

## **New Zealand weather and climate news**

Clips courtesy of MetService

### ***MetService focus***

#### **Night of wild wind leaves clean-up job**

The MetService said the strongest gust in the region, of 117kmh, was recorded on Swampy Summit between 3am and 4am.

<https://www.odt.co.nz/news/dunedin/night-wild-wind-leaves-clean-job>

#### **Weather analysis the 'super gain' for New Zealand in America's Cup**

There's an old adage that says you can't change the wind but you can adjust your sails.

It's a lesson for life, but racing sailors have got this down to a fine art as they seek incremental gains in performance.

<https://www.actionnewsnow.com/content/national/497593351.html?ref=351>

## ***NIWA***

### **NIWA's Hotspot Watch for 17 October 2018**

#### **North Island**

Up to 17th October 2018, rainfall has been below normal or well below normal for a majority of the North Island, excluding the East Cape and the Tauranga area where rainfall has been near normal. The drier than normal pattern has generally been a continuation of what was observed during September.

<http://www.scoop.co.nz/stories/SC1810/S00064/niwas-hotspot-watch-for-17-october-2018.htm>

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

### **Antarctic ice shelf 'sings' as winds whip across its surface**

Winds blowing across snow dunes on Antarctica's Ross Ice Shelf cause the massive ice slab's surface to vibrate, producing a near-constant set of seismic 'tones' scientists could potentially use to monitor changes in the ice shelf from afar, according to new research.

<https://www.sciencedaily.com/releases/2018/10/181016150654.htm>

### **Extreme weather (and other news) – Australia and Pacific**

#### **Proposal for big seismic survey in Bass Strait knocked back**

THE proposal for a massive seismic survey in Bass Strait, which was causing significant concern to the offshore fishing fleet, has been refused by the federal approval agency.

<http://www.gippslandtimes.com.au/story/5701779/proposal-for-big-seismic-survey-in-bass-strait-knocked-back/>

#### **Australia Could Enter Mega Drought Lasting 20-Years**

Despite the fact that we've seen rain most days over the past week, experts are warning that Australia could soon enter a mega-drought that could last for a period of 20 years.

<http://www.973fm.com.au/newsroom/experts-predict-australia-could-enter-mega-drought-lasting-twenty-years>

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

#### **Now, weather updates right on your phone**

Panaji: A free SMS-based service for citizens, groups and in ..

Read more at:

[http://timesofindia.indiatimes.com/articleshow/66252777.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](http://timesofindia.indiatimes.com/articleshow/66252777.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)

#### **Japan, New Zealand agree to pursue 'free and open Indo-Pacific'**

Oct. 15 (UPI) -- Japan and New Zealand agreed to jointly provide support for island nations in the South Pacific -- a move that could offer an alternative to Chinese assistance to Pacific islands.

<https://www.upi.com/Japan-New-Zealand-agree-to-pursue-free-and-open-Indo-Pacific/9691539610643/>

## **Deaths spark calls in Nepal for better warning systems**

KATHMANDU, Nepal (AP) — The bodies of five South Korean climbers killed in a fierce storm last week on a mountain in Nepal were set to head home Tuesday amid calls to improve weather warning systems on Nepal's mountains.

<http://uk.businessinsider.com/ap-deaths-spark-calls-in-nepal-for-better-warning-systems-2018-10/?r=AU&IR=T>

## **Extreme weather (and other news) – Americas and Europe**

### **R63m lease at the heart of SA Weather Service CEO's suspension**

Why would you spend R63m for a four-year office lease when you can pay R53m for a five-year one?

That is the key question surrounding the suspension of the South African Weather Service (SAWS) chief executive Jerry Lengoasa.

<https://www.timeslive.co.za/news/south-africa/2018-10-16-r63m-lease-at-the-heart-of-sa-weather-service-ceos-suspension/>

### **France: Worst Storm in Over a Century Kills At Least 12**

In southwestern France, at least 12 people are dead after a powerful storm brought the equivalent of seven months' worth of rain in just a few hours, flooding whole villages and forcing authorities to evacuate residents trapped on rooftops. The floods are the worst to hit the area in over a century. They came as meteorologists said exceptionally warm sea water along the Mediterranean coast added to the storm's ferocity. The increased ocean temperatures are consistent with global warming caused by human activity.

