

New Zealand weather and climate news

(MetService focus)

MetService to upgrade forecast on website

Otago Daily Times

MetService communications meteorologist Lisa Murray said yesterday the website, which until now has shown only Greymouth, would be refreshed to ...

NZ's new role in global Tropical Cyclone preparedness

Scoop.co.nz

The World Meteorological Organization (WMO) has named Chris Noble from New Zealand's MetService as the Chair of the Tropical Cyclone ...

Flooding hits the streets as deluge drenches Manawatū

Stuff.co.nz

MetService recorded 34 millimetres of rain in Palmerston North from midnight to midday on Thursday. Some streets in Palmerston North were flooded ...

NZ's home of skiing opens with new chairlifts and snowmaking

Queenstown's playground just became a little more epic with the opening of Coronet Peak's ski area today, with upgrades across the mountain focused on improving access for sightseers and snowsports enthusiasts.

MetOcean

Southern Ocean Wave Atlas presentation at NZ Antarctic Science Conference

MetOcean Solutions, commissioned by the New Zealand Defence Force, produced a state of the art wave atlas of the Southern Ocean (SO). Next week our key findings will be presented at New Zealand Antarctic Science Conference in Christchurch.

5-7 Aug / Nelson

Unlocking the potential of our oceans

Cawthron Institute invites professionals from industry, government and iwi with an interest in the possibilities of open ocean aquaculture to join the Cawthron Open Oceans Symposium.

ECMWF

SMOS joins forces with top weather forecasting system

Space Daily

As of yesterday, 11 June 2019, measurements from ESA's SMOS mission are being fully integrated into ECMWF's forecasting system, allowing for a ...

WMO

World Meteorological Congress approves sweeping reforms

The World Meteorological Congress has approved a package of sweeping reforms to embrace a more comprehensive Earth system approach, with a stronger focus on water resources and the ocean, more...

WMO honours outgoing President David Grimes

Saluted by a standing ovation, David Grimes of Canada wrapped up his second and final term today as the World Meteorological Organization's President, after eight years that helped shape the future...

WMO congress boosts early warning and humanitarian action

The World Meteorological Organization's ruling conference has endorsed a package of measures to strengthen early warnings against hazards like floods and tropical cyclones and to ensure that these...

WMO Congress backs shift to "Earth system" approach

The World Meteorological Organization's ruling congress has backed a strategic shift to a more integrated "Earth system" approach that aims to break down barriers between different research fields,...

56th issue of the TCC News - Japan Meteorological Agency

This issue covers: Launch of the new JMA's One-month Guidance Tool / Incorporation of Standardized Precipitation Index (SPI) for drought monitoring / into the ClimatView tool- Summary of Japan's...

WMO Congress backs new public-private engagement plan

Posted:

The World Meteorological Organization's ruling Congress has adopted a landmark declaration on strengthening links between the public, private and academic sectors so that countries can better tackle...

Divino Moura of Brazil receives IMO prize, WMO's top honour

The World Meteorological Organization has presented its top prize to Divino Moura of Brazil for his outstanding work in meteorology and climatology and his leadership in science.

WMO adopts new ocean agenda

The World Meteorological Congress has approved a new to streamline and enhance WMO ocean activities, boost inter-agency coordination and cooperation, and contribute to the UN Decade of Ocean Science...

WMO embarks on new strategy on hydrology and water resources

Water stress, water-related hazards and water quality pose increasing challenges to modern society. And yet, the capacity to monitor and manage this vital resource is fragmented and inadequate. The...

WMO: protect radio frequencies vital to earth observations

The governing congress of the World Meteorological Organization has stressed the need to protect radio frequencies allocated to services supporting earth observations. Jeopardizing these frequencies...

Extreme weather (and other news) – Australia and Pacific

West Pacific tropics may heat up next week with 1st named storm since February

AccuWeather.com

AccuWeather meteorologists are monitoring an area between Micronesia and the Marshall Islands as the breeding ground for the basin's next ...

Extreme high rainfall for Niuafu'ou in May

Matangi Tonga

While the tropical Pacific Ocean and atmosphere remain near El Nino thresholds, the outlook remains on El Niño watch with climate models ...

PNG govt urged to build capacity to respond to disasters

RNZ

So it continues to happen and it'll probably become more prevalent with climate change, and we've got to be prepared for that and things like El Nino.

Timely and reliable meteorology and hydrology information

Fiji Times

THE Ministry of Disaster Management and Meteorological Services will be able to provide timely and reliable meteorology and hydrology information ...

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

South Africa joins international space weather monitoring community

defenceWeb

Dr Phil Mjwara, Department of Science and Technology (DST) director-general, recently visited the Space Weather Regional Warning Centre for Africa ...

