

New Zealand weather and climate news

These clips are courtesy of MetService library

MetService

Editorial: Unsettled spring is not that unusual

All of that certainly makes our weather sound fairly unsettled, so it might be surprising to hear the analysis from MetService duty meteorologist Tui McInnes on Monday that the most unusual weather feature of the spring so far was actually the high-pressure system that produced settled weather for much of the country last week.

<https://www.stuff.co.nz/the-press/opinion/108703637/editorial-unsettled-spring-is-not-that-unusual>

Jandal weather? More like Snow-vember

"Most people can expect to see some rain over the next few days - however, snow is surprisingly the main focus of this event," forecaster Tui McInnes said.

https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12162251

Dunedin drenched, volunteers called on to fill sandbags

Civil Defence is urging Dunedin residents to stay off the roads after torrential rain caused widespread flooding and slips around the city this afternoon. A heavy rain warning is in place for the next few hours and residents are being urged to conserve water to ease pressure on the wastewater system. MetService meteorologist Lisa Murray spoke to Lisa Owen.

<https://www.radionz.co.nz/national/programmes/checkpoint/audio/2018672049/dunedin-drenched-volunteers-called-on-to-fill-sandbags>

Soggy start to summer likely after November deluge

MetService forecaster Georgina Griffiths said November would end on a "very wet note" for people in the east of the South Island.

"The highs of the last two and a-half months are goneburger, done and dusted.

<https://www.stuff.co.nz/science/108743395/soggy-start-to-summer-likely-after-november-deluge>

Wintry weather expected to continue into Tuesday after snow and hail for South Island and Wellington

MetService severe weather forecaster Andy Downs said mid-November snow was "unusual, but not unprecedented". The wintry conditions were caused by a strong, cold southerly airstream moving across New Zealand.

<https://www.stuff.co.nz/national/108691268/snow-falls-to-400m-overnight-as-strong-cold-southerly-moves-up-south-island>

MetService: Conditions perfect for 100m-tall Canterbury twister

Severe weather forecaster Andy Downs said without knowing the full extent of the damage it was difficult to say how strong the tornado's winds had been.

<https://www.stuff.co.nz/science/108694095/metservice-conditions-perfect-for-100mtall-canterbury-twister>

Auckland facing a cold and wet Tuesday following a day of snow in the south

Metservice meteorologist Angus Hines said unstable conditions throughout the nation will also hamper the weather around Auckland.

"The shower activity is really going to be picking up, becoming more frequent for a time in the middle of the day and afternoon," he said.

https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12162810

Evacuations as flooding hits Dunedin

MetService meteorologist Ravi Kandula said a heavy rain warning remained in place for eastern Otago until 7pm this evening and steady rain was expected to get heavier this afternoon when "significant" falls were expected.

<https://www.odt.co.nz/news/dunedin/evacuations-flooding-hits-dunedin>

Rising floodwaters threaten Otago township, block roads

Forecaster Claire Flynn said there was risk of more flooding and slips.

She said motorists should take care.

<https://www.radionz.co.nz/news/national/376386/rising-floodwaters-threaten-otago-township-block-roads>

More rain for Hawke's Bay after 'cold pool' soaks region

"A little bit of rain was recorded in Napier from about 1pm but the most recorded in one hour was between 3pm and 4pm with about 4.2mm," MetService Meteorologist Claire Flynn said.

https://www.nzherald.co.nz/hawkes-bay-today/news/article.cfm?c_id=1503462&objectid=12163677

Unseasonably cold and wild weather tipped to last much of the week

MetService meteorologist Claire Flynn said Auckland residents could expect the unsettled weather to continue through the week with more hail and thunderstorms possible tomorrow, along with a top temperature of 16C.

https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12163445

Hail batters central Auckland as storms roll across the region

While there is no severe weather watch currently in place, MetService spokesperson Claire Flynn says most of the North Island could still get "some decent hail and some fairly heavy rain"

Another spokesperson for MetService, Leigh Matheson, explains hail requires water to freeze within convective clouds. The unseasonable weather is being caused by a "large cluster" of these hail-causing clouds heading over central Auckland today.