[https://www.democracynow.org/2018/10/16/headlines/france\\_worst\\_storm\\_in\\_over\\_a\\_century\\_kills\\_at\\_least\\_12](https://www.democracynow.org/2018/10/16/headlines/france_worst_storm_in_over_a_century_kills_at_least_12)

## **International news and research**

### **W4CCA: Building a Flood Early-Warning Network**

The Asia Foundation's Paula Uniacke and Aditya Pillai participated in Global Climate Action Summit events across San Francisco in September. Among Foundation programs they discussed are ones that improve resilience to extreme weather events.

In two flood-prone regions along the India-Bangladesh border, The Asia Foundation is working with local women to build flood early warning networks in their communities. The Women for Climate Change Adaptation project (W4CCA), funded by the Foundation's Lotus Circle, trains them to develop local flood-response plans and helps them engage with local institutions to improve emergency decision-making and resilience. Currently, government flood warnings in the region are not location specific and can be difficult for communities to interpret. This makes it hard to respond quickly and effectively when floodwaters threaten, increasing flood damage and risking people's lives.

The W4CCA networks will use local data to establish village-specific flood thresholds in project locations. When these thresholds are breached, text messages will alert designated W4CCA leaders, who will activate the flood-response plan in the broader W4CCA network and members' personal networks in the community. By virtue of their social positions, women often have extensive social networks. With effective training and technical tools, they are well situated to broadly disseminate critical and time-sensitive information. The W4CCA early-warning networks will create important leadership roles for women while better protecting them and their communities from floods.

The post [W4CCA: Building a Flood Early-Warning Network](#) appeared first on [The Asia Foundation](#).

### **Flood-Management Training for Elected Women in India and Nepal**

The Asia Foundation's Aditya Pillai participated in Global Climate Action Summit events across San Francisco in September. Among Foundation programs he discussed are those that improve resilience to extreme weather events.

In the Kosi basin, which straddles Nepal and India, The Asia Foundation is conducting a training-of-trainers for roughly 200 elected women from local government and female political-party leaders to help them improve their communities' resilience to frequent floods. Extreme weather events are expected to have a growing impact in coming decades on glacial rivers such as the Kosi, and these events often pose a unique and outsized threat to women and marginalized groups. For a disaster-prone region, the knowledge to adapt, effective engagement with local governments, and adequate representation of marginalized populations are critical. The DFID-funded program helps trainees work with local governments on predisaster planning and postdisaster response. The training addresses flood-related challenges to health and sanitation (particularly water-borne and mosquito-related diseases), livelihoods (as most women are involved in farming and animal husbandry, the sectors most affected by the floods), prenatal and childcare (floods disrupt transport, leaving pregnant women and mothers of young children without access to health care) and other topics. Through subsequent classes in these trainers' communities, the program is expected to reach 2,000 individuals.

The post [Flood-Management Training for Elected Women in India and Nepal](#) appeared first on [The Asia Foundation](#).

## **Europeans Launch Next Phase of Exascale Weather Forecasting Project**

The European Centre for Medium-Range Weather Forecasts (ECMWF) and its partners have begun the second phase of an EU-funded project to develop extreme-scale computing for numerical weather prediction (NWP) and climate modeling.

<https://www.top500.org/news/europeans-launches-next-phase-of-exascale-weather-forecasting-project/>

## **Mythbusting: Is Weather More Unpredictable Due to a Changing Climate?**

There are some commonly spoken narratives that are actually false, at least as stated in the exact words used, that erode trust in weather forecasting. For example, just recently a friend mentioned how “it seems clear, at least to the layperson, that variability due to climate change is making weather more unpredictable, making weather information more valuable.”

<https://www.precisionag.com/systems-management/data/mythbusting-is-weather-more-unpredictable-due-to-a-changing-climate/>

## **FCC considers opening airways at cost of weather safety**

Satellite data to make room for selfies and viral streams

<https://www.news4jax.com/weather/fcc-considers-opening-the-airways-at-the-cost-of-weather-safety>

## **Climate scientist sees stage set for reprise of worst known drought, famine**

A Washington State University researcher has completed the most thorough analysis yet of The Great Drought -- the most devastating known drought of the past 800 years -- and how it led to the Global Famine, an unprecedented disaster that took 50 million lives. She warns that the Earth's current warming climate could make a similar drought even worse.

