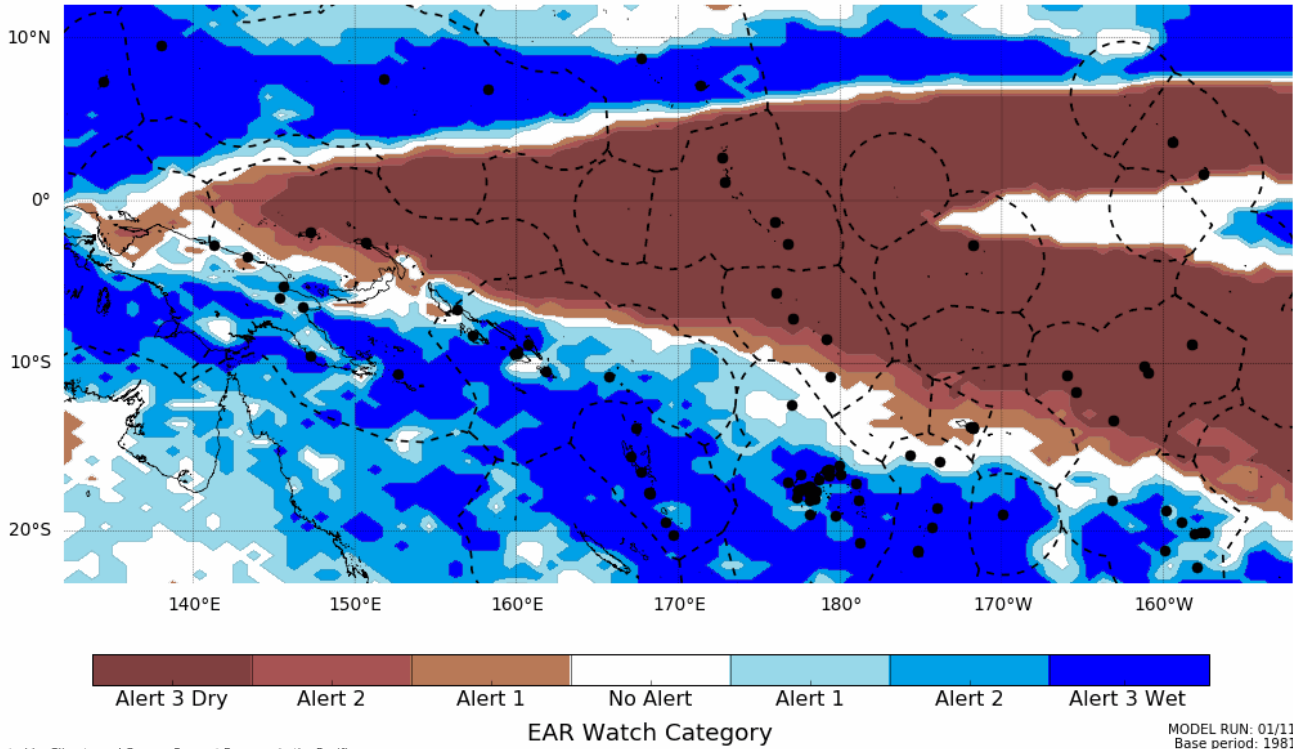




# Climate and Ocean Support Program in the Pacific (COSPPac) Regional Early Action Rainfall Watch

## Monthly and Seasonal Rainfall Watch: December 2021 – February 2022

EAR Watch Categorical forecast for  
December 2021

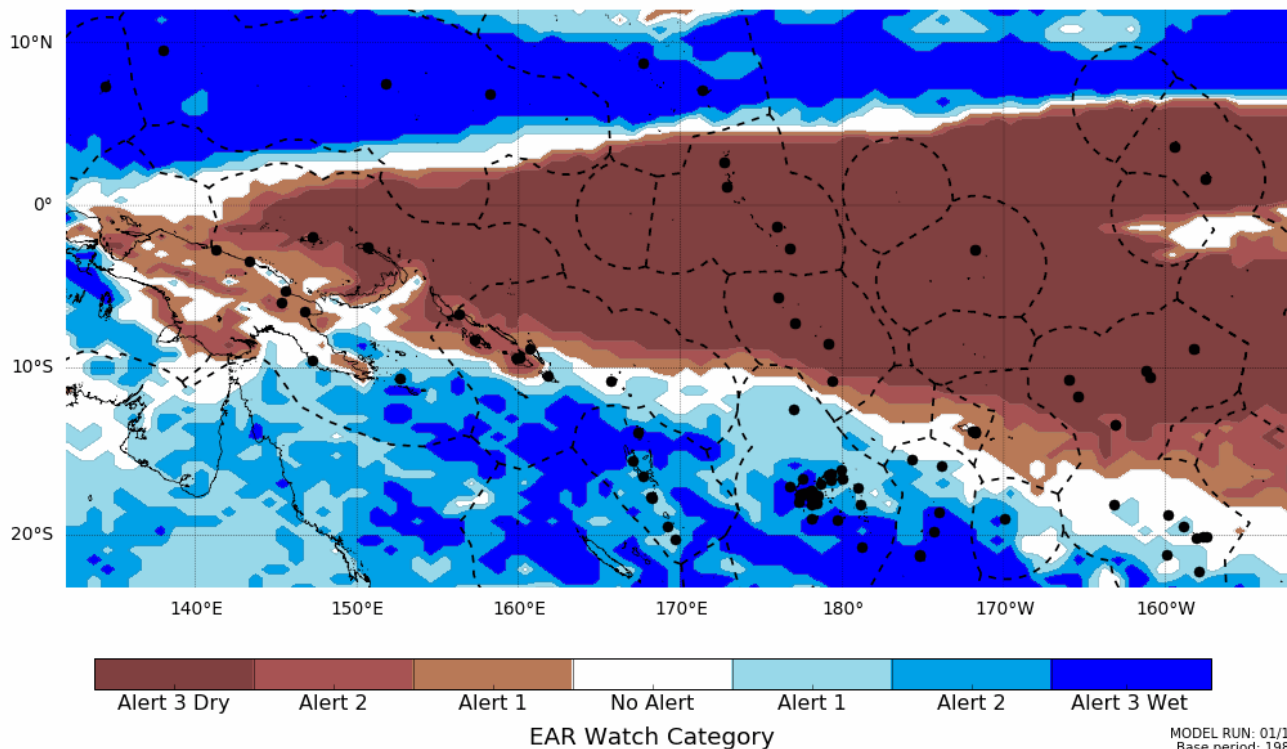


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Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <http://www.marineregions.org/>.