<https://www.newshub.co.nz/home/new-zealand/2018/11/hail-batters-central-auckland-as-storms-roll-across-the-region.html>

Eye kept on Clutha as level drops

MetService meteorologist Andrew James said yesterday was Dunedin's wettest day in a November which already had had three times the average rainfall.

<https://www.odt.co.nz/regions/eye-kept-clutha-level-drops>

Weather eases after widespread flooding in Dunedin and Otago

MetService Meteorologist Andrew James said Dunedin had experienced its wettest day of the month with 47.7 millimetres of rain falling, with a peak hourly total of 10.6mm.

<https://www.stuff.co.nz/national/108716716/wintry-conditions-set-to-continue-as-heavy-snow-and-rain-forecast-for-south-island>

Warnings after snow, heavy rain hit the lower South Island

MetService meteorologist Karl Loots said the rain has been heavy and persistent from Southland to South Canterbury.

<https://www.radionz.co.nz/news/national/376322/warnings-after-snow-heavy-rain-hit-the-lower-south-island>

Waterspout sighting on North Shore 'crazy'

MetService forecaster Allister Gorman said the waterspouts were not a surprise, given the thunderstorm that lashed much of the country on Tuesday.

<https://www.stuff.co.nz/auckland/108747098/Waterspout-sighting-on-North-Shore-crazy>

TVNZ's weatherman Dan Corbett says 'be careful' of mother nature

Dan Corbett, who is known fondly as Dan the Weatherman, lives and breathes meteorology. He is the flourish at the end of TVNZ 1's nightly news bulletin that can make even a rainy day sound like a barrel of laughs.

<https://www.stuff.co.nz/entertainment/tv-radio/tv-guide/108751677/tvnzs-weatherman-dan-corbett-says-be-careful-of-mother-nature>

Cleanup in flood's wake

Authorities across the South have turned their attention to the cleanup as the worst of this week's flooding appears to be over.

<https://www.odt.co.nz/regions/cleanup-floods-wake>

All hail: 'Unusual' hail storm sends mum and daughter on a 'snow' hunt

An impromptu, and rare, 'snow' hunt in November has resulted in afternoon screams of delight - music to a mother's ears.

The "unusual" cold snap on Monday, as temperatures dropped from 13 degrees Celsius to 8C, brought a dump of hail to State Highway 1, between Blenheim and Picton.

<https://www.stuff.co.nz/national/108710582/unusual-hail-storm-brings-unseasonal-temperatures>

Watch: Stunning aerial footage shows Otago's Clutha River flowing at levels not seen for nearly 20 years

Confronting aerial footage shows Otago's Clutha River flowing at levels not seen for nearly 20 years after torrential rains slammed the region.

According to the Otago Regional Council (ORC) "the Clutha River is currently flowing at 2720 cumecs, flood flows of this magnitude have not been seen in the Clutha River since November 1999".

<https://www.tvnz.co.nz/one-news/new-zealand/watch-stunning-aerial-footage-shows-otagos-clutha-river-flowing-levels-not-seen-nearly-20-years>

NIWA

Update on El Niño

An abnormal El Niño weather event is looking likely for New Zealand over summer, according to NIWA meteorologist Ben Noll.

<http://www.scoop.co.nz/stories/SC1811/S00066/update-on-el-nino.htm>

Extreme weather (and other news) – Australia and Pacific

NZ seeks to fund Pacific projects which help 'local people'

New Zealand wants to back a different type of aid project in the Pacific and wants no part of a bidding war with big powers for influence in the region.

<https://www.radionz.co.nz/news/political/376224/nz-seeks-to-fund-pacific-projects-which-help-local-people>

PASSING OF DIRECTOR METEOROLOGICAL SERVICE

It is with great sadness that we announce the passing of Mr. Ravind Kumar, Director of the Department of Fiji Meteorological Service, who passed away at his home in Waqadra, Nadi on Sunday 18th November, 2018.

<http://fijisun.com.fj/2018/11/20/passing-of-director-meteorological-service/>

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

Malaysians unprepared for lightning strikes

PETALING JAYA: Malaysia has among the highest incidence of lightning activity in the world, but the country is woefully unprepared for these deadly strikes.

