

## New Zealand weather and climate news

Courtesy of MetService

*MetService*

**Falling snow hits the southern alpine passes**

MetService meteorologist Karl Loots said heavy rain fell in eastern areas of the North Island overnight Saturday as a front went over.

<https://www.stuff.co.nz/national/105674217/falling-snow-hits-the-southern-alpine-passes>

**Missing pilot Matt Wallis believed to have died in Wanaka crash, police say**

Metservice meteorologist Ravi Kandula said it had been a "cloudy, gloomy day with reduced visibility" since about midday in Wanaka.

<http://www.newstalkzb.co.nz/news/national/wanaka-rallies-in-search-of-pilot/>

**Heavy rain causes slips, more bad weather on the way**

MetService meteorologist Nick Zacher said a low pressure front is moving slowly in from the west.

Heavy rain warnings in place for Fiordland are predicting flooding and slips.

MetService meteorologist April Clark said the South Island would bear the brunt of the bad weather on Saturday but it would move further north overnight.

<https://www.radionz.co.nz/news/national/362314/heavy-rain-causes-slips-more-bad-weather-on-the-way>

**Tramper who died in Nelson Lakes named**

York said the cause of death was still to be identified by the coroner.

He said it was difficult to know how weather conditions had impacted the situation.

"There's so many variables around the weather.

"The conditions have been both fantastic and very poor in the time he had been in the park."

<https://www.stuff.co.nz/nelson-mail/news/105508409/tramper-who-died-in-nelson-lakes-appeared-well-prepared>

*MetOcean*

Wave energy converters are not geared towards the increase in energy over the last century

Wave energy converters are designed to generate the maximum energy possible in their location and take a typical year in the location as a reference. Researchers have been exploring how ocean energy in Ireland has evolved during the last century. The results reveal an increase of up to 40%, which directly affects the output of the converters

<https://www.sciencedaily.com/releases/2018/07/180720112831.htm>

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

Monitoring, early-warning system established on Qinghai-Tibet Plateau: white paper

BEIJING, July 18 (Xinhua) -- To monitor eco-environmental changes on the Qinghai-Tibet Plateau, China has set up a relatively complete monitoring and early-warning system, said a white paper released by the State Council Information Office on Wednesday.

[http://www.xinhuanet.com/english/2018-07/18/c\\_137332364.htm](http://www.xinhuanet.com/english/2018-07/18/c_137332364.htm)

Lightning, Thunderstorms, Floods Killed 1,006 People in India in Under 2 Months

The Indian government has established a high-level thunderstorm expert group mandated to develop a high-resolution operational prediction system by March 2019. The ongoing augmentation of the Indian Meteorological Department's observational network is expected to improve the mesoscale prediction system.

<https://sputniknews.com/asia/201807191066503803-thunderstorm-killed-thousands-india/>

Japan heatwave kills 30 and hospitalises thousands as authorities continue flood clean-up

Less than a month after flooding killed more than 200 people in western Japan, a heat wave has now brought unprecedented scorching temperatures, killing at least 30 people and sending thousands nationwide to hospitals.

<http://www.abc.net.au/news/2018-07-22/japan-heatwave-kills-30-and-sees-thousands-in-hospital/10022488>

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

#### **Meteorologists: Iowa Hit By At Least 5 Tornadoes**

Meteorologists say at least five tornadoes touched down as an unexpected swarm of destructive storms hit central Iowa Thursday, injuring at least 17 people, flattening buildings in three cities and forcing a hospital evacuation.

<https://www.wdio.com/weather/iowa-tornadoes/4995647/>

### International news and research

#### **Olympics-Faster, Higher, Hotter - Tokyo weather prompts 2020 fears**

TOKYO (Reuters) - As the two-year mark approaches for the Tokyo 2020 Olympics, Japan is being scorched by an intense heatwave that has prompted fears of similar extreme weather when the sporting showpiece takes place in the country.

<http://uk.businessinsider.com/r-olympics-faster-higher-hotter---tokyo-weather-prompts-2020-fears-2018-7/?r=AU&IR=T>

#### **Meteorologist: Ocean temps will play key role in storm intensity**

CURRITUCK — Is the Albemarle vulnerable to a hurricane this year, and is there any way to predict how many major storms could potentially strike the region before hurricane season officially ends in November?

<http://www.dailyadvance.com/News/2018/07/18/Meteorologist-Ocean-temps-will-play-key-role-in-storm-intensity.html>

#### **Sahara dust may make you cough, but it's a storm killer**

The bad news: Dust from the Sahara Desert in Africa -- totaling a staggering 2 to 9 trillion pounds worldwide -- has been almost a biblical plague on Texas and much of the Southern United States in recent weeks. The good news: the same dust appears to be a severe storm killer.

<https://www.sciencedaily.com/releases/2018/07/180720154909.htm>

## **How Lightning Sensors on a Weather Satellites Track Meteoroids**

What do lightning strikes and meteoroids zipping through space have in common? It turns out they both can be tracked from a weather satellite. Scientists have discovered that the Geostationary Lightning Mapper on NOAA's GOES-16 and GOES-17 satellites sees more than just lightning flashes in our skies.