<https://www.sciencedaily.com/releases/2018/10/181011103708.htm>

## **WMO**

### **Finnish Meteorological Institute launches the third development co-operation project in Nepal**

The objective of the co-operation is to improve Nepal's preparedness for natural disasters caused by weather conditions and to support the service development and personnel competence of the local...

[Read more here](#)

### **Very Severe Cyclonic Storm “TITLI” over Bay of Bengal and Very Severe Cyclonic Storm “LUBAN” over Arabian Sea - India Meteorological Department**

In a rarest of rare occurrence, two very severe cyclonic storms (VSCS), one each in Bay of Bengal (7-13 Oct.) and Arabian Sea (06-14 Oct.) developed simultaneously during October 2018. The VSCS,...

[Read more here](#)

### **Business development / commodities / infrastructure etc**

UK firm Skyline plans to launch weather insurance

London-headquartered insurance technology company Skyline Partners has announced plans to launch its inaugural weather insurance product to provide protection to farmers in India by next year.

<https://www.thehindubusinessline.com/news/world/uk-firm-skyline-plans-to-launch-weather-insurance/article25233774.ece>

### **Understory continues to grow**

On October 10, 2018, Understory, the Madison, Wisconsin based weather company, filed paperwork with the SEC recording a \$6.5 million dollar raise.

<http://siliconprairienews.com/2018/10/understory-continues-to-grow/>

### **Aviation**

#### **Rocket Lab names site in Virginia, US as first launchpad outside NZ**

Rocket Lab has selected Nasa's Wallops Launch Facility in the US state of Virginia for its first US launch site.

[https://www.nzherald.co.nz/business/news/article.cfm?c\\_id=3&objectid=12144371](https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12144371)

#### **Qantas and Virgin Australia planes narrowly avoid colliding during wild weather over Brisbane**

Two planes flew dangerously close in wild weather near Brisbane, last Thursday

A loss of separation was reported involving a Qantas 737 and Virgin Australia 737

Australian Transport Safety Bureau and Airservices Australia are investigating

It's understood both aircraft were following directions from air traffic controllers

<https://www.dailymail.co.uk/news/article-6279423/Qantas-Virgin-Australia-launches-narrowly-avoid-colliding-huge-storm-Brisbane.html>

### **Air New Zealand does deal for autonomous air taxis**

Air New Zealand and Zephyr Airworks have signed an agreement to bring the world's first autonomous electric air taxi service to New Zealand.

<https://www.stuff.co.nz/business/107868666/air-new-zealand-deal-does-deal-for-autonomous-air-taxis>

### **Embraer Unveils Two New Business Jets It Says Will Claim Long-Range Crown**

Embraer introduced midsize and super-midsize business jets Sunday that it aims to launch in 2019, filling out what was already one of the broadest lineups in the market with what the company says will be the longest-range planes in their class.

<https://www.forbes.com/sites/jeremybogaisky/2018/10/14/embraer-unveils-two-new-business-jets-it-says-will-claim-long-range-crown/#6a33417a47bb>

### **Energy and Mining**

#### **'Creaking and groaning' New Zealand energy system poses risk to economy**

Falling lake levels and gas supply problems pose an "immediate risk" to New Zealand's economy, with warnings that energy prices could rise across the board.

<https://www.stuff.co.nz/business/107891655/creaking-and-groaning-new-zealand-energy-system-poses-risk-to-economy>

#### **Genesis partners with Tilt in Taranaki wind farm**

Oct. 17 (BusinessDesk) - Genesis Energy is partnering with Tilt Renewables to develop a 100 MW wind farm at Waverley on the southern Taranaki coast.

