

New Zealand weather and climate news

These clips come courtesy of MetService

MetService Focus

Wintry blast chills South with snow, wind, rain

MetService meteorologist David Miller said the eye of the storm had moved north to South Canterbury, with snow in the high country forecast down to 600 metres overnight

MetService meteorologist Angus Hines said the front had brought unusually cold weather for the time of year.

"It's pretty cold for the middle of spring, although it's also well known that the South can be changeable at this time of year, with four seasons in one day."

<https://www.odt.co.nz/regions/wintry-blast-chills-south-snow-wind-rain>

First snow, now heavy rain for the South Island, thunderstorms possible further north

In the 12 hours to 5am Thursday, between 20mm and 40mm of rain fell in the Canterbury high country, MetService meteorologist David Miller said.

<https://www.stuff.co.nz/national/107755009/first-snow-now-heavy-rain-for-the-south-island-thunderstorms-possible-further-north>

Snow in Southland, sunshine in Northland - and everything else in between

MetService meteorologist Matthew Ford said a front hovering over Stewart Island was making its way up the South Island and the cold southerly would remain for the rest of the week.

<https://www.stuff.co.nz/southland-times/107738052/Snow-in-Southland-sunshine-in-Northland-and-everything-else-in-between>

Farmers braced for bad weather as 'complex system' approaches

MetService Meteorologist Tui McInnes said mild conditions have seen the week off to a great start, however that's about to change.

<https://www.newshub.co.nz/home/rural/2018/10/farmers-braced-for-bad-weather-as-complex-system-approaches.html>

Motorists warned of strong winds in Canterbury High Country

MetService says northwest gales were expected to rise from 80 to 100 kilometres an hour in Twizel on Wednesday, before changing to southeast and 50kmh in the evening.

<https://www.stuff.co.nz/timaru-herald/news/107732931/Motorists-warned-of-strong-winds-in-Canterbury-High-Country>

Near average Tropical Cyclone season expected

TCWC Manager and severe weather expert Chris Noble says cyclone activity started particularly early this year with the development of Tropical Cyclone Liua in September.

“Despite the early start, we expect a near average number of cyclones to form in the coming season between November 2018 and April 2019,” he says.

MetService will begin to issue its daily Tropical Cyclone Potential Bulletin from 1 November, or earlier if considered necessary.

<https://newsie.co.nz/news/120407-near-average-tropical-cyclone-season-expected.html>

Cold snap: Trampers warned over South Island avalanche risk

Cold snap: Trampers warned over avalanche risk in South Island

A wintry blast expected to hit the country later today could affect travellers on some South Island roads.

<http://www.scoop.co.nz/stories/HL1810/S00057/cold-snap-trampers-warned-over-south-island-avalanche-risk.htm>

Future proofing the Community of Omaio in New Zealand against climate change

The impacts of climate change are projected to be significant according to a new study done by leading hydrologists and other experts from NIWA in New Zealand. These impacts will include rising sea levels, increased long hot dry periods and more intensive periods of heavy rain.

<https://www.linkedin.com/pulse/future-proofing-community-omaio-new-zealand-against-climate-insley/>

Older

Warm spring weather expected until midweek

MetService meteorologist April Clark says the weather has been a perfectly timed gift for those on school holidays.

<https://www.newshub.co.nz/home/new-zealand/2018/10/warm-spring-weather-expected-until-midweek.html>

Spring weather to give way to rain, snow in South Island

But MetService meteorologist Brian Mercer said today early in the week would be characterised by scattered showers around much of the country, especially the west.

<https://www.newstalkzb.co.nz/news/national/spring-weather-to-give-way-to-rain-snow-in-south-island/>

Your weather: Fine start to second week of school holidays before southerly blast

MetService meteorologist Karl Loots said the fine weather of the past few days would persist today and tomorrow for most places.

https://www.nzherald.co.nz/wanganui-chronicle/news/article.cfm?c_id=1503426&objectid=12138691

Halfway through spring, get ready for a wintry storm

We may be almost halfway through spring, but don't put away your warm layers yet - there's a wintry storm on the horizon.

<https://www.stuff.co.nz/national/107670223/Halfway-through-spring-get-ready-for-a-wintry-storm>

New R&D tax incentives widely welcomed

The Government has announced a new tax incentive scheme designed to boost spending on research and development

<https://www.computerworld.co.nz/article/647713/new-r-d-tax-incentives-widely-welcomed/>

and even older -----

Tauranga experiences third driest September, says MetService

According to MetService meteorologist Georgina Griffiths, the city experienced its third driest September in 77 years.

"Tauranga had 39 per cent of the September normal rainfall. It was the third driest September at the airport site which has been in place since 1941.

https://www.nzherald.co.nz/bay-of-plenty-times/news/article.cfm?c_id=1503343&objectid=12135670

School holiday weather: Rain sweeps Auckland, Northland, Bay of Plenty and the South Island

A front moving to the northeast of the North Island brought rain and some heavy showers for areas north of Waikato, MetService meteorologist Sarah Haddon said.

https://www.nzherald.co.nz/northern-advocate/news/article.cfm?c_id=1503450&objectid=12135308

Your weather: Mild conditions set to continue into weekend for most parts of the country

That's good news for most areas aside from the west coast of the South Island as rain, possibly heavy, was predicted to hang over the area for today and tomorrow, MetService meteorologist Josh Griffin said.

https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12136576

Weather: New Zealand drying out faster than usual

"While everywhere should get spells of fine weather this week, the best place to be from Tuesday is probably the central North Island," says meteorologist Stephen Glassey

<https://www.newshub.co.nz/home/rural/2018/10/weather-new-zealand-drying-out-faster-than-usual.html>

Spring weather coming early as warm, dry and calm conditions grip country

A low-pressure system lying to the north of the country should remain offshore but MetService meteorologist Angus Hines said Northland could see some rain.

https://www.nzherald.co.nz/bay-of-plenty-times/news/article.cfm?c_id=1503343&objectid=12135950

Foxton Beach storm surge defences tested

Horowhenua District Council worked with Horizons Regional Council, [Palmerston North City Council's](#) Rescue and Emergency Response Team (REST) and the Foxton Beach Fire Brigade on Sunday to inflate a large barrier across Hartley Street in Foxton Beach.

<http://www.scoop.co.nz/stories/AK1810/S00054/foxtton-beach-storm-surge-defences-tested.htm>

Tongariro death: 'People need to start listening to us'

A Police officer is frustrated by trampers refusing to heed warnings about the risks of hiking the Tongariro Alpine Crossing.....

"Now we all know that it's an alpine environment, and the weather deteriorated," Mr Shepherd said.

<https://www.radionz.co.nz/news/national/367785/tongariro-death-people-need-to-start-listening-to-us>

Pilot denies 'making up' fog story

Helicopter pilot Murray Sarginson has been accused of "making up" a story about fog descending over his aircraft before he crashed into a hillside near Lindis Pass.

The 2016 crash claimed the life of his business partner and sole passenger, 32-year-old Liam Edwards.