<https://www.thestar.com.my/news/nation/2018/11/10/msians-unprepared-for-lightning-strikes-expert-many-lack-awareness-and-safety-measures/>

Typhoon Toraji lashes Vietnam, kills at least 12

Emergency units dispatched to areas hit by flash floods and landslide triggered by the typhoon

<https://www.aa.com.tr/en/asia-pacific/typhoon-toraji-lashes-vietnam-kills-at-least-12/1314914>

International news and research

In all weathers – An Irishwoman’s Diary on sailor and meteorologist Libby Greenhalgh

Biting, cutting, piercing, following – there are as many adjectives as there are English words for wind. The Foclóir Seoltóireachta has 40 Irish phrases for “gaoth”, while Icelandic terms for gales and storms match Inuit ways for describing snow.

<https://www.irishtimes.com/opinion/in-all-weather-an-irishwoman-s-diary-on-sailor-and-meteorologist-libby-greenhalgh-1.3696760>

Half of the world's annual precipitation falls in just 12 days, new study finds

Climate change likely to make global precipitation more uneven

https://www.eurekalert.org/pub_releases/2018-11/ncfa-hot111518.php

The first rains in centuries in the Atacama Desert devastate its microbial life

These recent rains are attributed to changing climate over the Pacific Ocean

https://www.eurekalert.org/pub_releases/2018-11/snrc-tfr111418.php

By 2100, Up to Six Natural Disasters At Once Could Threaten Some Areas

If you think recent natural disasters have been terrifying — just wait. Things will only get worse over the next century, a group of leading climate change researchers warns in a paper published in Nature Climate Change this week.

[Read more here](#)

Current climate models underestimate warming by black carbon aerosol

Researchers have discovered a new, natural law that sheds light on the fundamental relationship between coated black carbon and light absorption.

<https://www.sciencedaily.com/releases/2018/11/181119155950.htm>

WMO

WMO advances Integrated Global Greenhouse Gas Information System

WMO has hosted the first symposium and user summit of the Integrated Global Greenhouse Gas Information System (IG3IS), which aims to help inform and guide reductions in emissions of carbon dioxide and other heat trapping gases which are driving climate change.

[Read more here](#)

Farming/horticulture

Orchardists 'dodge a bullet' despite wild weather

Central Otago orchardists believe they've escaped significant crop damage despite the brutal weather this week.

<https://www.odt.co.nz/rural-life/horticulture/orchardists-dodge-bullet-despite-wild-weather>

Climate change 'creeping up' on winemakers and putting pressure on grapes, says scientist

Hotter, drier summers mean many wine grape growers have to harvest their grapes earlier, resulting in riper wines with higher alcohol content.

Compressed vintages are a real challenge through the wine production chain and many growers are having to change grape varieties as average temperatures rise.

<https://www.abc.net.au/news/2018-11-22/climate-change-creeping-up-on-winemakers/10519206>

Hydrology

Smarter approach to flood prevention on test

UK: A project has been launched which aims to combine real-time measurement of water levels, weather forecasting, historical data and smart analysis to prevent the flooding of railway lines.

<https://www.railwaygazette.com/news/technology/single-view/view/smarter-approach-to-flood-prevention-on-test.html>

Marketing

Forecasting The Value Of Weather Data For Marketers

Can marketers who better understand tomorrow's weather make more profitable decisions today? Does this insight equip marketers with a competitive edge? If so, how can this weather insight be most effectively leveraged?

<https://www.forbes.com/sites/paultalbot/2018/11/19/forecasting-the-value-of-weather-data-for-marketers/#593c2be41b70>

Transport/roading/shipping/freight

StormGeo Launches Navigator Solutions Portfolio

StormGeo, a world-leading provider of ship weather routing and fleet performance systems, today announced the launch of the Navigator Solutions Portfolio. Delivered by a single vendor, the portfolio is an integrated, navigational and route optimization platform connecting onboard solutions to shore-based decision support. The key advantages of a single-vendor connected system include sharing internal information and utilizing the full benefit of digitalization to improve performance and reduce costs.