<http://www.scoop.co.nz/stories/BU1810/S00507/genesis-partners-with-tilt-in-taranaki-wind-farm.htm>

## **Space weather**

### **NCKU to launch 'space weather' forecast system**

AWAITING LIFTOFF: The system can forecast ionospheric changes at altitudes of between 100km and 1,000km and it would come into operation when Formosat-7 is launched

<http://www.taipeitimes.com/News/taiwan/archives/2018/10/17/2003702541>

## **El Nino / La Nina**

### **Predicting an El Niño or La Niña year 17 months in advance**

El Niño-Southern Oscillation (ENSO) leads to extreme climatic variations called El Niño and La Niña that cause dangerous weather conditions in many regions throughout the world. Currently, a reliable forecast of the ENSO phases can be made about a year beforehand. This study details a novel method that allows for the accurate forecast of its phases up to 17 months in advance.

<https://www.sciencedaily.com/releases/2018/10/181015084633.htm>

## **Climate change / global warming / sea level rise**

### **Why People Aren't Motivated to Address Climate Change**

People are often highly motivated to avoid threats. If you are walking down a dark, isolated city street, you are vigilant for unexpected sights and sounds and probably pick up the pace to get back to a populated area as quickly as possible. If you step into the street and see a bus bearing down on you, you jump back. If a large unfamiliar dog is growling outside your front door, you stay inside.

<https://hbr.org/2018/10/why-people-arent-motivated-to-address-climate-change>

### **Under IPCC forecasts babies born today will be 22 when warming hits 1.5C. What will life be like?**

Meet Casey X. She was born in Alice Springs Hospital on October 13, 2018.

She came into the world screaming, before projectile-vomiting over the hospital floor and falling asleep.

[Read more here](#)

### **how climate change could cause global beer shortages**

Severe climate events could cause shortages in the global beer supply, according to new research. The study warns that increasingly widespread and severe drought and heat may cause substantial decreases in barley yields worldwide, affecting the supply used to make beer, and ultimately resulting in 'dramatic' falls in beer consumption and rises in beer prices.

<https://www.sciencedaily.com/releases/2018/10/181015113555.htm>

### **New interactive scenario explorer for 1.5 degrees C pathways**

IIASA and the Integrated Assessment Modeling Consortium (IAMC) have made the scenarios underlying last week's Intergovernmental Panel on Climate Change (IPCC) 1.5 degrees C Special Report publicly available, in an interactive online resource. The resource provides scenarios and a suite of visualization and analysis tools, making the assessment more transparent to researchers, policymakers, and the public.

<https://www.sciencedaily.com/releases/2018/10/181015113552.htm>

### **What it will take to meet climate change obligations?**

The Government's flagship climate change legislation is scheduled to become law next year and will set New Zealand's long-term emissions goal.

<https://www.radionz.co.nz/national/programmes/ninetoon/audio/2018666841/what-it-will-take-to-meet-climate-change-obligations>

### **Cloud seeding / Geoengineering**

#### **Peter Griffin on climate change: Without geo-engineering, we are imperiled**

Peter Griffin debuts as a new science columnist today. He founded the [Science Media Centre](#) and directed it for 10 years. He was also the founder and editor of the [Sciblogs.co.nz](http://Sciblogs.co.nz) platform. He is a Wellington-based journalist who has covered science and technology for nearly 20 years. Follow him on [Twitter @petergnz](#)

<https://www.stuff.co.nz/science/107780026/peter-griffin-on-climate-change-without-geoengineering-we-are-imperiled>

## Journal and articles online

### Meteorological Applications

Volume 25, Issue 4

Pages: i-iv, 493-664

October 2018

#### ISSUE INFORMATION

##### Issue Information

Pages: i-iv | First Published: 16 October 2018

#### RESEARCH ARTICLES

##### Sensitivity of initial-condition and cloud microphysics to the forecasting of monsoon rainfall in South Asia

Md Safat Sikder, Faisal Hossain

Pages: 493-509 | First Published: 19 September 2018

Selected intense precipitation events in the Ganges Brahmaputra Meghna (GBM) region (left panel), and Indus basin (right panel) along with available in-situ station within the analysis extents and their associated Thiessen polygons.

##### Predictor selection method for the construction of support vector machine (SVM)-based typhoon rainfall forecasting models using a non-dominated sorting genetic algorithm

Tao-Chang Yang, Pao-Shan Yu, Kun-Hsiang Lin, Chen-Min Kuo, Hung-Wei Tseng

Pages: 510-522 | First Published: 19 September 2018

The proposed predictor selection method can intelligently decide on the suitable input variables from numerous weather factors and typhoon characteristics for the construction of effective typhoon rainfall forecasting models. Four support vector machine (SVM)-based models with different combinations of the three types of input variables (i.e. antecedent rainfalls, typhoon characteristics and local weather factors) were constructed and compared.