<https://www.stuff.co.nz/national/107568695/pilot-denies-making-up-fog-story>

Heavy rain for west, snow for Milford Rd

MetService is forecasting a period of heavy rain which may reach warning levels in Fiordland and the far south of Westland.

<https://www.odt.co.nz/regions/heavy-rain-west-snow-milford-rd>

MetOcean

Climate change efforts should focus on ocean-based solutions

The first broad-scale assessment of ocean-based solutions to reduce climate change and its impacts shows their high potential and calls for immediate development and scale-up of the most-promising measures

https://www.eurekalert.org/pub_releases/2018-10/f-cce092718.php

An operational hydrodynamic forecast model for Tasman and Golden Bay

MetOcean Solutions has recently operationalised a high resolution hydrodynamic model for Tasman and Golden Bay, New Zealand.

<http://www.metocean.co.nz/news/2018/10/1/an-operational-hydrodynamic-forecast-model-for-tasman-and-golden-bay>

Oceans are changing

University of Delaware

New research finds that when westerly winds in the Antarctic Ocean strengthen during the austral summer (October to February), surface waters in the region acidify faster than can be accounted for by increases in carbon dioxide from the atmosphere alone.

<https://www.sciencedaily.com/releases/2018/10/181009175643.htm>

A proposed maritime education centre of Aotearoa

aims to honour iwi guardianship of the ocean, and educate young people on its importance.

<https://www.radionz.co.nz/news/national/368056/maritime-education-centre-announced-in-nelson>

Climate change efforts should focus on ocean-based solutions

The first broad-scale assessment of ocean-based measures to reduce atmospheric carbon dioxide, counteract ocean warming and/or reduce ocean acidification and sea-level rise shows their high potential to mitigate climate change and its impacts. The study identifies ocean-based renewable energy as the most promising, and several local marine conservation and restoration options as 'no-regret measures', that should be scaled-up and implemented immediately, but concludes all other measures are still too uncertain to recommend without further research.

<https://www.sciencedaily.com/releases/2018/10/181004085346.htm>

NIWA

Dry weather predicted for rest of 2018, but no threat of drought yet

It's shaping up to be a dry October, farmers have already started irrigating in mid-Canterbury and NIWA expect similar conditions to persist until Christmas, but no one is crying "drought" just yet.

https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12137034

Nippy nights as summer draws nearer

Chances of a warm, dry summer under El Nino conditions are increasing, but Niwa National Climate Centre scientists warn Kiwis not to get their togs and towels out just yet.

<https://www.odt.co.nz/news/national/nippy-nights-summer-draws-nearer>

Extreme weather (and other news) – Australia and Pacific

New system to warn of freak waves and storm surges in Tuvalu

A new warning system in Tuvalu is hoped to save people from freak waves and storm surges.

It was developed after Cyclone Pam in 2015, which sent waves rolling across the country's atolls, forcing the evacuation of some 300 people.

<https://www.radionz.co.nz/international/pacific-news/368416/new-system-to-warn-of-freak-waves-and-storm-surges-in-tuvalu>

11 cyclones could hit Pacific this season

The South Pacific is forecast to experience seven to eleven cyclones this season, and three or four of those are likely to be severe.

<https://www.radionz.co.nz/international/pacific-news/368388/11-cyclones-could-hit-pacific-this-season>

El Nino alert declared by Bureau of Meteorology, with 70pc chance of hot and dry conditions

The Bureau of Meteorology has just upped the chance of an El Nino this year, meaning there is now three times the normal risk of the climate driver associated with hot and dry conditions happening this year.

<http://www.abc.net.au/news/2018-10-09/bom-declares-el-nino-alert/10356724>

NZ plans weather stations for Tokelau

New Zealand is building weather stations in Tokelau to assist with climate change research....

One of its electronic engineers visiting Tokelau, David Downer, said the station will help prepare for weather disasters.

<https://www.radionz.co.nz/international/pacific-news/368012/nz-plans-weather-stations-for-tokelau>

Trust Me, I'm An Expert: Cyclone season approacheth, but this year there's a twist

Australia has just had its driest September on record, and the second driest month ever: the only drier month was April 1902.

The Bureau of Meteorology's tropical cyclone outlook is out today. It's predicting a weaker-than-normal tropical cyclone season this year but if one hits – and it's likely one will – it'll bring water to rain-starved soil that will soak it up and reduce the flooding risk.

[Read more here](#)

Climate change aid 'not reaching those who need it most'

Money aimed at combatting climate change is not reaching the Pacific's poorest and most vulnerable, a development agency says.

<https://www.radionz.co.nz/international/pacific-news/368162/climate-change-aid-not-reaching-those-who-need-it-most>

September Australia's second-driest month on record

Australia just experienced its driest calendar month in more than a century as the nation continues a prolonged spell of below-average rainfall that is defining 2018.

<https://www.9news.com.au/national/2018/10/02/12/42/australia-drought-driest-month-over-century>

Hurricane Walaka heading towards Johnston Atoll

Hurricane Walaka remains a Category 4 storm to the southwest of Hawaii, as it heads towards Johnston Atoll.

<https://www.radionz.co.nz/international/pacific-news/367800/hurricane-walaka-heading-towards-johnston-atoll>

In Tokelau, NZ must ease tensions, mend relations

Analysis - A New Zealand delegation travelling to Tokelau this week will find a territory divided, tense and looking to Wellington for a way forward.

<https://www.radionz.co.nz/international/pacific-news/367728/in-tokelau-nz-must-ease-tensions-mend-relations>

Thunderstorm asthma forecast for Victoria getting better at predicting the 'chaotic beasts'

Thunderstorm asthma events are proving "chaotic beasts" for Victorian meteorologists to predict, but new data is being used to refine the world-leading forecasting service for this year's grass pollen season.

<http://www.abc.net.au/news/2018-10-01/thunderstorm-asthma-forecast-service-launched-for-pollen-season/10324192>

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

Meteorological Dep't takes to social media to combat fake news

The department wants to curb the spread of false weather information online

<https://thescoop.co/2018/10/08/meteorological-dept-takes-to-social-media-to-combat-fake-news/>

Weather reports in English, Korean for safer mountaineering

CHINO, Nagano Prefecture--Hikers from abroad may stand a better chance of survival in potentially treacherous locations with a new online weather forecasting service in English and Korean.

<http://www.asahi.com/ajw/articles/AJ201810090004.html>

Sky's the limit: Could Skymet soon become India's go-to monsoon forecaster?

India is a hotbed for startups.

From food delivery to cashless payments to booking a massage at home, there's a startup solve for every other service imaginable.

<https://www.firstpost.com/tech/science/skys-the-limit-could-skymet-soon-become-indias-go-to-monsoon-forecaster-5297851.html>

Met department under-reported rainfall intensity in Kerala, says government

The IMD underreported the intensity of rainfall that triggered unprecedented flooding that left more than 400 people dead and caused a trail of devastation across Kerala in August although it had accurately predicted heavy rain, according to a draft government report.