MODEL RUN: 01/11/2021  
Base period: 1981-2018  
Model: ACCESS-S2

The regional maps are available via [http://access-s.clide.cloud/files/project/EAR\\_watch/pacificx/](http://access-s.clide.cloud/files/project/EAR_watch/pacificx/).

## EAR Watch Categorical forecast for January 2022

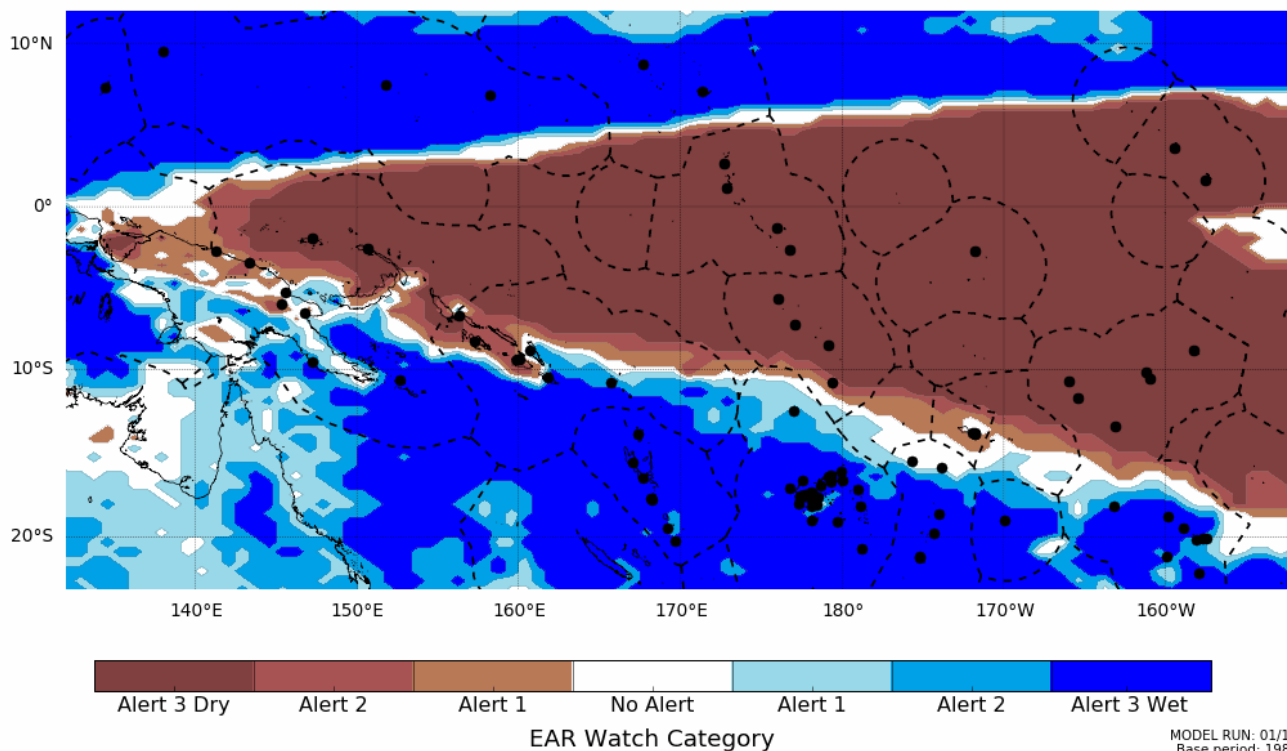


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MODEL RUN: 01/11/2021  
 Base period: 1981-2018  
 Model: ACCESS-S2

