – all from 13abc Action News.

<https://www.13abc.com/content/news/Track-the-weather-wherever-you-are-with-13abcs-new-First-Warning-Weather-app-498320291.html>

The Weather Channel's AR Wildfire Animation is The Scariest Yet

Augmented reality is allowing weather reporters to use more dynamic and compelling methods for reporting potential weather dangers.

<https://interestingengineering.com/the-weather-channels-ar-wildfire-animation-is-the-scariest-yet>

Airpup kite balloon for videography, communications, and meteorology

Photographers, meteorologists or those looking to expand communication to their projects may be interested in a new balloon kite hybrid device aptly named the Airpup which has been created by a team based in Portland, Oregon. The Airpup can be used for a wide variety of different aerial photography applications and uses 40 percent less helium than spherical balloons. Watch the demonstration video below to learn more about its construction and features.

<https://www.geeky-gadgets.com/airpup-kite-balloon-19-10-2018/>

Space weather

Space weather: Impacts on New Zealand: 13 November, Auckland; 14 November, Christchurch; 15 November, Wellington. Leading New Zealand experts on space weather and its impact on

earth will deliver presentations about the high impact, low probability events space weather can contribute to

<https://www.otago.ac.nz/news/events/otago697419.html>

Climate change / global warming / sea level rise

What's in a Half a Degree? 2 Very Different Future Climates

A new IPCC report shows the impacts in the near future that can be avoided by limiting warming to 1.5 degrees Celsius instead of 2 degrees C

[Read more here](#)

Climate fund approves \$1.5b for projects in poor countries

A United Nations-backed fund has approved more than US\$1 billion (\$1.52b) for 19 new projects to help developing countries tackle climate change, officials said yesterday.

https://www.nzherald.co.nz/climate-change/news/article.cfm?c_id=26&objectid=12146479&ref=rss

Rising temperatures and human activity are increasing storm runoff and flash floods

Researchers have demonstrated for the first time that runoff extremes have been dramatically increasing in response to climate and human-induced changes. Their findings show a large increase in both precipitation and runoff extremes driven by both human activity and climate change. They also found that storm runoff has a stronger response than precipitation to human-induced changes (climate change, land-use land-cover changes, etc).

<https://www.sciencedaily.com/releases/2018/10/181022085820.htm>

Climate change and natural hazards: What advantages for building resilience?

Climate change is increasing the risk of extreme weather events, including droughts, flooding, hurricanes, earthquakes and wildfires. In 2017, costs were estimated to be \$306 billion, which is almost double 2016's loss of \$188 billion (and also much higher than the 10-year-average of \$190 billion).

<https://www.euractiv.com/section/climate-environment/video/climate-change-and-natural-hazards-what-advantages-for-building-resilience/>

Emergency preparedness / disaster planning / resilience

Experts warn Sydney could be struck by a deadly tsunami from NZ earthquake

Sydneysiders have been warned to expect a tsunami within their lifetime, as the threat of a "dangerous" wave hitting the city is "very real".

https://www.nzherald.co.nz/world/news/article.cfm?c_id=2&objectid=12143313

Journal and articles online

Quarterly Journal of the Royal Meteorological Society

Accepted Articles

Accepted, unedited articles published online and citable. The final edited and typeset Version of Record will appear in the future.

Predicting Weather Forecast Uncertainty with Machine Learning

Sebastian Scher, Gabriele Messori

First Published: 12 October 2018

Impact of Radar Data Assimilation and Orography on Predictability of Deep Convection

Kevin Bachmann, Christian Keil, Martin Weissmann

First Published: 12 October 2018

The importance of stratospheric initial conditions for winter North Atlantic Oscillation predictability and implications for the signal-to-noise paradox

Christopher H. O'Reilly, Antje Weisheimer, Tim Woollings, Lesley Gray, Dave MacLeod

First Published: 12 October 2018

Soil Moisture - Precipitation Coupling over Central Europe: Interactions between surface anomalies at different scales and its dynamical implication

Florian Baur, Christian Keil, George C. Craig

First Published: 12 October 2018

A wavelet based analysis of convective organization in ICON large-eddy simulations

Sebastian Brune, Florian Kapp, Petra Friederichs

First Published: 11 October 2018

Signal and noise in regime systems: a hypothesis on the predictability of the North Atlantic Oscillation

K. Strommen, T.N. Palmer

First Published: 10 October 2018

Uncertainty and Scale Interactions in Ocean Ensembles: From Seasonal Forecasts to Multi-Decadal Climate Predictions

L. Zanna, J. M. Brankart, M. Huber, S. Leroux, T. Penduff, P. D. Williams

First Published: 09 October 2018

Quarterly Journal of the Royal Meteorological Society

Accepted Articles

Accepted, unedited articles published online and citable. The final edited and typeset Version of Record will appear in the future.

Sensitivity of the surface orographic gravity wave drag to vertical wind shear over Antarctica

H. V. Turner, M. A. C. Teixeira, J. Methven, S. B. Vosper

First Published: 18 October 2018

Duration and decay of Arctic stratospheric vortex events in the ECMWF seasonal forecast model

Yvan J. Orsolini, Kazuaki Nishii, Hisashi Nakamura

First Published: 16 October 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.

Atmospheric waves were spotted hours before violent, deadly tornado

October 22, 2018 - [9News.com](#)

of impact, but NASA says that understanding the spread of gravity waves will help the forecasting of events that cause violent tornadoes.

[Read MORE](#)

Hurricane Willa approaches Pacific Mexico coast

October 23, 2018 - [UPI.com](#)

the storm are at 135 mph, the National Hurricane Center said in a 3 a.m. advisory Tuesday. The storm was located 75 miles southwest of Las

[Read MORE](#)

Thanks to Climate Change, Cities Must Rethink Their Infrastructure

October 23, 2018 - US News & World Report

traffic tunnels are able to transition to stormwater management during intense precipitation events, an example of multifunctionality.

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Alaska's Freakish Fall: A Record Wait for First Freeze and Snow

October 23, 2018 - Weather Underground

[Read MORE](#)

When flying into a hurricane won't work, meteorologists use these high-tech alternatives

October 22, 2018 - Popular Science

a storm is also a sign of rapid strengthening. Satellites are important tools for meteorologists to estimate the intensity of the winds in

[Read MORE](#)

Michael marks a new kind of storm in Georgia

October 22, 2018 - [WRAL.com](#)

"If the oceans are warmer, that's fuel for the storm," he said. "The storms get more intense. They also get bigger, they also last longer.

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[The house that withstood Hurricane Michael](#)

October 22, 2018 - The Week Magazine

as Hurricane Michael thundered ashore earlier this month, the most intense storm recorded in the history of the Florida Panhandle. The

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[As Tornadoes Shift Eastward, Scientists Explore Why](#)

October 22, 2018 - Insurance Journal

what is expected. Pennsylvania State University meteorology professor Paul Markowski, who wasn't part of the research, praised the study as

[Read MORE](#)

[Hurricane Michael showed how woefully unprepared the military is for extreme weather](#)

October 21, 2018 - [MSN.com](#)

may intensify more rapidly just before striking land, making hurricane forecasting more difficult," wrote Massachusetts Institute of

[Read MORE](#)

['We are saving lives.' Final flight into Hurricane Michael captured rare storm data](#)

October 21, 2018 - Miami Herald

and atmospheric pressure inside the hurricane. The National Hurricane Center uses the data for forecasts and advisories. "The data that we

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the BNP-PARIBAS Foundation funded the research. Additional coauthors are from the Bureau of Meteorology in Melbourne, Australia; Istanbul

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