<https://www.hindustantimes.com/india-news/met-department-under-reported-rainfall-intensity-in-kerala-says-government/story-wODuQS3kPzvYKbCq77hyhL.html>

The Challenge and Promise of India's New Container Super-Port

Inter-city transportation in India includes coastal shipping that carries freight at very competitive tariffs. While container ships of 23,000 TEUs are now entering international service between Asia and Europe, India has yet to open a port capable of berthing and providing service for such ships. Work is underway in the Kerala region of Southwestern India to build a container super-port, under very challenging weather conditions, at Vizhinjam that offers over 18 meters of natural water depth.

<https://www.maritime-executive.com/editorials/the-challenge-and-promise-of-india-s-new-container-super-port>

Calls for weather agency chief to quit (Indonesia)

Members of House panel blame BMKG head for allegedly lifting tsunami alert prematurely

<https://www.straitstimes.com/asia/se-asia/calls-for-weather-agency-chief-to-quit>

Typhoon Kong-rey to batter Japan, South Korea with wind and rain

On the heels of deadly Typhoon Trami, Japan will face another dangerous typhoon this week.

<https://www.accuweather.com/en/weather-news/japan-taiwan-china-and-south-korea-on-alert-for-super-typhoon-kong-rey/70006222>

Here's why improved forecasts are not helping prevent floods, droughts in India

Extreme rainfall events that led to the major flood in Mumbai in August 2017 and the disastrous Kerala flood this year, as well as several less catastrophic ones across the country, were predicted by the India Meteorological Department (IMD) days in advance. Yet the forecasts were not useful in avoiding such disasters.

<https://www.firstpost.com/tech/science/heres-why-improved-forecasts-are-not-helping-prevent-floods-droughts-in-india-5296671.html>

International news and research

Extreme weather (and other news) – Americas and Europe

Storm Callum

The third storm of the 18/19 season has been named.

Met Éireann has named an intense area of low-pressure, which will pass to the west of Ireland, northern England and Scotland during Friday, Storm Callum. The strongest winds are likely in western Ireland, although North Western parts of the UK can expect severe gales. The main impacts for the UK will be from heavy rain across some western areas on Friday and Saturday. Yellow Met Office Weather Warnings for wind and rain are in force for Friday and Saturday.

<https://www.metoffice.gov.uk/news/releases/2018/storm-callum>

Hurricane Michael: Category four storm lashes Florida coast

US officials say it is too late to flee from the path of Hurricane Michael - a category four storm - and are warning those that stay to shelter in place.

<https://www.radionz.co.nz/news/world/368410/hurricane-michael-category-four-storm-lashes-florida-coast>

Hurricane Michael Could Do Billions of Dollars of Damage

Some 84,000 homes are at risk from the major storm, one analytics firm projects

[Read more here](#)

Flash floods in Spain's Mallorca kill 9, many missing

Two British nationals among the dead as cars are swept away by raging, muddy waters in the Spanish island.

<https://www.aljazeera.com/news/2018/10/flash-floods-spain-mallorca-kill-9-missing-181010100342382.html>

Hurricane Michael Is Officially More Powerful than Hurricane Katrina

Hurricane Michael made an "unprecedented" landfall on the northern Gulf coast of Florida Wednesday afternoon (Oct. 10). Just as it came ashore, meteorologists with the National Hurricane Center (NHC) released data showing that the rapidly strengthening storm made landfall as the third-strongest hurricane in continental U.S. history. It edged out Hurricane Katrina, which devastated the Gulf coast in 2005.

<https://www.livescience.com/63798-hurricane-michael-more-intense-than-katrina.html>

Why Did Hurricane Michael Become Such a Monster Storm So Quickly?

Forecasters watching Hurricane Michael barrel toward the Gulf coast of Florida earlier this week saw the storm do something "most unusual."

<https://www.livescience.com/63795-why-hurricane-michael-intensified.html>

Centro Epsilon Meteo Moves HPC Weather Forecasting to Verne Global in Iceland

Today Verne Global announced that the Centro Epsilon Meteo meteorological forecasting organizations will start using the company's HPC optimized bare-metal infrastructure to accelerate and improve the accuracy of its forecasting and data analytics capabilities.

<https://insidehpc.com/2018/10/centro-epsilon-meteo-moves-hpc-weather-forecasting-verne-global-iceland/>

International news and research

Student-made anemometer to be produced by one of Kazanian companies

A wind speed measuring device turned out to be more affordable than competitors

https://www.eurekalert.org/pub_releases/2018-10/kfu-sat100518.php

Lidar temperature series in the middle atmosphere as a reference data set

– Part 1: Improved retrievals and a 20-year cross-validation of two co-located French lidars by Robin Wing, Alain Hauchecorne, Philippe Keckhut, Sophie Godin-Beekmann, Sergey Khaykin, Emily M. McCullough, Jean-François Mariscal, and Éric d'Almeida <https://www.atmos-meas-tech.net/11/5531/2018/>

Short Summary: The objective of this work is to minimize the errors at the highest altitudes of a lidar temperature profile which arise due to background estimation and a priori choice. The systematic method in this paper has the effect of cooling the temperatures at the top of a lidar profile by up to 20 K – bringing them into better agreement with satellite temperatures. Following the description of the algorithm is a 20-year cross-validation of two lidars which establishes the stability of the technique.

Wind holds key to climate change turnaround

New research could help bring about the kind of far-reaching changes deemed necessary in the UN's dire new climate change report. Scientists found that when westerly winds in the Antarctic Ocean strengthen during the austral summer (Oct.-Feb.), surface waters in the region acidify faster than can be accounted for by increases in carbon dioxide from the atmosphere alone.

<https://www.sciencedaily.com/releases/2018/10/181009175643.htm>

Rapid, widespread changes may be coming to Antarctica's Dry Valleys

Antarctica's sandy polar desert, the McMurdo Dry Valleys, has undergone changes over the past decade and the recent discovery of thawing permafrost, thinning glaciers and melting ground ice by a research team are signs that rapid and widespread change could be on the horizon.

<https://www.sciencedaily.com/releases/2018/10/181009135822.htm>

Merging of ozone profiles

from SCIAMACHY, OMPS and SAGE II observations to study stratospheric ozone changes by Carlo Arosio, Alexei Rozanov, Elizaveta Malinina, Mark Weber, and John P. Burrows <https://www.atmos-meas-tech-discuss.net/amt-2018-275/>

Short Summary: The aim of this study is the merging of stratospheric ozone profiles from 3 satellite datasets. The merged time series is used to compute long-term changes as a function of altitude, latitude and longitude to study the evolution of the ozone layer over 1985-2018. We found positive trends in the upper stratosphere at mid-latitudes, related to the Montreal

Protocol and increasing greenhouse gases, and a remarkable variability of ozone changes as a function of longitude and over the last 15 years.

Spring storms can hit without warning, so why are they so hard to forecast?

Perth experienced one of its wildest weather swings seen this year yesterday, when the first 30-degree day of spring gave way within the hour to heavy downpours and a spectacular lightning display.