<http://www.weathernationtv.com/news/lightning-sensors-weather-satellites-track-meteoroids/>

## **Rapid cloud clearing phenomenon could provide another piece of climate puzzle**

Researchers have described rapid and dramatic clearing of low cloud cover off the southwest coast of Africa. This newly observed phenomenon could help climatologists understand how clouds affect Earth's heating and cooling.

<https://www.sciencedaily.com/releases/2018/07/180719142157.htm>

## **Harvey Redesigns Rainfall Maps**

The deluge that swamped Houston changes how we measure downpours.

As Hurricane Harvey's aftermath dumped rain on the Houston area in August, the staff at the National Weather Service (NWS) knew they were watching history.

[Read more here](#)

## **How to Discover New Cloud Species**

Clouds form in a multitude of different shapes and sizes, their infinite combinations and position across the sky offering a visual drama in response to the light conditions. But despite their apparent randomness, a detailed naming convention is in place to categorize them.

[Read more here](#)

**Dramatic satellite images reveal thick palls of dust choking Beijing and blowing across 2,000 miles of Asia**

About a week ago, dust sweeping north from the Sahara blanketed parts of Eastern Europe, turning snow-covered ski slopes a strange shade of orange.

[Read more here](#)

## WMO

**Aeronautical meteorology supports safe and efficient aviation industry**

**Geneva, 20 July 18 - Aviation safety and efficiency, environmental risks and protection, as well as extreme weather and climate change impacts are on the agenda of the World Meteorological Organization (WMO) Commission for Aeronautical Meteorology.**

**[Read more here](#)**

**Meteorology in support of ocean science**

**UNESCO's Intergovernmental Oceanographic Commission (IOC) Executive Council has expressed support for stronger collaboration between the meteorological and the oceanographic communities, taking advantage of the process of reform of WMO constituent bodies.**

**[Read more here](#)**

**[Business development / commodities / infrastructure etc](#)**

**Clouds over massive Chinese infrastructure projects but China and Malaysia 'can weather change'**

**Beijing seeks greater belt and road cooperation as Mahathir envoy visits the Chinese capital to pave the way for Malaysian prime minister's trip next month**

**<https://www.scmp.com/news/china/diplomacy-defence/article/2155884/clouds-over-massive-chinese-infrastructure-projects>**

**A Bright Outlook for Weather As Infoplaza And BMT Argoss Merge**

**Infoplaza BV and BMT ARGOS BV, leading providers of global weather services, announced their decision to combine activities with immediate effect. The new weather company will strengthen its position in the Dutch weather market as well as the international offshore and marine industries.**

**<https://www.hellenicshippingnews.com/a-bright-outlook-for-weather-as-infoplaza-and-bmt-argoss-merge/>**

**The Weather Channel's Local Now Teams Up With Yelp**

This week The Weather Channel announced a new partnership with Yelp to bring new content to their Local Now weather service. With this deal, Local Now will not only give you weather and news updates but also recommendations, reviews, images, and videos of the best local restaurants and bars in their area.

<https://www.cordcuttersnews.com/the-weather-channels-local-now-teams-up-with-yelp/>

**PG&E adding weather stations from Chico firm in wildfire fight**

**CHICO** — A Chico-based weather forecasting business has landed a multi-million dollar contract to provide PG&E with a roughly 200 weather stations in the utility's effort to reduce wildfire danger throughout California.

<https://www.chicoer.com/2018/07/18/pge-adding-weather-stations-from-chico-firm-in-wildfire-fight/>

**Hurricanes and other extreme events**

The availability of water from underground aquifers is vital to the basic needs of more than 1.5 billion people worldwide. In recent decades, however, the over-pumping of groundwater, combined with drought, has caused some aquifers to permanently lose their essential storage capacity.

[Read more here](#)

**More category 5 hurricanes forecasted by scientists**

Researchers have learned from studying 2012's Hurricane Sandy, that we are more likely to see larger, more powerful hurricanes in the future.

[Read more here](#)

**Aviation**

**JetBlue Airways to Implement ClimaCell's New HyperCast Aviation Microweather Software to Increase Safety and Efficiency**

*New HyperCast Aviation solution designed specifically for airlines and airport operations teams*

**BOSTON, July 18, 2018 (GLOBE NEWSWIRE)** -- ClimaCell<sup>®</sup>, the microweather™ technology company that finds and forecasts location-specific, short-term weather that others can't see, launched today a new Aviation version of its HyperCast™ software. The product has all of the

weather measurement and forecasting capabilities of ClimaCell's cross-industry HyperCast product that is used by major sports teams, construction companies, drone companies, and ride-sharing companies, but with additional features designed specifically for airline and airport operations teams

<https://www.ptcommunity.com/wire/jetblue-airways-implement-climacell-s-new-hypercast-aviation-microweather-software-increase>

### Communications/social media

You can now clearly show how communication adds to business value

One of the toughest tasks for communicators is to clearly show how we add direct, tangible value to a business. Communication professionals internationally believe proving our value is one of the most important issues confronting practitioners. Responding to this need, a practical Communication Value Circle framework has been developed, which helps communicators to explain the 'big picture' about their role and demonstrate how it adds measurable value to the organization.