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

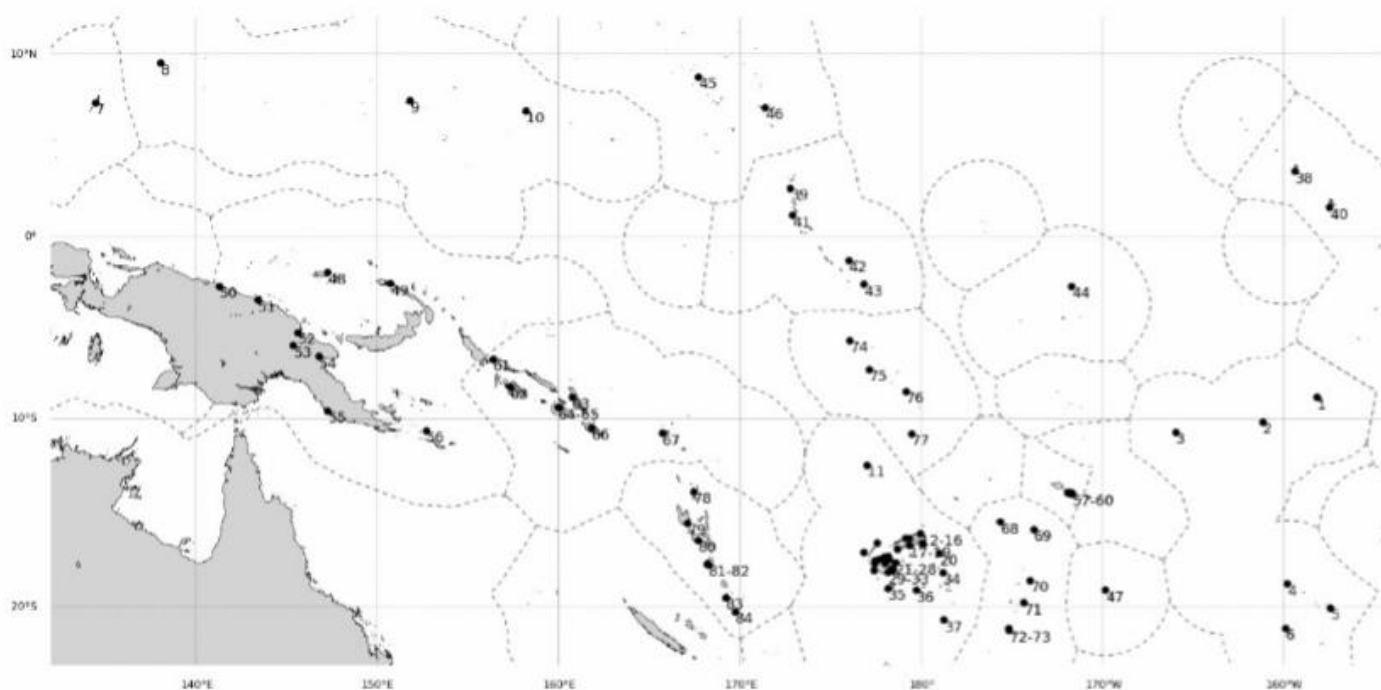
## EAR Watch Categorical forecast for December 2021 to February 2022



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MODEL RUN: 01/11/2021  
 Base period: 1981-2018  
 Model: ACCESS-S2