<http://www.abc.net.au/news/2018-10-10/why-are-perth-spring-storms-so-hard-to-forecast/10360628>

Why you should never mute emergency alert notifications on your phone

Every cell phone user in the country receives alerts on their phone. Many times the notifications come from social media or texts for personal use. However, other times they are sent for emergency purposes.

In the case of severe local and national emergencies, alerts are sent straight from the top: the United States government.

<https://m.accuweather.com/en/weather-news/why-you-should-never-mute-emergency-alert-notifications-on-your-phone/70006176>

More wet and dry weather extremes projected with global warming

Global warming is projected to spawn more extreme wet and dry weather around the world, according to a new study. Those extremes include more frequent dry spells in the northwestern, central and southern United States and in Mexico, and more frequent heavy rainfall events in south Asia, the Indochinese Peninsula and southern China.

<https://www.sciencedaily.com/releases/2018/10/181004085343.htm>

Global warming increases wildfire potential damages in Mediterranean Europe

A study published in Nature Communications, led by researchers of the University of Barcelona in collaboration with other research institutions, shows that anthropogenic warming will increase the burned areas due to fires in Mediterranean Europe, and the increase of the burned area could be reduced by limiting global warming to 1.5 °C. The higher the warming level is, the larger the increase of the burned area is.

https://www.eurekalert.org/pub_releases/2018-10/uob-gwi100218.php

How rising global temperatures will affect 6 major cities

3 Oct 2018

Kristin Musulin

Smart Cities Dive

The earth is on a trajectory to warm 3-4°C by 2100. This heat map details how that rise in temperatures will affect major metropolitan hubs.

Smart Cities Dive took a closer look at how this would affect six major metropolitan hubs, and what the respective mayors and city leaders are doing to curb climate impacts as the clock ticks.

<https://www.smartcitiesdive.com/news/how-rising-global-temperatures-will-affect-6-major-cities/538690/>

New weather model could increase tornado-warning times

Researchers have obtained data from recent next-generation satellites in a numerical weather-prediction model used to provide guidance for tornadic thunderstorm forecasting.

<https://www.sciencedaily.com/releases/2018/10/181001154041.htm>

What you need to know about FEMA's 'Presidential Alert' emergency alert system test on Wednesday

Nearly every cell phone user across the United States will receive a text message on the same day at the same time. The message will be titled "Presidential Alert."

<https://www.accuweather.com/en/weather-news/what-you-need-to-know-about-femas-presidential-alert-emergency-alert-system-test-on-wednesday/70006204>

Metop-C to boost resilience and innovation in weather forecasting

The launch of the Metop-C satellite, scheduled for 7 November 2018, will ensure the continuous supply of crucial data to help initialise numerical weather prediction models for years to come.

<https://www.ecmwf.int/en/about/media-centre/news/2018/metop-c-boost-resilience-and-innovation-weather-forecasting>

Met Office and Surfers Against Sewage team up

Met Office staff members have hit the beach this week, to mark the start of their new charity partnership with Surfers Against Sewage.

<https://www.metoffice.gov.uk/news/releases/2018/met-office-announces-partnership-with-surfers-against-sewage>

Experiencing extreme weather is not enough to convince climate change skeptics

Experiencing extreme weather is not enough to convince climate change skeptics that humans are damaging the environment, a new study shows.

<https://www.sciencedaily.com/releases/2018/10/181001171149.htm>

WMO

Climate change report is a “wake-up” call on 1.5°C global warming

A landmark report on climate change is a wake-up call about both the huge challenges and the benefits of limiting global warming to 1.5° Celsius in view of the escalating threats from rising temperatures the World Meteorological Organization (WMO) said today.

[Read more here](#)

Business development / commodities / infrastructure etc

DTN Signs Agreement to Acquire Weather Decision Technologies

Acquisition builds upon DTN’s significant meteorological expertise and insights and further supports customers’ weather-based decisions

<https://www.businesswire.com/news/home/20181008005426/en/DTN-Signs-Agreement-Acquire-Weather-Decision-Technologies>

Weather technology company ClimaCell closes \$45 million Series B on mission to expand globally

Weather technology company ClimaCell closed its \$45 million Series B last week. The company provides location-specific, short-term weather forecasts by utilizing hyper-sensing technologies like wireless communication networks instead of depending solely on government radar.

<https://www.freightwaves.com/news/weather-technology-company-climacell-closes-45-million-series-b-on-mission-to-expand-globally>

Understanding the IPCC special report on 1.5°C global warming

INCHEON, Republic of Korea, 1 October 18 – The Intergovernmental Panel on Climate Change (IPCC) opened a meeting on Monday to consider its special report Global Warming of 1.5 °C, including the impacts and associated risks of such a temperature increase. WMO and the UN Environment Programme, as co-sponsors of the IPCC, issued a brief to provide context and explanation of key concepts about the landmark report.

[Read more here](#)

WMO receives LUI Che Woo Prize for protecting public safety

The World Meteorological Organization (WMO) has received the 2018 LUI Che Woo Prize award for Welfare Betterment for its role in improving weather forecasts and disaster warnings and protecting public safety.

[Read more here](#)

Understanding the IPCC special report on 1.5°C global warming

INCHEON, Republic of Korea, 1 October 18 – The Intergovernmental Panel on Climate Change (IPCC) opened a meeting on Monday to consider its special report Global Warming of 1.5 °C, including the impacts and associated risks of such a temperature increase. WMO and the UN Environment Programme, as co-sponsors of the IPCC, issued a brief to provide context and explanation of key concepts about the landmark report.

[Read more here](#)

Afghanistan hails new, improved hydrometeorological service

A WMO-led project to establish a functioning hydrometeorological service in Afghanistan to improve early warnings and provide accessible and accurate weather forecasts to increase resilience has “achieved more than anyone could imagine,” according to an Afghan government minister.

[Read more here](#)

WMO and Hong Kong Observatory strengthen cooperation

WMO has signed an agreement with the Hong Kong Observatory (HKO) to further strengthen meteorological cooperation.

Under a Memorandum of Understanding signed by HKO Director Shun Chi-ming and WMO Secretary-General Petteri Taalas, HKO will support WMO's initiative in establishing the Global Multi-hazard Alert System (GMAS).

[Read more here](#)

Meteorology also competes! - Servicio Meteorológico Nacional Argentina

The Youth Olympic Games will take place between October 6 and 18 in Buenos Aires, Argentina, and the National Meteorological Service will provide meteorological support to the Olympic Committee. Hourly forecasts of all the variables for each sport discipline, extension of resolution of radars and meteorological models, 24 x7 assesment and special training are some of the services that the NMS will provide to the organization of the event. An unprecedented experience in the region.