<https://cuttingedgepr.com/free-articles/you-can-now-clearly-show-how-communication-adds-to-business-value/>

### Energy and Mining

Geo40 partner with Maori on world-leading energy project

(19 July 2018) - Geo40, in cooperation with Contact Energy and the Ngati Tahu Tribal Lands Trust, is this month set to start commercially extracting silica from geothermal fluid as part of a world-leading sustainable energy partnership.

<http://www.scoop.co.nz/stories/BU1807/S00476/geo40-partner-with-maori-on-world-leading-energy-project.htm>

### Suffering that sinking feeling

Giants of energy and defence are in choppy waters

The heatwave has helped leave an £80 million hole in profits, SSE warned as shareholders waved through plans to merge its supply business with Npower.

<https://www.thetimes.co.uk/article/fine-weather-burns-80m-hole-in-sse-profits-kgf8nz83x>

## Satellites and radar

### **Garmin Announces New Weather Radar**

Garmin introduced a new Doppler-based, solid-state aviation weather radar on Wednesday. According to the company, the GWX 75 is intended for use in a wide range of aircraft and was designed as a direct replacement for the GWX 70. The GWX 75 features a high-definition color palette, a range of 320 nautical miles, horizontal scan angles of up to 120 degrees, and pilot-adjustable sector scanning. Additional options include turbulence detection and ground clutter suppression.

<https://www.avweb.com/avwebflash/news/Garmin-Announces-New-Weather-Radar-231156-1.html>

## Transport/roading/shipping/freight

### **Cyber, Climate Risks and Human Error Threaten Shipping's Safety Progress, According to New Allianz Report**

*Safety & Shipping Review 2018: 94 large ships lost worldwide in 2017, down 38% over 10 years. Bad weather involved in 1 in 4 losses.*

<https://www.businesswire.com/news/home/20180718005180/en/Cyber-Climate-Risks-Human-Error-Threaten-Shipping%E2%80%99s>

### **Kiwi duck tour operator says US boat shouldn't have been operating in stormy conditions**

A director of a duck tour company in New Zealand said the deaths of 17 people in a duck boat accident in the US was tragic, but the boat should not have been operating.

[https://www.nzherald.co.nz/nz/news/article.cfm?c\\_id=1&objectid=12093438](https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12093438)

### **The Duck Boat Tragedy Was Preventable Because The Storm Did Not 'Come Out Of Nowhere'**

Like everyone else, my heart aches for the victims of the duck boat accident in Branson, Missouri this week. In fact, I write this piece with the hope that future incidents like this can be prevented.

<https://www.forbes.com/sites/marshallshepherd/2018/07/20/duck-boat-tragedy-was-preventable-because-storm-did-not-come-out-of-nowhere/#391f511930f8>

### **Ferry accidents: Not so gently down the stream**

It was a fun outing at sea for everyone and nothing seemed amiss. At around 4pm, the Phoenix departed for Phuket island with its 105 passengers. 10 minutes into the journey, the sky turned dark. Half an hour later, the boat started shaking violently as a monsoon storm – said to be the biggest storm in five years – hit the boat some seven kilometres from shore.

<https://theaseanpost.com/article/ferry-accidents-not-so-gently-down-stream-0>

**How Missouri Duck Boat Tragedy Unfolded: Timeline of Weather Watches, Warnings, Reports**

A squall line of severe thunderstorms roared through the Ozarks of southwest Missouri.

This line of storms produced wind gusts over 50 mph near Table Rock Lake.

The National Weather Service issued several warnings covering the potential for dangerous high winds.

<https://weather.com/storms/severe/news/2018-07-20-missouri-duck-boat-table-rock-lake-weather-timeline>

**South China, Southeast Asia waters lead global shipping losses, says Allianz review**

The waters of South China and Southeast Asia have become the accident hotspot for global shipping, with 30 vessels, making up almost a third of the 94 losses worldwide coming from the region in 2017.

<http://www.seatrade-maritime.com/news/asia/south-china-southeast-asia-waters-lead-global-shiping-losses-according-to-allianz-review.html>

### Journals online

The June 2018 edition of the CMOS Bulletin is available

<http://bulletin.cmos.ca/cmos-bulletin-scmo-vol-46-no-3-june-2018/>

<http://bulletin.scmo.ca/bulletin-scmo-volume-46-numero-3-juin-2018/>

Thanks to MetService Library for these clips

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My latest WeatherEye .... Tropospheric-temperatures-1989-June-2018. from John Maunder

<https://www.sunlive.co.nz/blogs/12329-tropospheric-temperatures-1989-june-2018.html>