<https://www.hellenicshippingnews.com/stormgeo-launches-navigator-solutions-portfolio/>

Transport Minister Phil Twyford earmarks \$29 million for safety improvements on SH3

The Government has committed almost \$30 million towards safety improvements on a busy central North Island road.

Transport Minister Phil Twyford this morning announced work will begin in February to make "urgent safety improvements" to State Highway 3 – from Waitara to Bell Block, heading north of New Plymouth.

https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12163207

World's First Galciated Motorable Road Being Laid in Ladakh by BRO Amid Extreme Weather Conditions

The months when construction works can be taken up are few, forcing officials to be ready with plans and strategies in advance to achieve targets.

<https://www.news18.com/news/india/worlds-first-galciated-motorable-road-being-laid-in-ladakh-amid-extreme-weather-conditions-by-bro-1942829.html>

Innovation and technologies (inc data and new products)

Understory Secures \$7.5M in New Funding to Power Global Expansion of Weather Sensor Network

New investors include Revolution's Rise of the Rest Seed Fund

Growth funding to expand Understory's international presence in the agriculture market with ground-truth, actionable weather data

<https://www.businesswire.com/news/home/20181120005192/en/Understory-Secures-7.5M-New-Funding-Power-Global>

Space weather

Professor Craig Rodger: The hazards of space weather

Explosions on the sun can cause storms that shut down satellites and electric systems on earth - thankfully, University of Otago's Craig Rodger says, New Zealand is ahead of the curve.

<https://www.radionz.co.nz/national/programmes/ninetonoon/audio/2018671987/professor-craig-rodger-the-hazards-of-space-weather>

Climate change / global warming / sea level rise

150 academics, researchers urge 'robust and emergency' climate action

Robust, emergency action is needed in response to the "deepening ecological crisis" of climate change, says a letter to the Government signed by 150 academics and researchers.

<https://www.stuff.co.nz/national/politics/108700655/150-academics-researchers-urge-robust-and-emergency-climate-action>

Quarterly Journal of the Royal Meteorological Society

Uncertainty and scale interactions in ocean ensembles: From seasonal forecasts to multidecadal climate predictions

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

Version of Record online: 08 November 2018

The ocean plays an important role in the climate system on time-scales of weeks to centuries. Despite improvements in ocean models, dynamical processes involving multiscale interactions remain poorly represented, leading to errors in forecasts. We present recent advances in understanding, quantifying, and representing physical and numerical sources of uncertainty in novel regional and global ocean ensembles at different horizontal resolutions.

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News

November 20, 2018

News

Northwest Forests Will Weather Climate Change Better Than Others In The West: Study 

November 19, 2018 - Oregon Public Broadcasting

co-author Polly Buotte of OSU. Buotte says the research does not predict fire or drought severity — just whether or not a specific forest

[Read MORE](#)

Cable news networks spend far more time talking about hurricanes than wildfires

November 19, 2018 - The Washington Post

Why that imbalance? A few likely reasons. Forecasting. Notice that the peaks in hurricane coverage happened in concert with or before the

[Read MORE](#)

Colder, Darker Climates Tied to Increased Alcohol Consumption

November 19, 2018 - Psych Central

World Health Organization, the World Meteorological Organization and other large, public data sets, the research team found a clear negative

[Read MORE](#)

Climate Change and National Security, Part I: What is the Threat, When's It Coming, and How Bad Will It Be?

November 19, 2018 - Lawfare Blog

to include changes in precipitation and the hydrological cycle, more intense storm events, increases in the severity and frequency of

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DIY crop speed breeding system to boost drought research

November 19, 2018 - Phys.org

DIY crop speed breeding system to boost drought research

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It may be getting harder for Puerto Rico's national forest to recover from storms

November 18, 2018 - Pittsburgh Post-Gazette

process of regeneration. Climate change is expected to make big storms more intense, and it's unclear how forests like El Yunque will react.