[Read more here](#)

Aviation

Better winter weather forecasts for airports

EU-funded researchers developed up to the minute probabilistic forecasts for winter weather that enable air traffic and airport operators to make their operations more efficient and to mitigate risks.

https://cordis.europa.eu/result/rcn/239886_en.html

Considerations for temperature sensor placement on rotary-wing unmanned aircraft systems

by Brian R. Greene, Antonio R. Segales, Sean Waugh, Simon Duthoit, and Phillip B. Chilson
<https://www.atmos-meas-tech.net/11/5519/2018/>

Short Summary: With the recent commercial availability of rotary-wing unmanned aircraft systems (rwUAS), their ability to collect observations in the lower atmosphere is quickly being realized. However, integrating sensors with an rwUAS can introduce errors if not sited properly. This study discusses an objective method of determining some of these error sources in

temperature, including improper airflow and rotary motor heating. Errors can be mitigated by mounting thermistors under propellers near the tips.

German and New Zealand agencies sign agreement for space research

It's one small step for New Zealand, one giant leap for space research – New Zealand and German space agencies have announced they will work together.

<https://www.stuff.co.nz/science/107594223/german-and-new-zealand-agencies-sign-agreement-for-space-research>

Fatal plane crash causes determined

Poor weather and flight practices have been determined to be the causes of a fatal plane crash near the north branch of the Motatapu River in 2015.

<https://www.odt.co.nz/regions/wanaka/fatal-plane-crash-causes-determined>

Flying with Datalink Weather

Five key rules for better decision-making.

<https://www.flyingmag.com/flying-with-datalink-weather>

Space centre scales back business plan

The Centre for Space Science Technology (CSST) has been given another \$3 million of government funding, despite the start-up blowing its business plan.

<https://www.odt.co.nz/regions/central-otago/space-centre-scales-back-business-plan>

DroidEFB Expands Android Flight App Capabilities

While developers haven't put as much effort into creating aviation apps for mobile devices that run the Android operating system, DroidEFB's electronic flight bag (EFB) app offers features compatible with many iOS-based EFB apps, and the company continues to add new capabilities.

The latest version of DroidEFB—version 2.4.8—now is integrated with AOPA's desktop Flight Planner. DroidEFB users can plan a flight on the AOPA system and then upload the route to DroidEFB on their mobile device. Other new features include the ability to add or export waypoints, translated Metars and TAFs, and a graphic depiction of Metar trends.

<https://www.ainonline.com/aviation-news/general-aviation/2018-10-09/droidfb-expands-android-flight-app-capabilities>

Police and Defence Force look to extend drone use for operations

New Zealand skies could become a lot busier as police and the Defence Force eye up extending their drone use for operations.

<https://www.stuff.co.nz/national/107698850/Police-and-Defence-Force-look-to-extend-drone-use-for-operations>

World-renowned space company partners with New Zealand research institute

The Centre for Space Science Technology (CSST) and Airbus Defence and Space today announced a partnership agreement, which will give New Zealand businesses, industry, government and the research community access to an even wider selection of high resolution, weather independent, near real-time satellite imagery.

<http://www.scoop.co.nz/stories/SC1810/S00036/world-renowned-space-company-partners-with-nz-institute.htm>

Helicopter Online Ground School offers webinar on HEMS Weather Tool

Helicopter Online Ground School has announced it will be holding a free live Federal Aviation Administration (FAA) webinar on the HEMS Weather Tool and how it can help any pilot who is operating below 5,000 feet.

<https://www.verticalmag.com/press-releases/helicopter-online-ground-school-offers-webinar-on-hems-weather-tool/>

Satellites and radar

NZ businesses to get wider access to satellite data - no matter what the weather

The Centre for Space Science Technology has partnered with Airbus Defence and Space to give New Zealand businesses, government and researchers wider access to satellite imagery.

<https://bizedge.co.nz/story/nz-businesses-to-get-wider-access-to-satellite-data-no-matter-what-the-weather>

Climate change / global warming / sea level rise

Climate target not viable for NZ economy - expert

New Zealand's economy could not sustain an emissions target that kept global warming below 1.5°C, a climate expert has said.

<https://www.radionz.co.nz/news/national/368231/climate-target-not-viable-for-nz-economy-expert>

New IPCC report marks 'end of magical thinking' about climate change - UC expert

Limiting global warming to 1.5C would require rapid, far-reaching and unprecedented changes in all aspects of society, the IPCC said in a new assessment released today (2pm Monday 8 October NZTime). With clear benefits to people and natural ecosystems, limiting global warming to 1.5C compared to 2C could go hand-in-hand with ensuring a more sustainable and equitable society, the Intergovernmental Panel on Climate Change (IPCC) said today.

University of Canterbury Associate Professor Dr [Bronwyn Hayward](#) was the only New Zealand Lead Author on the [IPCC Special Report on Global Warming of 1.5°C](#), released today. She is an Associate Professor of Political Science and International Relations at the University of Canterbury, where she is also the Director of the Sustainable Citizenship and Civic Imagination research group Hei Puāwaitanga and Associate Dean of Postgraduate Research.

Associate Professor [Bronwyn Hayward](#) gives her perspective on the IPCC report:

<http://www.scoop.co.nz/stories/SC1810/S00038/ipcc-report-end-of-magical-thinking-about-climate-change.htm>

The IPCC's latest special report - Global Warming of 1.5C - has been released at a press conference in Incheon, South Korea.

The report was approved on Saturday following a week-long session in Incheon. It highlights a number of climate change impacts that could be avoided by limiting warming to 1.5C above pre-industrial levels, including offering some protection to coral reefs and preventing about 10 centimetres of sea-level rise.

<http://www.scoop.co.nz/stories/SC1810/S00035/ipcc-15c-report-expert-reaction.htm>

Global sea level could rise 50 feet by 2300, study says

Global average sea-level could rise by nearly 8 feet by 2100 and 50 feet by 2300 if greenhouse gas emissions remain high and humanity proves unlucky, according to a review of sea-level change and projections.

<https://www.sciencedaily.com/releases/2018/10/181008083456.htm>

Businesses cannot ignore climate change

OPINION: Every now and again, wandering about the corporate traps, it's still possible to meet a senior executive who doesn't think climate change is "a thing".

<https://www.stuff.co.nz/business/107744383/businesses-cannot-ignore-climate-change>

Jim Salinger: The real facts on methane

Methane's (CH₄) role in New Zealand's greenhouse gas (GHG) emissions has been very much highlighted in recent deliberations on climate change.

This includes a recent opinion by Dr Geoff Duffy (New Zealand Herald, October 2) "Methane stance way off track", an earlier note by Parliamentary Commissioner for the Environment Simon Upton on CH₄ emissions from livestock, and the focus in Zero Carbon Bill consultations on the treatment of CH₄ differently from carbon dioxide (CO₂) and nitrous oxide (N₂O) on the role of anthropogenic GHG increases to global warming.

https://www.nzherald.co.nz/climate-change/news/article.cfm?c_id=26&objectid=12138885&ref=rss

Emergency preparedness / disaster planning / resilience

The science project using indigenous Māori knowledge to increase NZ's resilience to natural hazards

How can we as a nation better respond to natural hazards like tsunamis and floods?

