



Phone: (678) 24686, 22932 VOIP: 5391

Email: admin@meteo.gov.vu Website: www.vmgd.gov.vu

Address: PMB 9054, Lini Highway, Port Vila, Vanuatu

(Address correspondence to Director)

(Toute correspondance doit être envoyée au Directeur)

3rd November 2023

Media Release:

Vanuatu National Statement on Tropical Cyclone (TC) Outlook for 2023/24 Season

Vanuatu is expecting 3 – 5 named tropical cyclones and El Niño conditions to continue through 2023/24 TC Season

Key Messages:

1. It is expected that 3 to 5 named tropical cyclones (TCs) will pass in the Vanuatu's tropical cyclone area of responsibility (Figure 1) in the upcoming tropical cyclone season, from 1st November 2023 to 30th April 2024. Out of those TCs which might develop, 2 or more may reach intensity of Category 3 or higher.
2. The tropical cyclone risk for Vanuatu for the upcoming tropical cyclone season 2023/2024 is "average to above average risk".
3. The official tropical cyclone season for Vanuatu is from 1st November to 30th April. However, Vanuatu has experienced tropical cyclones forming outside this period, e.g., TC Donna in May 2017 and TC Gina in May 2022.
4. Cyclone formation is rarely spread evenly throughout the season; often quiet periods are followed by bursts of activity, e.g. TCs Judy and Kevin in February – March 2023. Historically, the peak Tropical Cyclone season for Vanuatu is usually from January to March. All communities shall should remain vigilant and well prepared.
5. With the current El Niño conditions, Vanuatu is expected to experience drier than average conditions for much of the country for the next 3 to 6 months. However, if a TC occurs in the area, it could bring heavy rainfall, potentially leading to flooding as well as other related hydro-meteorological hazards such as destructive winds, storms surge, mudflow and landslides.
6. Government through NDMO clusters with partners to start planning on Tropical cyclone preparedness and response.



(To contact VMGD Divisions directly)

Observations: Ph: 22433 | Email: observers@meteo.gov.vu
Forecast: Ph: 22932 | Email: forecast@meteo.gov.vu
Climate Change: Ph: 22331 | Email: pccap@vanuatu.com.vu

Climate: Ph: 23866 | Email: climate@meteo.gov.vu
Geo-Hazards: Ph: 24686 | Email: geohazards@meteo.gov.vu
ICT and Engineering: Ph: 24686 | Email: helpdesk@meteo.gov.vu

Vanuatu Tropical Cyclone Seasonal Outlook 2023/24

Out of the 8 – 14 tropical cyclones predicted for the Pacific region, it is likely that 3 – 5 named tropical cyclones will pass in Vanuatu Area of Responsibility this 2023/24 tropical cyclone season. The cyclone risk for Vanuatu for the upcoming cyclone season 2023/24, compared to all cyclone seasons is “average to above average risk”.

Vanuatu and New Caledonia typically experience high cyclone activity, with an average of about 2 or 3 tropical cyclones passing close to the islands each year¹. In general, the peak Tropical Cyclone season for Vanuatu is usually from January to March. However, cyclone formation is rarely spread evenly throughout the season; often quiet periods are followed by bursts of activity, e.g. TCs Judy and Kevin in February – March 2023. This upcoming cyclone season is expected to emulate past cyclone seasons that had similar background climate conditions to the present (2023/24). Six analogue cyclone seasons have been identified; and this outlook is based on statistical analysis of these analogue seasons. The analogue seasons include cyclones season 1982/83; 1987/88; 1991/92; 1997/98, 2009/10 and 2015/16. With tropical cyclone activity average to above average risk this cyclone season, potentially at least 2 cyclones may reach Category 3 or higher. Category 5 cannot be ruled out as occurrences of those types of storm systems have been frequent over recent years.

Studies have shown that Climate Change may also affect tropical cyclones in a variety of ways; an intensification of rainfall and wind speed, a decrease in overall frequency but an increase in frequency of very intense storms are among the possible consequences of human-induced climate change².

Tropical cyclones affecting any islands of Vanuatu will bring significant rainfall, extreme damaging winds, hazardous marine conditions and coastal damages that are possible. With the current El Niño conditions, Vanuatu is expected to experience drier than average conditions for much of the country in the coming month (Figure 2). However, if a TC occurs in the area, it could bring heavy rainfall, and as a result, flooding including flash flooding, mudflow and landslides may occur over islands of Vanuatu.

These events can cause a great deal of damage to property and human life. Past experiences have shown that the impacts of Tropical cyclones are detrimental to social and economic lives of Vanuatu. Therefore, all communities should remain alert and well-prepared for potential severe tropical cyclone events. Remember, only one event can cause lots of damage and loss of lives. Communities should be vigilant, weather-ready and take all necessary precautionary measures; and follow forecast updates provided by the Vanuatu Meteorology and Geo-hazards Department (VMGD).

Note: Traditional Knowledge (TK) has an enormous capacity for adaptive management strategies that are essential for adjusting to weather and climate (variabilities and changes) extremes. Traditional knowledge has been significantly used with the local communities and will continue to help them adapt to the changes caused by extreme climate variabilities³. Traditional Indicators for cyclones include over abundant of fruits example mango, ground nesting of Pacific Emerald Dove.