The optimal SVM-RTW using all three types of input variables performed the best. It significantly improved hourly typhoon rainfall forecasting, especially for the long lead-time forecasting.

Comparative evaluation of the skill of a global circulation model and a limited area model in simulating tropical cyclones in the north Indian Ocean

G. N. Mohapatra, V. Rakesh, P. K. Mohanty, S. Himesh

Pages: 523-533 | First Published: 19 September 2018

For a large sample of cyclones of various intensities formed over the north Indian Ocean, the forecast skills of a global and a regional model with different forecast leads are compared. Although a global circulation model (GCM) cannot match the resolution of a limited area model (LAM) over a smaller domain, it is possible that better representation of scales and thus scale interactions can lead to better simulation of tropical cyclones with a GCM. This hypothesis is tested in the present work with a GCM and a LAM configuration. Histogram of errors in landfall for different leads (24 hr, 48 hr and 96 hr) in a LAM and a GCM. The number in parentheses represents the number of cases with <200 km for the respective lead hours.

Use of probabilistic medium- to long-range weather-pattern forecasts for identifying periods with an increased likelihood of coastal flooding around the UK

Robert Neal, Rutger Dankers, Andrew Saulter, Andrew Lane, Jonathan Millard, Gavin Robbins, David Price

Pages: 534-547 | First Published: 23 July 2018

A set of 30 European weather patterns was objectively related to coastal flooding (caused by large waves and storm surges) at 21 sites around the United Kingdom. For example, weather pattern 14 (shown here) was a coastal-risk weather pattern at Lowestoft on the east coast of England. These results were used to create a medium- to long-range probabilistic weather-pattern forecasting tool designed for highlighting forecast periods with a higher likelihood than normal of coastal flooding.

Evaluating high-impact precipitation forecasts from the Met Office Global Hazard Map (GHM) using a global impact database

J. C. Robbins, H. A. Tittley

Pages: 548-560 | First Published: 19 September 2018

The Met Office Global Hazard Map (GHM) summarizes the risk of high-impact weather across the globe over the coming week using global-ensemble forecast data. A new, semi-automated evaluation approach that assesses the ability of the multi-model ensemble precipitation summary layers to highlight events that cause community impacts, as recorded in an impact database, is described. Hit rates for all impact severities range from 40 to 60% for days 1–3 and taper off to lower hit rates at the longer lead times (10–20% for days 6–7).

[Analysis of trends in rainfall and dry/wet years over a century in the Eastern Ganga Canal command](#)

Radha Krishan, Bhaskar R. Nikam, Santosh M. Pingale, Ayush Chandrakar, Deepak Khare

Pages: 561-574 | First Published: 19 September 2018

Location map of the study area with the coverage of IMD rainfall data grids.

[Hazmat risk area assessment by atmospheric dispersion modelling using Latin hypercube sampling with weather ensemble](#)

Robert Sigg, Petter Lindgren, Pontus von Schoenberg, Leif Persson, Jan Burman, Håkan Grahn, Niklas Brännström, Oscar Björnham

Pages: 575-585 | First Published: 22 September 2018

By applying weather ensembles a probabilistic field of risk area, following the atmospheric release of a hazardous substance, can be obtained, in contrast to a traditional deterministic field. This figure illustrates the profound difference that may occur when the risk area is estimated a few days in advance. A methodology to address this issue in combination with other sources of uncertainties is proposed and discussed.

[Optimal period of record for air-conditioning outdoor design conditions in different climate zones of China](#)

Mingcai Li, Sujie Liang, Cao Xiang

Pages: 586-595 | First Published: 22 September 2018

By combining standard deviation and optimal climate normal model methods, a novel method was proposed to calculate the optimal period of record for air-conditioning outdoor design conditions. The feasibility of the method was proved in five different climate zones in China. The previous study confirmed that the 30-year record is no longer suitable for calculating the air-conditioning design conditions and relative shorter record ranging from five to 21 years should be used in different climate zones.