New Zealand scientists and researchers are exploring Mātauranga Māori (Māori indigenous knowledge) for the Resilience Challenge – an ambitious nationwide project exploring New Zealand's resilience to such hazards.

<https://www.radionz.co.nz/national/programmes/teahikaa/audio/2018665566/the-science-project-using-indigenous-maori-knowledge-to-increase-nz-s-resilience-to-natural-hazards>

Energy and Mining

Wind to power new energy era

Wind farms to play pivotal role in taking NZ to 100 per cent renewable energy goal.

New Zealand's wind power industry is poised to deliver large swathes of power in coming years as the country strives to become one of the first in the world with 100 per cent renewable energy sources.

https://www.nzherald.co.nz/opus/news/article.cfm?c_id=1504443&objectid=12135637

Windier wind farms

Depending on how wind turbines are situated relative to each other and to the prevailing wind, those not directly in the path of the wind could be left to extract energy from significantly depleted airflow. However, according to researchers, there are ways to get around this issue of diminishing wind returns.

<https://www.sciencedaily.com/releases/2018/10/181004131821.htm>

Large-scale US wind power would cause warming that would take roughly a century to offset

Extracting energy from the wind causes climatic impacts that are small compared to current projections of 21st century warming, but large compared to the effect of reducing US electricity emissions to zero with solar. Researchers report the most accurate modelling yet of how increasing wind power would affect climate, finding that large-scale wind power generation would warm the Continental United States 0.24 degrees Celsius because wind turbines redistribute heat in the atmosphere.

<https://www.sciencedaily.com/releases/2018/10/181004131821.htm>

Natural Gas Prices Rise On The 'Elephant In The Room'

Despite the Autumn shoulder season being in full force, natural gas prices have been continuing their rise, with prompt month prices up 34 cents, or 12%, to today's close at \$3.24 per MMBtu since September 19. We've blown past important technical resistance at \$3.19 and \$3.23. These are the highest prices since the end of January.

<https://www.forbes.com/sites/judeclemente/2018/10/03/natural-gas-prices-rise-on-the-elephant-in-the-room/#59050c46a9b0>

Farming/horticulture

Farmers facing dry conditions as El Niño looms

Farmers are being warned they may be in for a dry summer but Niwa says it's not sure how bad things will get

<https://www.radionz.co.nz/news/national/367887/farmers-facing-dry-conditions-as-el-nino-looms>

Health

Why Cases of UTIs Increase During Summer: It May Really Be the Weather

SAN FRANCISCO — Cases of urinary tract infections (UTIs) spike every summer, and now a new study suggests why: It may really be the weather.

<https://www.livescience.com/63760-why-urinary-tract-infections-increase-summer.html>

Satellites and radar

Australia stakes its claim to valuable space data with new super-satellite

The recently launched NovaSAR-1 satellite has the ability to provide high-resolution Earth imagery for disaster assessment or crop monitoring even at night or in cloudy conditions. And Australia will have direct control of the data collected.

<https://www.createdigital.org.au/australia-claim-valuable-space-data-satellite/>

Transport/roading/shipping/freight

NZTA's extra money already claimed by weather and logging repairs

Transport bosses say they are pumping an extra \$400,000 into a Taranaki council's roading budget over the next three years - but the council spent that amount in two months repairing damage caused by logging trucks and bad weather.

<https://www.stuff.co.nz/business/industries/107604938/nztas-extra-money-already-claimed-by-weather-and-logging-repairs>

Logging and weather blamed for \$400,000 roading overspend

A logging boom may be good for the Taranaki economy, but it's causing roading chaos inland and concern for a mayor.

<https://www.stuff.co.nz/business/industries/107429075/Logging-and-weather-blamed-for-400-000-roading-overspend>

Cyber security and IoT

Asia-Pacific countries fight back after wave of cyber attacks

Nations examine offensive options amid allegations of Chinese intrusions

<https://www.ft.com/content/e846aeac-914f-11e8-b639-7680cedcc421>

Innovation and technologies (inc data and new products)

ClimaCell Grabs \$45M for Weather Data for Airlines, Driverless Cars

Aviation, public utilities, and insurance are among the old-line industries that rely on accurate weather forecasts and monitoring to make crucial decisions for their operations. Now, advances in artificial intelligence and other technologies are creating uses for weather data in new sectors—think ride-hailing services, drones, and self-driving cars.

<https://www.xconomy.com/boston/2018/10/04/climacell-grabs-45m-for-weather-data-for-airlines-driverless-cars/>

Journal and articles online

Weather

Early View

Online Version of Record before inclusion in an issue

Sub synoptic-scale features associated with extreme surface gusts during the South Australia Storm of September 2016 – Part II: analysis of mechanisms driving the gusts

Nick Earl, Ian Simmonds

Version of Record online: 29 September 2018

(a) Shapiro–Keyser conceptual model of the life cycle of an extratropical cyclone: stage I – open wave, stage II – frontal fracture, stage III – bent-back front and frontal T-bone, and stage IV – mature, frontal occlusion (adapted for the Southern Hemisphere). The cold and warm conveyor

belts (CCB and WCB respectively) are marked, along with the low-pressure centre (L) and the cloud signature (stippled areas; adapted from Baker,). (b) Conceptual model of sub synoptic-scale features within an extratropical cyclone, during transition from stage III to stage IV (adapted from Browning, , for the Southern Hemisphere). The image also shows where convective cell (CC), dry slot convection (DSC), dry conveyor belt (DCB), convective line (CL) and sting jet (SJ) associated gusts can occur in relation to the cyclone.

Spatial patterns of seasonal level trends of groundwater in India during 2002–2016

Yanping Cao, Shouraseni Sen Roy

Version of Record online: 28 September 2018

Quality and applications of wind data from sound detection and ranging (SODAR) equipment and microwave wind profilers

P. W. Chan, Y. Y. Chiu, Q. S. Li

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Weather

Early View

Online Version of Record before inclusion in an issue

First steps towards real-time weather front mapping using routine high-resolution aircraft-derived UK observations in geographical information system (GIS) software

Martin Deryck Protts, Edmund Keith Stone

Version of Record online: 03 October 2018

A map of the study area, with Mode-S datapoints and the cloud layer at the time of capture overlaid. In motion, this image shows how cloud movement corresponds closely to the wind direction, which, combined with the correlation with kriging, demonstrates that Mode-S data can be used for weather front mapping.

