

Early Action Rainfall (EAR) Watch

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The Early Action Rainfall Watch provides a summary of recent rainfall patterns, particularly the status of the rainfall and the outlook for the coming months. This product is issued on a monthly basis. For more details and climate Information, contact the Vanuatu Meteorology and Geo-hazards Department.

Summary

ENSO Status: El Niño Watch continues. El Niño Southern Oscillation (ENSO) status is currently neutral, however there are signs of El Niño forming later this year therefore dial is raise to Watch, this means there is a 50% chance of El Niño in 2023.

Rainfall Status: No Alert is in place for the whole country in April. This indicates that the Very Wet and Seriously Wet conditions experienced over the past 3, 6 & 12 months are easing.

Rainfall Outlook: With the rainfall outlook for May, there is a medium chance of very wet for all islands of Vanuatu. For May to July 2023 rainfall outlook, there is a medium chance of very wet conditions for the northern and Central islands and low chances of extremes for southern region and part of Torba Province.

Rainfall Status

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	Rainfall Status				
Period	1-month period	3-month period	6-m pe	ionth riod	12-month period
Months	April 2023	February 202 April 2023	3 — Novembo 3 Apri	er 2022 — il 2023	May 2022 — April 2023
Torres					
Sola					
Luganville					
Saratamata					
Lakatoro					
Sherpherds					
Port Vila					
Lenakel					
Anelghaohat					
0%	10%	20%	80%	90%	100%
Coricusta		, bia	Man		Coriously
Drv	Drv	Alert	Wet	/	Wet

The table below provides information on rainfall status for Vanuatu. The status refers to rainfall received over the last 1, 3, 6 and 12 months, highlighting very dry or very wet periods relative to normal.

Information on the Maps

Vanuatu's rainfall status is assessed using the MSWEP dataset available via http://www.gloh2o.org/mswep/. MSWEP is a global precipitation dataset at 0.1° resolution, available from 1979 that combines data from rain gauges, satellite observations and reanalysis. The data is processed and presented in Percentile Index form by the Australian and New Zealand DFAT Climate and Ocean Support Program in the Pacific. 'No Alert' is assigned where rainfall was between the 20th and 80th percentile for the period in question.







Data source: MSWEP Method: Percentile © Commonwealth of Australia 2023, Australian Bureau of Meter Model Run: 01/04/2023 Base period: 1980-2021 ted by COSPPa Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Mar and Exclusive Economic Zones (200NM), version 11, Available online at http://www.marineregions.org/



Data source: MSWEP Method: Percentile © Commonwealth of Australia 2023, Au Model Run: 01/04/2023 Base period: 1980-2021 ted by COSPI Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marineregions



12-month rainfall status to end of April 2023

Data source: MSWEP Method: Percentile © Commonwealth of Australia 2023, Australian Model Run: 01/04/2023 Base period: 1980-2021 d by COSF Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Mar and Exclusive Economic Zones (200NM), version 11, Available online at http://www.marineregions.org/

Rainfall Outlook Maps

Forecast for Extreme Rainfall maps

The chance of extremes outlook maps present the likelihood of very wet or very dry conditions. They display the chance that the outlook will result in rainfall in the top or bottom 20% of historical observations for the selected outlook period. Where there is white shading it is less likely there will be either very wet or very dry conditions, rainfall is likely to be close to normal in this case. A very high chance of very dry (very wet) conditions is associated with the highest likelihood of rainfall being in the lowest (highest) 20% on record. A medium chance of very dry (very wet) conditions is associated with a lower but reasonable chance of rainfall being in the lowest (highest) 20% on record.



Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundarie and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marineregions.org/.



© Commonwealth of Australia 2023, Australian Bureau of Meteorology, supported by COSPPac Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase. Maritime Boundaries and Exclusive Economic Zones (200MM), version 11. Available online at http://www.marineregions.org/.



Vanuatu Reference Map

Climate Change Drought Projections to 2090

For the whole of Vanuatu, the overall amount of time spent in drought is expected to stay the same or slightly decrease in the future. Droughts are expected to occur less often. Drought length is not expected to change. Overall, there is low confidence ('trust') in drought projections. However, droughts will continue to occur including serious droughts and people still need to prepare for these events.

Seriously Wet condition Impacts

When conditions have been very wet for a prolonged period, soil saturation can occur which may lead to increased risk of flash flooding, surface flooding, drain overflow and damage to property and infrastructure. Water sources may become contaminated and transportation may be disrupted with associated impacts on tourism and local economy. Damage may occur to water sensitive crops such as dryland taro, mature manioc, yam and kumala and an increase in crop pest and disease may be experienced. Very wet periods can lead to outbreaks of leptospirosis, dengue and malaria.