Impact of aerosol number concentration on precipitation under different precipitation rates

O. Alizadeh-Choobari

Pages: 596-605 | First Published: 22 September 2018

The 24 hr accumulated precipitation (mm) over the innermost domain during the simulation period from 0000 UTC on April 14 to 0000 UTC on April 15, 2012, obtained from the (a) control and (b) polluted experiments. Time-series of precipitation rate (mm/hr) in the control (solid lines) and polluted (dashed lines) experiments averaged over (c) Region 1 and (d) Region 2. Locations of Regions 1 and 2 are boxes in (a) or (b).

Global positioning systems meteorology over Morocco: accuracy assessment and comparison of zenith tropospheric delay from global positioning systems and radiosondes

Fatima Zahra Hdidou, Soumia Mordane, Siham Sbi

Pages: 606-613 | First Published: 22 September 2018

As a preliminary step for assimilating the global positioning system (GPS) zenith tropospheric delays (ZTDs) in numerical weather prediction (NWP) models, ZTD data of the Moroccan permanent GPS meteorology stations are analysed. The accuracy of near-real-time GPS ZTD is validated against two references: the International Global Navigation Satellite System Service final troposphere estimates and radiosondes. The comparison shows a good agreement between GPS ZTD and both International Global Navigation Satellite System Service and radiosonde ZTDs. The time series of ZTD shows a seasonal signal with higher values in summer.

Radar-derived parameters in hail-producing storms and the estimation of hail occurrence in Romania using a logistic regression approach

Sabina Stefan, Nicu Barbu

Pages: 614-621 | First Published: 22 September 2018

Romania and synoptic stations (dots) located in the coverage area of Bucharest weather radar (RDBU) (star).

Earlier awareness of extreme winter precipitation across the western Iberian Peninsula

David A. Lavers, David S. Richardson, Alexandre M. Ramos, Ervin Zsoter, Florian Pappenberger, Ricardo M. Trigo

Pages: 622-628 | First Published: 24 September 2018

The extreme forecast index (EFI) applied to water vapour transport has the ability to provide earlier awareness of extreme precipitation in western Iberia. This synoptic-scale structure seen here on forecast day 1 on February 12, 2016, is typical during many extreme precipitation events in western Iberia. The synoptic-scale characteristics of the water vapour transport EFI enable it to capture the approximate location of extremes earlier (from forecast day 11) compared with using the precipitation EFI.

#### The algorithmic detection of pulse thunderstorms within a large, mostly non-severe sample

Paul W. Miller, Thomas L. Mote

Pages: 629-641 | First Published: 23 September 2018

An automated procedure for identifying pulse thunderstorms, weakly forced thunderstorms (WFTs) that produce severe weather, from within a large, overwhelmingly non-severe WFT sample was tested. The classifications were performed using random forests, a decision-tree-based machine learning technique, based on the storms' radar and total lightning parameters. In a subset of active geographical and convective environments, the random forest achieved a critical success index of 50% with vertically integrated liquid density being the most effective differentiating parameter.

#### Correction to Beaufort-estimated wind speeds over the Tropical Indian Ocean

Nunna Kameshwari, T. V. S. Udaya Bhaskar, Rama Rao E. Pattabhi, Venkata Jampana

Pages: 642-654 | First Published: 23 September 2018

The present paper derives a correction explicitly for the Tropical Indian Ocean (TIO) (30–100 ° E, 30 ° S–30 ° N) using individual records from the International Comprehensive Ocean—Atmosphere Dataset (ICOADS) and Indian Meteorological Department (IMD) unique data for the period 1985–2005 to correct the Beaufort-estimated wind speeds (WSs) observed over the TIO. There is significant reduction in bias between Beaufort estimates and the anemometer-measured WS after the application of the newly derived correction.

#### The dependence of minimum-time routes over the North Atlantic on cruise altitude

Fabio Mangini, Emma A. Irvine, Keith P. Shine, Marc A. Stringer

Pages: 655-664 | First Published: 21 September 2018

Using 31 years of wind data, minimum-time routes for flights across the North Atlantic are calculated for different aircraft cruise altitude between flight levels FL300 and FL390 (300 to

200 hPa). Eastbound flights are found to be fastest for cruise altitudes at FL340; westbound flights are fastest

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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](#).