World's highest operating weather stations installed on Everest

Business Standard

World's highest operating weather stations installed on Everest ... Data from the weather stations and other new research conducted as part of ... been edited by Business Standard staff and is auto-generated from a syndicated feed.).

Tens of thousands hit by floods in central Indonesia

The Straits Times

Mr Mulyono Prabowo, a meteorologist from the country's meteorology agency, the BMKG, said he expected the extreme weather to continue in the ...

Now weather forecasters shield India Inc from rainy days

Economic Times

At present, four major private weather forecasters are active in India. ... weather data along with AI, Internet of Things (IoT) and analytic technologies.

Taiwanese meteorology experts blocked from Geneva summit at last minute

Taipei Times

Taiwanese experts were yesterday abruptly blocked from attending the World Meteorological Congress in Geneva, Switzerland, reportedly due to ...

New Zealand research

Climate secrets buried deep beneath the Southern Ocean

A Kiwi couple are on board a ship filled with international experts hoping to extract climate insights from below the seabed in the Southern Ocean.

University of Otago paleoceanographer, Christina Riesselman and husband Chris Moy, a paleoclimatologist, are among the 30 researchers on the JOIDES Resolution.

International news and research

The Weather Machine by Andrew Blum review — the forecast for weathermen is bleak

Algorithms are replacing human forecasters, but Richard Morrison predicts turbulence

Weather forecasting in times of extreme weather events

Economic Times

He is also member of a Whatsapp group called India Weather People, comprising of 100-plus enthusiasts. The data generated by the PWS at Powai is ...

NOAA Says Upgraded Weather Model to Yield Better Forecasts

Government Technology

The software models the physics of the weather, taking from satellites and sensors, and develops predictions of coming conditions. “The dynamical ...

Aviation

First public open day for NASA's flying telescope SOFIA

NASA and German Aerospace Center's Stratospheric Observatory for ... SOFIA's 130-strong crew is currently stationed in Christchurch to conduct ...

Whanganui to benefit from \$50 million training deal for Indian pilots

A commercial pilot academy based at Whanganui Airport has struck a \$50 million deal with India's largest passenger airline to train hundreds of pilots.

Further progress made on refreshing Air Force capabilities

Scoop.co.nz

The project aligns with the Civil Aviation Authority-directed New Southern Sky programme, which seeks to follow global demands to realise the safety, ...

How Qantas and other airlines decide whether to fly near volcanoes

Mount Agung volcano in Bali, Indonesia, has been erupting intermittently since November 2017. The volcano erupted six times in the last month and resulted in the cancellation and delay of some flights in and out of Bali's Ngurah Rai International Airport.

Business/Insurance

Zurich launches CE training focused on severe weather

Insurance Business

"This training program is premised on the clear understanding that our customers don't conduct business in a vacuum," said Paul Lavel, chief claims ...

Clouds

Weather What!? Clouds that look like a rainbow - what is going on here!?

KGO-TV

She did the responsible thing and asked our meteorologists. Mike Nicco jumped at the chance to explain what she was seeing - it's a circumhorizontal ...

Energy and Mining

Global Energy Demand Increase Attributed to Weather

The Maritime Executive

By MarEx 2019-06-11 23:53:49. BP has released its 68th annual Statistical Review of World Energy, highlighting the growing divergence between ...

Fog

Fog delays at NZ airports could be blown away by trans-Tasman technology project

Flight delays caused by fog-bound airports may be a problem of the past in a few years, with New Zealand investing millions of dollars to explore a new technology that would improve the accuracy of GPS data.

Government (regional and national)

Government to invest \$75m into Gracefield Innovation Quarter revamp

New Zealand Herald

A \$75 million cash injection into Callaghan Innovation's Gracefield Innovation ... seismic improvements, asbestos removal, roof and weather tightness.

Lightning

Lightning strike kills 2 teenagers in western Pa., tornado touches down in NJ

AccuWeather.com

A stormy Thursday in the Northeast turned deadly after a lightning strike killed two teenagers who were fishing at a park in western Pennsylvania.

What does it feel like to be struck by lightning?

Exploding clothing, curious skin marks and the crawling sensation of being covered in ants. Kate Newton meets a man who was struck by lightning and talks to the experts about what happens to your body if you're hit.

Lightning strike kills two giraffes at a popular Florida attraction

(CNN)A drive-through Florida safari park confirmed Tuesday that two giraffes were killed instantly by lightning last month.

How South Jersey is protecting people from lightning

Press of Atlantic City

Twice a month, Meteorologist Joe Martucci unearths how our local communities prepares and plans for the elements. This month's theme, June ...