¹ Climate Change in the Pacific: Scientific Assessment and New Research. Volume 1: Regional Overview. Volume 2: Country Reports

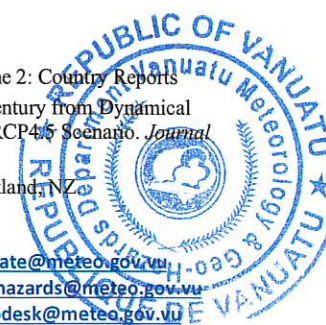
² Knutson, T. R. et al. 2015. Global Projections of Intense Tropical Cyclone Activity for the Late Twenty-First Century from Dynamical Downscaling of Late Twenty-First Century from Dynamical Downscaling of CMIP5/RCP4.5 Scenarios CMIP5/RCP4.5 Scenario. *Journal of Climate*. DOI: 10.1175/JCLI-D-15-0129.1.

³Rarai, A. 2018. Traditional Knowledge and Environmental Change in Vanuatu. MSc. Thesis, University of Auckland, NZ.

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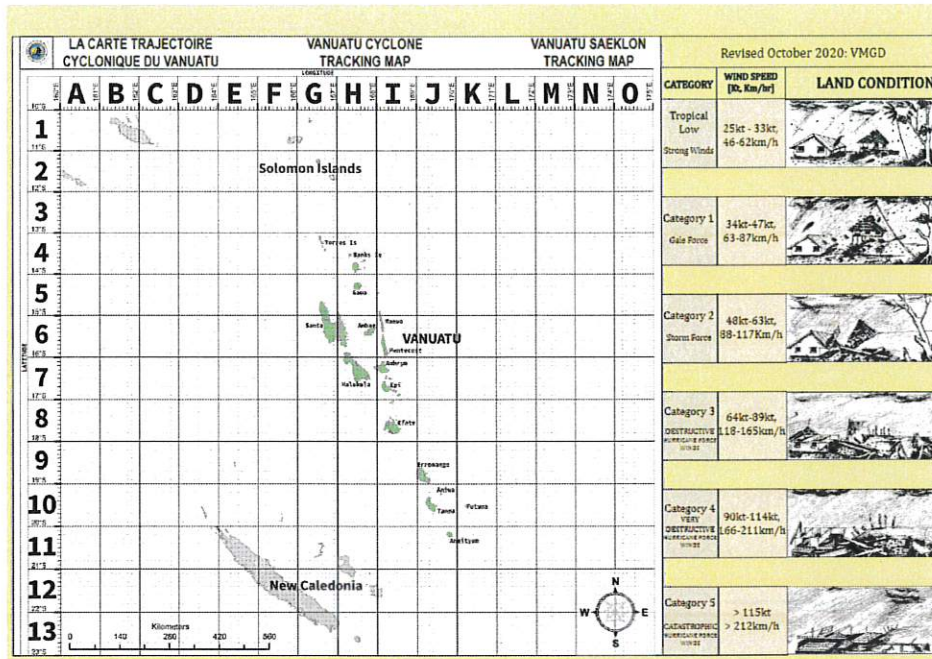


Figure 1: Vanuatu Tropical Cyclone Area of Responsibilities (10°- 23° South, 160° -175° East).

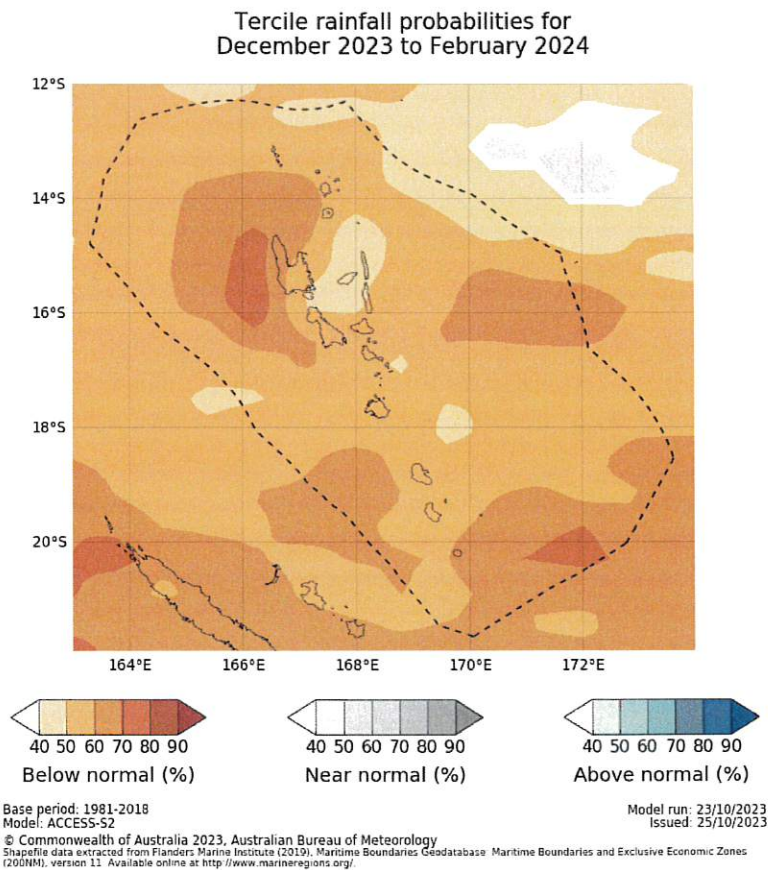


Figure 2: Generally, drier than average conditions is expected for the whole country.

For more Information:

Contact the Director, Vanuatu Meteorology and Geo-Hazards Department (VMGD)

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