October 16, 2018

## News

### [Trouble Brewing? Climate Change Closes In on Beer Drinkers](#)

October 15, 2018 - Scientific American

Increasing droughts and heat waves could have a devastating effect on barley stocks—and beer prices.

[Read MORE](#)

### [Reporting Live from Hurricanes: Unsafe and Over the Top, or "Dangerous but Necessary"?](#)

October 15, 2018 - The Washington Post

[Read MORE](#)

### [Space Agencies Welcome New Entrants Developing Satellites for Tracking Greenhouse Gases](#)

October 15, 2018 - Space.com

the Sentinel-4 and -5 missions, which will be carried on weather satellites operated by Eumetsat. He added that ESA is considering a future

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### [Costs from hurricane damage to rise alongside frequency, intensity](#)

October 13, 2018 - The Hill

about \$30 billion in damage. And the economic costs associated with Hurricane Florence, which largely affected coastal communities in the

[Read MORE](#)

[How climate change will affect your health](#)

October 13, 2018 - The Denver Channel

like E. coli and salmonella grow faster in warmer weather. Obradovich, the MIT Media Lab research scientist who co-authored the study,

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[Before-and-after satellite photos reveal devastation left by Hurricane Michael](#)

October 13, 2018 - Mashable

the Florida Panhandle on Oct. 10, storm scientists predicted Michael would be an extremely intense storm, in large part because it passed

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[Climate Change & the Mental Health of the Earth](#)

October 13, 2018 - Psychology Today Blog

measures. They took this data and related it to meteorological information using research methodologies from “climate econometrics” to look

[Read MORE](#)

[The answer to Michael’s fury may lie in a shifting current crossing the Gulf of Mexico](#)

October 12, 2018 - Miami Herald

on climate change. But the earth’s system is being primed for more frequent intense storms, he said. “We have a warmer ocean, a warmer

[Read MORE](#)

[How Climate Change Made Our Hurricane Predictions Way More Accurate](#)

October 12, 2018 - FiveThirtyEight

work of William Gray, who developed the first data-driven seasonal hurricane forecasts in the early 1980s, said James Elsner, a professor at

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[We Still Don't Understand the Superstorms of the Anthropocene](#)

October 12, 2018 - MotherBoard

fuel hurricanes, and it also helps give storms stronger, more intense winds. Climate change also increases the storm surge, or the coastal

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[The Never-Ending Drought Story](#)

October 12, 2018 - Outside Online

over the past few years, a storm's legacy begins only when it hits the coast with intense winds. Storms can bring many inches of drought-

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[Miami Meteorologist John Morales Is Looking For Higher Ground](#)

October 12, 2018 - The Huffington Post

University of Georgia's atmospheric program and a former president of the American Meteorological Society. "John is in a center- to center-

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[Here's why hurricanes are rapidly exploding in strength](#)

October 11, 2018 - MSN.com

this would prove a key pathway toward more intense hurricanes in general. "The rapid intensification of these storms, which was part of what

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## Hurricane Michael: The Data Behind Another Very Active Hurricane Season

October 11, 2018 - Inverse

of the planet and the impact that is having on weather systems.” Research from the federal government’s Geophysical Dynamics Laboratory

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## Hurricane Michael’s Remarkable, Terrifying Run

October 11, 2018 - The Atlantic

But they have not made nearly the same amount of headway forecasting hurricane strength, which have not improved since 1990. Even on

[Read MORE](#)

## entoring365: New and Improved Mentoring Interface

October 11, 2018 - Eos - Earth and Space Science News

Geophysicists, the Association for Women Geoscientists, the American Meteorological Society, and the Incorporated Research Institutions for

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## Hurricane Hunters were in the eye when Hurricane Michael roared ashore

October 11, 2018 - Air Force Times

data from inside storms in order to help the National Hurricane Center improve the accuracy of its forecasts of “the cone of uncertainty,”

[Read MORE](#)

## Michael made history as one of the top four strongest hurricanes to strike the United States

October 11, 2018 - MSN.com

when it tracked into Georgia early Wednesday evening, becoming the most intense storm to hit the state since 1898. Subscribe to the Post

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the University of Pennsylvania. Her research has examined disaster insurance markets, the National Flood Insurance Program, federal disaster

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