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California cities now have the worst air pollution on Earth as smoke blows into town

November 17, 2018 - Yahoo! News

woes have been further aided by a common weather phenomenon known as an inversion layer, wherein air pollution gets trapped under a layer of

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Both people and cities making hurricanes worse, including Katrina, say new studies

November 15, 2018 - NOLA.com

intensification of storms, according to Tom Knutson, a research meteorologist at the National Oceanic and Atmospheric Administration. The

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NOAA's New Pacific Satellite Has Sent Back Its First Glorious Images of Alaska and Hawaii

November 15, 2018 - Earther - Nature for Nerds - Gizmodo

But they do provide a snapshot of what's meteorologists will have to work with. Advertisement
The satellite will join GOES-16 and Japan's

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Analysis of data sources improves ability to respond to climate change in East Africa

November 15, 2018 - Phys.org

10-day, and monthly time scales. The research, published in the journal of Hydrology and Earth System Sciences, revealed that the Climate

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[Unintended consequences of dams, reservoirs worsen water shortages, study finds](#)

November 14, 2018 - UPI.com

society is paramount." In addition to more research into the interplay between hydrology, society and water infrastructure, Di Baldassarre

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[Why space debris cleanup might be a national security threat](#)

November 14, 2018 - EconoTimes

by the breakup of older spacecraft. In February 2015, a Defense Meteorological Satellite Program (DMSP-F13) spacecraft, called USA 109,

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[When will this terrible wildfire season in California end?](#)

November 13, 2018 - Mashable

things to come as this century progresses," Sasha Gershunov, a research meteorologist at the Scripps Institution of Oceanography, said in an

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[Disaster after Disaster, California Keeps Falling Short on Evacuating People from Harm's Way](#)

November 20, 2018 - Los Angeles Times

More than 140 people have died in California over the last 13 months from various calamities. In many of these disasters, officials have acknowledged flaws in the evacuation plans.

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[Four Weird Things We've Seen During This November Cold Snap](#)

November 20, 2018 - The Weather Channel

November has begun with cold conditions dominating a large swath of the central United States, yielding some weather oddities when it comes to snowfall and temperatures.

[Read MORE](#)

[Half of the World's Precipitation Falls in Just 12 Days, New Study Finds](#)

November 20, 2018 - American Geophysical Union

Climate models project this lopsided distribution of rain and snow is likely to become even more skewed by century's end, with half of annual precipitation falling in 11 days.

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[Air Quality in California: Devastating Fires Lead to a New Danger](#)

November 20, 2018 - The New York Times

The wildfires that have laid waste to vast parts of California are presenting residents with a new danger: air so thick with smoke it ranks among the dirtiest in the world.

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[The Science of Why a Modest Snowstorm Caused Havoc on the East Coast](#)

November 20, 2018 - Forbes

This week was truly one of "fire and ice." The nation continued to watch the tragedy of the California wildfires. As that disaster continued to play out, a relatively "modest" snowstorm caused significant mayhem in the mid-Atlantic and Northeast.

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[AVs still need better tech — and more data — to drive in bad weather](#)

November 14, 2018 - Axios

Most AVs use a combination of lidar, radar and cameras to survey their environment, but these technologies can fall short in even mildly inclement weather.

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[How to make undergraduate research worthwhile](#)

November 14, 2018 - Nature

Practices might differ from country to country, but undergraduate students can be better served in research, says Shaun Khoo.

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[Why it's so hard to issue a fire warning](#)

November 15, 2018 - Axios

In the U.S., there are warnings for tornadoes, floods and hurricanes — but the nearly 30,000 residents of Paradise, California got no official warning from the National Weather Service that an explosively growing wildfire was headed for their community on Nov. 8.

[Read MORE](#)

[Rain in wildfire-scarred Northern California will end fire threat, bring new ones](#)

November 20, 2018 - CNN.com International

is in effect Wednesday afternoon through Friday morning. A Winter Storm Watch is in effect Wednesday Afternoon and Wednesday night above

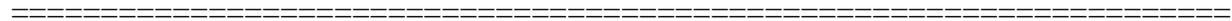
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[Mars InSight is coming in for a landing soon on the Red Planet](#)

November 16, 2018 - CNN.com International

on the surface. But the engineers prepared the spacecraft to land during a dust storm if need be. Mars is known for its dust storms, some

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