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



Perihyn 1, Rakahanga 2, Pukapuka 3, Aitutaki 4, Mauke 5, Rarotonga 6, Keror 7, Yap 8, Chuuk 9, Pohnpei 10, Rotuma 11, Uktu Point 12, Labasa 13, Seqaqa 14, Yasawai 15, Matei 16, Savusavu 17, Nabuwalu 18, Viwa 19, Vanuabalavu 20, Pergmil 21, Yawara 22, Dobulevu 23, Rarawai 24, Lautmil 25, R.K.S. Lodoni 26, Nadi 27, Monasavu 28, Nausori 29, Koronivia 30, Naccollevu 31, Leucala 32, Tokotoko 33, Lakoba 34, Vunisea 35, Matusu 36, Ono-Lau 37, Tabuaeran 38, Buteritari 39, Kiritimati 40, Tarawa 41, Boru 42, Arorae 43, Kaniteru 44, Kwajalein 45, Majuro 46, Aiofi 47, Mamote 48, Kavieng 49, Vanimo 50, Wewak 51, Madang 52, Goroka 53, Nadzab 54, Port Moresby 55, Misima 56, Asau 57, Apia 58, Nofanua 59, Afamalu 60, Taro Island 61, Munda 62, Auki 63, Henderson 64, Honiara 65, Kira Kira 66, Santa Cruz 67, Niuafoou 68, Niutooutapu 69, Vevae 70, Haapai 71, Nuku'alofa 72, Fua'amotu 73, Nanumea 74, Nui 75, Funafuti 76, Niulakita 77, Sola 78, Pekoa 79, Lamap 80, Bauerfield 81, Port Vila 82, White Grass 83, Aneityum 84.

### Rating Scale: Below Normal and Above Normal

Forecast Confidence	Tercile Forecast Probabilities (%)					Forecast Confidence	Tercile Forecast Probabilities (%)				
	39-44	45-50	51-54	55-59	60+		39-44	45-50	51-54	55-59	60+
Low						Low					
Low-Medium						Low-Medium					
Medium						Medium					
Medium-High						Medium-High					
High						High					
Very High						Very High					

E.g. If a region has a forecast probability for **above normal** rainfall of **45%** [17/38/45 – below normal/normal/above normal] with a **Medium-High** Confidence, it would give a **Mid-Blue** Alert Rating. Similarly if a region has a forecast probability for **below normal** rainfall of **45%** [45/38/17 – below normal/normal/above normal] with a **Medium-High** Confidence, it would give a **Mid-Brown** Alert Rating.

## Rainfall Status: as of 31 October 2021

Alert Level	3-month period
Seriously wet (90%)	Palau
Near or wetter than normal	FSM (C, K), Solomon Is. (W, E), Vanuatu (All), Fiji (N), Tuvalu (S), Kiribati (E), Niue, Cook Islands (All)
Warning (25%)	Solomon Is. (C), Fiji (C, E), Tuvalu (N), Kiribati (W)
Seriously dry (10%)	FSM (P), Marshall Is., Fiji (W), Samoa
Severely dry (5%)	FSM (Y)
Status not available	PNG (All), Fiji (R), Kiribati (C)

### List of Divisions:

Cook Is. (Northern – N)	FSM (Kosrae – K)	PNG (Highlands – H)
Cook Is. (Southern – S)	Kiribati (Western Is. – W)	Samoa
Fiji (Western Division – W)	Kiribati (Central Is. – C)	Solomon Is. (Western Region – W)
Fiji (Central Division – C)	Kiribati (Eastern Is. – E)	Solomon Is. (Central Region – C)
Fiji (Eastern Division – E)	Marshall Is.	Solomon Is. (Eastern Region – E)
Fiji (Northern Division – N)	Niue	Tuvalu (Northern Region – N)
Fiji (Rotuma – R)	Palau	Tuvalu (Southern Region – S)
FSM (Yap – Y)	PNG (Momase Region – M)	Vanuatu (Northern Region – N)
FSM (Chuuk – C)	PNG (New Guinea Is. – Is.)	Vanuatu (Southern Region – S)
FSM (Pohnpei – P)	PNG (Southern Region – S)	

Three-month total rainfall is typically used for monitoring grasslands, shallow rooted plants and small water body (e.g. small water tanks, streams) moisture deficits. Allow for uncertainty associated with island size, topography, geology and soil type.

### Rainfall Status

- Estimates of moisture/water stress are based on recent rainfall compared with historical observations using the Percentile (Decile) Index. A division is listed once at the highest station alert within that division.

### Seasonal Rainfall Watch

- Information provided gives an indication of predicted total rainfall over the next three months, not how intense the rain may be in any one event, nor how it may vary from month to month.
- Information provided has been given on a divisional scale as Pacific Island Countries can experience a high range of rainfall variability within country. It is possible to have forecasts which simultaneously favour above and below normal rainfall in different parts of the one country.
- Starting at 39%, the alert levels indicate increasing chances of either below or above normal rainfall, as defined below. A measure of confidence, based on historical model performance, also plays a role in the rating level.
- The alerts are based on the highest station probabilities within a country or division.
- Definitions: "Below Normal Rainfall" = rainfall total below the 33<sup>rd</sup> percentile for that location and season; "Above Normal Rainfall" = rainfall total above the 67<sup>th</sup> percentile for that location and season.
- Local Met Services should be contacted for detailed information and outlooks. This product is not to be distributed to the public or other organisations.



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