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Meteorological Applications

Accepted Articles

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

Sensitivity of Tropical Cyclone Predictions in the coupled Atmosphere-Ocean model WRF-3DPWPto surface roughness schemes

M.M. Greeshma, C.V. Srinivas, K.B.R.R. Hari Prasad, R. Baskaran, B. Venkatraman

First Published: 05 October 2018

Evaluation of the self-heating effect in a group of thermometers used in meteorological and climate applications

Carmen García Izquierdo, Sonia Hernández, Alicia González, Laura Matias, Lenka Šindelářová, Radek Strnad, Dolores del Campo

First Published: 01 October 2018

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Use of Ensemble Forecasts to Investigate Synoptic Influences on the Structural Evolution and Predictability of Hurricane Alex (2016) in the Midlatitudes

Juan Jesús González-Alemán, Jenni L. Evans, and Alex M. Kowaleski

Performance Evaluation of the Fast Spherical Harmonic Transform Algorithm in the Yin–He Global Spectral Model

Fukang Yin, Guoli Wu, Jianping Wu, Jun Zhao, and Junqiang Song

Tropical Cyclone Track Sensitivity in Deformation Steering Flow

Ryan D. Torn, Travis J. Elless, Philippe P. Papin, and Christopher A. Davis

The Relation between Nocturnal MCS Evolution and Its Outflow Boundaries in the Stable Boundary Layer: An Observational Study of the 15 July 2015 MCS in PECAN

Coltin Grasmick, Bart Geerts, David D. Turner, Zhien Wang, and T. M. Weckwerth

Convergence Issues in the Estimation of Interchannel Correlated Observation Errors in Infrared Radiance Data

Pierre Gauthier, Ping Du, Sylvain Heilliette, and Louis Garand

Assimilation of All-Sky Infrared Radiances from Himawari-8 and Impacts of Moisture and Hydrometer Initialization on Convection-Permitting Tropical Cyclone Prediction

Masashi Minamide and Fuqing Zhang

The Stability of Incremental Analysis Update

Lawrence L. Takacs, Max J. Suárez, and Ricardo Todling

Topographic Effects on Radiation in the WRF Model with the Immersed Boundary Method: Implementation, Validation, and Application to Complex Terrain

Robert S. Arthur, Katherine A. Lundquist, Jeffrey D. Mirocha, and Fotini K. Chow

Finite Elements Used in the Vertical Discretization of the Fully Compressible Core of the ALADIN System

Jozef Vivoda, Petra Smolíková, and Juan Simarro

Ensemble-Based Atmospheric Reanalysis Using a Global Coupled Atmosphere–Ocean GCM

Nobumasa Komori, Takeshi Enomoto, Takemasa Miyoshi, Akira Yamazaki, Akira Kuwano-Yoshida, and Bunmei Taguchi

Modification of Polar Low Development by Orography and Sea Ice

Denis Sergeev, Ian A. Renfrew, and Thomas Spengler

Assessment of Numerical Weather Prediction Model Reforecasts of the Occurrence, Intensity, and Location of Atmospheric Rivers along the West Coast of North America

Kyle M. Nardi, Elizabeth A. Barnes, and F. Martin Ralph

Assimilating All-Sky Infrared Radiances from GOES-16 ABI Using an Ensemble Kalman Filter for Convection-Allowing Severe Thunderstorms Prediction

Yunji Zhang, Fuqing Zhang, and David J. Stensrud

Hurricane Bonnie (1998): Maintaining Intensity during High Vertical Wind Shear and an Eyewall Replacement Cycle

Erin M. Dougherty, John Molinari, Robert F. Rogers, Jun A. Zhang, and James P. Kossin

Impacts of Topography on Airflow and Precipitation in the Pyeongchang Area Seen from Multiple-Doppler Radar Observations

Chia-Lun Tsai, Kwonil Kim, Yu-Chieng Liou, Gyuwon Lee, and Cheng-Ku Yu

The Extremely Active 2017 North Atlantic Hurricane Season

Philip J. Klotzbach, Carl J. Schreck III, Jennifer M. Collins, Michael M. Bell, Eric S. Blake, and David Roache

Limited-Area Atmospheric Modeling Using an Unstructured Mesh

William C. Skamarock, Michael G. Duda, Soyoung Ha, and Sang-Hun Park

Relationships between Deep Convection Updraft Characteristics and Satellite-Based Super Rapid Scan Mesoscale Atmospheric Motion Vector-Derived Flow

Jason M. Apke, John R. Mecikalski, Kristopher Bedka, Eugene W. McCaul, Cameron R. Homeyer, and Christopher P. Jewett

Can the Direct Effect of Aerosols Improve Subseasonal Predictability?

Angela Benedetti and Frédéric Vitart

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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.

Selective Ensemble Mean Technique for Severe European Windstorms

S. Scher, G. Messori

First Published: 28 September 2018

The western Pacific subtropical high and tropical cyclone landfall: seasonal forecasts using the Met Office GloSea5 system

Joanne Camp, Malcolm J. Roberts, Ruth E. Comer, Peili Wu, Craig MacLachlan, Philip E. Bett, Nicola Golding, Ralf Toumi, Johnny C. L. Chan

First Published: 28 September 2018

Lagrangian transport across the upper Arctic waters in the Canadian Basin

F. Balibrea-Iniesta, J. Xie, V. J. García-Garrido, L. Bertino, A. M. Mancho, S. Wiggins

First Published: 24 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.

October 9, 2018

Hurricane Michael Strengthens Into Category 2 As it Barrels Towards Florida

October 9, 2018 - Time Magazine

to a major hurricane before landfall,” Robbie Berg, a hurricane specialist at the Miami-based storm forecasting hub, wrote in an advisory. A

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How climate change and technology research snared Nobel prize for two economists

October 8, 2018 - CBS News

Intergovernmental Panel on Climate Change cited Nordhaus' research in detailing how Earth's weather, health and ecosystems would be better

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Hurricane categories consider windspeed but ignore one of the deadliest effects

October 8, 2018 - Popular Science

describe wind strength in hurricanes is too deeply ingrained in the weather education of the United States to be able to completely remove

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'Unprecedented changes' must be made to stop catastrophic climate change, UN report says

October 8, 2018 - PBS NewsHour

life-or-death situation without a doubt," said Cornell University climate scientist Natalie Mahowald, a lead author on the report. Limiting

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Don Paul: New satellites offer more than just a pretty picture

October 8, 2018 - The Buffalo News

all this additional satellite imagery into our numerical weather models. A great deal of research has been ongoing at Pennsylvania State

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The Gathering Storm Over How Hurricanes Are Measured

October 5, 2018 - Bloomberg

in the Western Hemisphere, where the U.S. National Hurricane Center has responsibility for forecasting. 2. Why does it matter? It's become a

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Is the World Ready for the Next Big Tsunami?

October 4, 2018 - Foreign Policy

-Andrade and Diego Arcas, the director of the NOAA Center for Tsunami Research at the Pacific Marine Environmental Laboratory in Seattle.