Hiker killed by 'freak accident' lightning strike in Scottish Highlands

A 55-year-old woman has died after being struck by lightning in a "freak accident" while hiking through a mountain range in Scotland.

Lightning kills more people (in Nepal) than flood and landslide, but country lacks preparedness

The government has set up nine detection centers across the country, but experts say there should be more focus on precaution measures

Lightning destroys 39 houses in Western Nepal

BANKE: Around 39 houses have been destroyed in a fire caused by lightning that struck the houses at Duduwa rural municipality in Banke district, Western Nepal. Police Inspector of Banke, Arun Poudel, said that Nanki Yadav, 15, was wounded in the incident and has been taken to Indian bordering market for treatment.

How to Photograph Lightning

PCMag AU (blog)

Lightning strikes make for pretty incredible images, but they're so fleeting that they can be a challenge to capture. And a strike by itself, as beautifully ...

Transport/roading/shipping/freight

How Cruise Lines Handle Storms, Fog, Bomb Cyclones, and More

Condé Nast Traveler

Take heed, budding armchair meteorologists: Modern cruise ships have the latest and greatest weather forecasting equipment—far beyond what you ...

Innovation and technologies (inc data and new products)

5G Technology Jeopardizes Emergency Preparedness, Say UN Weather Experts

HSToday

The United Nations weather and climate agency, the World Meteorological Organization (WMO), has warned that the latest 5G mobile phone ...

New drone tech being used to predict and understand severe weather

KOKH FOX25

New drone tech being used to predict and understand severe weather ... "The real missing piece in terms of weather forecasting is getting critical data ...

Climate change / global warming / sea level rise

City temperatures and city economics, a hidden relationship between sun and wind and profits

Urban design undoubtedly influences the urban economy. A simple thing like designing an area to make it more walkable can boost local business profits. This can also increase real estate value, create more and better jobs and generate stronger local economies.

Journal and articles online

Meteorological Applications

Early View

Online Version of Record before inclusion in an issue

Development of an index for frost prediction: Technique and validation

José R. Rozante, Enver Ramirez Gutierrez, Pedro Leite da Silva Dias, Alex de Almeida Fernandes, Debora Souza Alvim, Vinicius Matoso Silva

Version of Record online: 14 June 2019

The occurrence of frost, when the crops are sensitive to low air temperature, causes serious damage to agriculture and has negative effects on production. In view of these negative impacts on the economy of Brazil and other neighbouring countries, a regional index IG (from Portuguese Índice de Geada) was developed at the Center for Weather Prediction and Climate Studies - National Institute for Space Research (CPTEC/INPE) in order to identify locations where frosts are most likely to occur. The results show that the IG can improve the prediction of frost events, and could be used to minimize impacts caused by frost events.

Quarterly Journal of the Royal Meteorological Society

Early View

Online Version of Record before inclusion in an issue

A maximum entropy approach to the interaction between small and large scales in two-dimensional turbulence

Wim T. M. Verkley, Camiel A. Severijns, Boudewijn A. Zwaal

Version of Record online: 06 June 2019

The vorticity field at time $t = 1,000$, resulting from a numerical integration of the reference model. (a) shows the field for the whole flow domain and (b) the upper right quadrant, both at the full resolution $N = 170$. (c) shows the same field as (b) but truncated to $R = 85$.

Impact of non-stationarity on hybrid ensemble filters: A study with a doubly stochastic advection-diffusion-decay model

Michael Tsyrlnikov, Alexander Rakitko

Version of Record online: 03 June 2019

A new hierarchical “model of truth” with stochastic partial differential equations on two levels in the hierarchy is proposed. The model is linear and generates conditionally Gaussian random fields with a tunable degree of non-stationarity in space and time. Non-stationarity of prior covariances is found to have a crucial impact on the performance of the three covariance-hybridization techniques in EnKF: blending ensemble covariances with static, time-smoothed, and space-

Characterization of the Atmospheric Boundary Layer in a Narrow Tropical Valley Using Remote Sensing and Radiosonde Observations, and the WRF Model: The Aburrá Valley Case Study

Laura Herrera, Carlos D. Hoyos

First Published: 07 June 2019

Verification of a Seeder-Feeder orographic precipitation enhancement scheme accounting for low-level blocking

S. A. Smith, P. R. Field, S. B. Vosper, S. H. Derbyshire

First Published: 06 June 2019

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My latest WeatherEye from John Maunder

<https://www.sunlive.co.nz/blogs/13424-may-rainfalls-tauranga-18982019.html>

<https://www.sunlive.co.nz/blogs/13448-tauranga-may-average-afternoon-temperatures-19132019.html>

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