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Birds use special senses to avoid storms

October 4, 2018 - Winston-Salem Journal

is coming; the faster and steeper the drop, the sooner the storm will arrive and the more intense it will be. Birds are known to be able to

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Hurricane categories are often misleading, here's how to fix the problem

October 4, 2018 - WPLG Local 10

Few meteorologists can explain why storm surge forecasts presented in local bulletins, National Hurricane Center advisories and on potential

[Read MORE](#)

Industry study warns airports: Climate impacts will be costly

October 4, 2018 - Climate Liability News

Radley Horton wrote in a 2015 study published by the American Meteorological Society. Extreme heat negatively affects aircraft performance,

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Warm and cold weather people are completely different

October 4, 2018 - New York Post

you prefer your temperatures a little milder? New research unveils the difference between cold and warm weather people. The study of 2,000

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Scientists zero in on cause of unusual Indonesian disaster

October 4, 2018 - MSN.com

tsunami," Costas Synolakis, director of the University of Southern California's Tsunami Research Center, told AFP. "It's fairly rare." When

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Using aircraft as weather stations

October 4, 2018 - Phys.org

Using aircraft as weather stations

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Why Fall Color Is Delayed in the Eastern U.S.

October 9, 2018 - Weather Underground

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It Looks Like Clouds But It Is Sea Ice--So Why Is It Swirling?

October 9, 2018 - Forbes

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Little-noticed treaty could help delay climate catastrophe

October 8, 2018 - The Guardian

2016 Kigali amendment on hydrofluorocarbons could reduce warming by a small but crucial 0.5C

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Tracking how rainfall morphs Earth's surface could help forecast flooding

October 2, 2018 - Science News

After Hurricane Harvey, scientists used GPS networks to track how Earth's surface morphed under the weight of floodwaters.

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Could Offshore Wind Farms Actually Sap the Rain From Hurricanes?

October 2, 2018 - Smithsonian.com

With enough turbines, the rainfall from Hurricane Harvey could have been reduced by 20 percent, according to a new study

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'Liquid soil' washed away buildings in Indonesia quake

October 3, 2018 - Click On Detroit

Costas Synolakis, director of the University of South California Tsunami Research Center. According to Synokalis, volcanic eruptions are

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How kite skiing and weighing snow helps improve projections of sea level rise

October 9, 2018 - Phys.org

"17"), and Jason approaches us after his regular satellite phone call with the meteorological office. It is bad news. They are forecasting

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2 Oct 2018

Tropical Depression Rosa threatens floods for 11 million people in the Southwest

October 2, 2018 - KITV 4 News

years," CNN meteorologist Gene Norman said. Research indicates global warming contributes to tropical storms getting "more intense, bigger

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Baseball fans dodging more cold snaps, heavy rainfall as climate patterns change

October 2, 2018 - The Morning Call

the rise, scientists say. Hurricane season is more active and storms more intense. Rising temperatures in the Arctic may also be causing the

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NASA sees Walaka becoming a powerful Hurricane

October 2, 2018 - Phys.org

intensity. GPM's Radar (DPR Ku Band) data revealed intense convective storms in a large feeder band that was wrapping around the tropical

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New weather model could increase tornado-warning times

October 1, 2018 - ScienceDaily

The results, reported in Monthly Weather Review published by the American Meteorological Society, suggest that we can greatly enhance our

[Read MORE](#)

In New Plan, Chinese Regime Loosens Controls on Air Pollution

October 1, 2018 - The Epoch Times

foundry industries should take turns peaking to reduce air pollution. The production of steel in hot weather was limited to 50 percent of

[Read MORE](#)

Irrigation Quantification From Space Exploiting Satellite Soil Moisture Products

October 1, 2018 - Sciencetrends

by L. Brocca, A. Tarpanelli, and P. Filippucci from the Hydrology Group of the Research Institute for Geo-Hydrological Protection of CNR, W.

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New research traces impact of weather safety training

October 1, 2018 - Phys.org

Parents Through Weather Science and Safety Workshops for Teachers, Bulletin of the American Meteorological Society (2018). DOI: 10.1175/BAMS

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California wildfires: Why October is the most dangerous month

October 1, 2018 - The Mercury News

in fire season,” said Craig Clements, director of the Fire Weather Research Laboratory at San Jose State University. “If it starts warming

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Forecasters push for cellphone alerts on severe storms

September 29, 2018 - StamfordAdvocate.com

Center bases it on numbers ... but we’re taking in societal impacts for winter weather, and I think maybe it’s time for us to start that

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Satellites being used to improve weather forecasting

September 29, 2018 - WRAL.com

and where the storm will arrive and the flooding it leaves behind. Beyond weather satellites like GOES-16, a fleet of NASA and other agency

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In the nation’s ‘hail alley,’ fierce storms and booming growth are on a costly collision course

September 28, 2018 - MSN.com

Ian Giammanco studies the effects of severe weather on the built environment as lead research meteorologist at the Insurance Institute for

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Landsat Before, After Images show Flooding in Carolinas from Florence

September 28, 2018 - USGS

In North Carolina, Florence's strong winds and storm surge could be felt along the coast and intense rains reached deep into the interior of

[Read MORE](#)

W&M: Cold winters kill tick-borne diseases, not ticks

September 28, 2018 - Daily Press

While Leu has looked into longer-term weather patterns affecting tick-borne diseases in his research, state public health entomologist David

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For collecting weather data, tiny satellites measure up to billion-dollar cousins

September 28, 2018 - Phys.org

on the same day, which is not possible with the standard government weather satellites right now, which maybe give you data over the same

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This building designed to flood is a glimpse of things to come

September 28, 2018 - Fast Company

the way it flows and designing structures to accommodate it. As storms get more intense with the impact of climate change, this kind of

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Super Typhoon Trami Looks Tremendous from Space in These Amazing Astronaut Photos

September 28, 2018 - Space.com

on the International Space Station got quite the view of the intense storm. European Space Agency astronaut Alexander Gerst shared several

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States that are using policy to fight climate change

September 28, 2018 - MSN.com

living in Hawaii have warranted concerns about rising sea levels and more intense storms due to climate change. A 2007 act signed by former

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Remarkably warm oceans spawned 2017's massive hurricanes

September 27, 2018 - Mashable

warm waters, and these warm conditions outweighed other weather factors. This research — published on Thursday in the journal Science — has

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Plants In The Arctic Are Getting Taller Due To Climate Change

September 27, 2018 - ValueWalk

According to Helen Beadman, head of polar, climate and weather at NERC, further research should focus on improving the way Arctic and alpine

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Orbiter spots NASA's silent Opportunity rover

September 27, 2018 - New York Post

good news: it's still there! Okay, so the dust storm obviously wouldn't have been intense enough to actually drag the heavy rover to a new

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Traditional methods of farming in a dry climate

September 26, 2018 - Phys.org

to prepare for greater extremes of temperature and weather. Researchers at the Tübingen collaborative research center (SFB) ResourceCultures

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UK must be more proactive in tackling climate change

September 25, 2018 - Phys.org

studies, Dr. Howarth is leading a programme of research on resilience to hot weather risks and also a project in collaboration with the

[Read MORE](#)

Loss of Bird Species Hampers Forecasting for Zimbabwe's Farmers

September 25, 2018 - Voice of America

the principal meteorologist at Zimbabwe's Meteorological Services Department, said the department's research indicated some - but not all

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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,

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My Latest WeatherEye

<https://www.sunlive.co.nz/blogs/12566-tauranga-september-rainfalls-18982018.html>

Thanks to all our regular contributors

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