



# Climate and Ocean Support Program in the Pacific (COSPPac)

## Regional Early Action Rainfall Watch February 2023

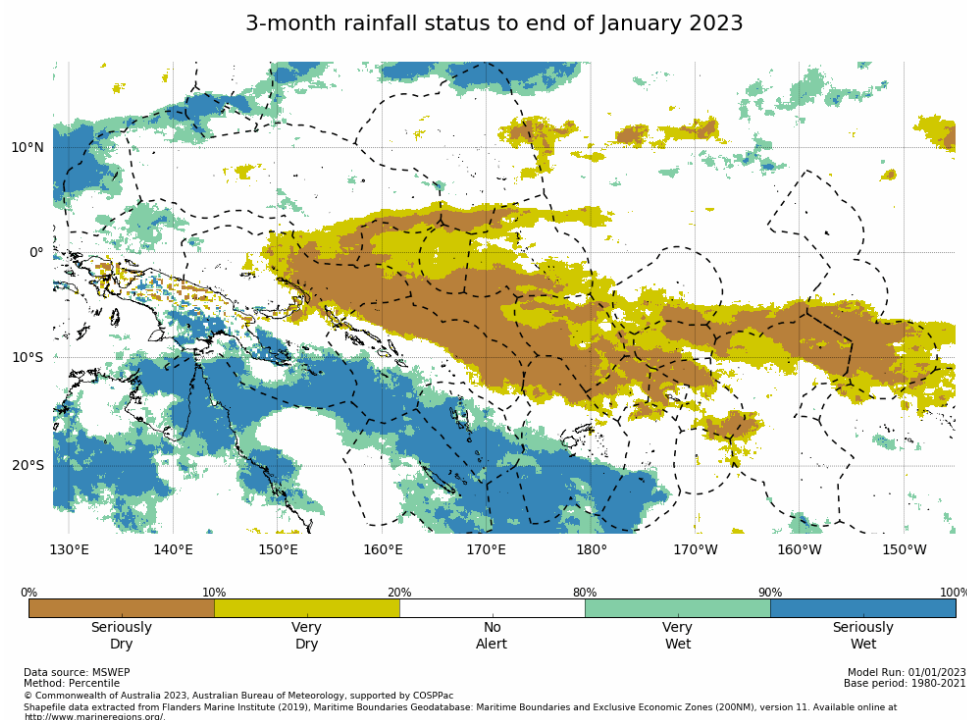
### El Niño-Southern Oscillation Status: as of 17 February 2023

La Niña continues in the tropical Pacific Ocean. While oceanic indicators, including sea surface temperatures (SSTs), have weakened to ENSO-neutral values, the atmosphere has been slower to respond and remains La Niña-like. Even as La Niña weakens, it can continue to influence global weather and climate.

For Pacific Island countries in the western and central Pacific region, there is a large region where very dry is likely for the coming season, this stretches east from northwest PNG in the west, to French Polynesia and Pitcairn Island in the east.

To the southwest of this region, the ACCESS-S model shows the opposite signal, that is, moderate to high chances for being very wet in a band stretching southeast of the PNG mainland, the southern Solomon Islands, New Caledonia, Vanuatu, southern Fiji, and southern Tonga. Very wet is also favoured across most of Palau, FSM and RMI during this season.

### Rainfall Status: as of 31 January 2023



The 3-month rainfall status for November 2022 to January 2023 was Very Dry or Seriously Dry in the New Guinea Islands, northern Solomon Islands, far southeast FSM, patches of RMI, southern Nauru, Kiribati (especially south of the equator), Tuvalu, far northern Fiji, far northern Tonga, Tokelau, Samoa, northern American Samoa, the northern Cook Islands, and northern French Polynesia.

Conversely, the status was Very Wet or Seriously Wet over the same period in parts of Palau, patches of central FSM, eastern PNG, the far south of the Solomon Islands, Vanuatu, New Caledonia, southern Fiji, and southern Tonga.

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/)

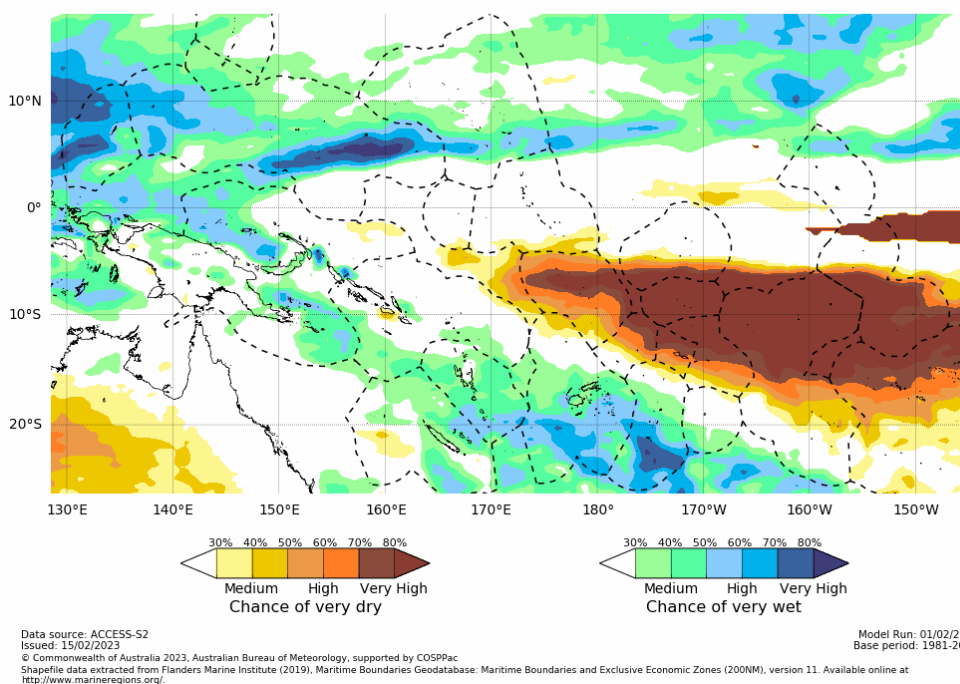
Three-month total rainfall is typically used for monitoring grasslands, shallow rooted plants and small water body (e.g. small water tanks, streams) moisture deficits. Allow for uncertainty associated with island size, topography, geology and soil type.

## Rainfall Status

- Estimates of moisture/water stress are based on recent rainfall compared with historical observations using the Percentile (Decile) Index.
- Definitions: "Very Dry" = rainfall in the lowest 20% of the historical record for that location and season, "Very Wet" = rainfall in the highest 20% for that location and season, "Seriously Dry" = rainfall in the lowest 10% of the historical record for that location and season, "Seriously Wet" = rainfall in the highest 10% for that location and season.

## Monthly Rainfall Watch: February 2023

Chance of extreme rainfall for February 2023

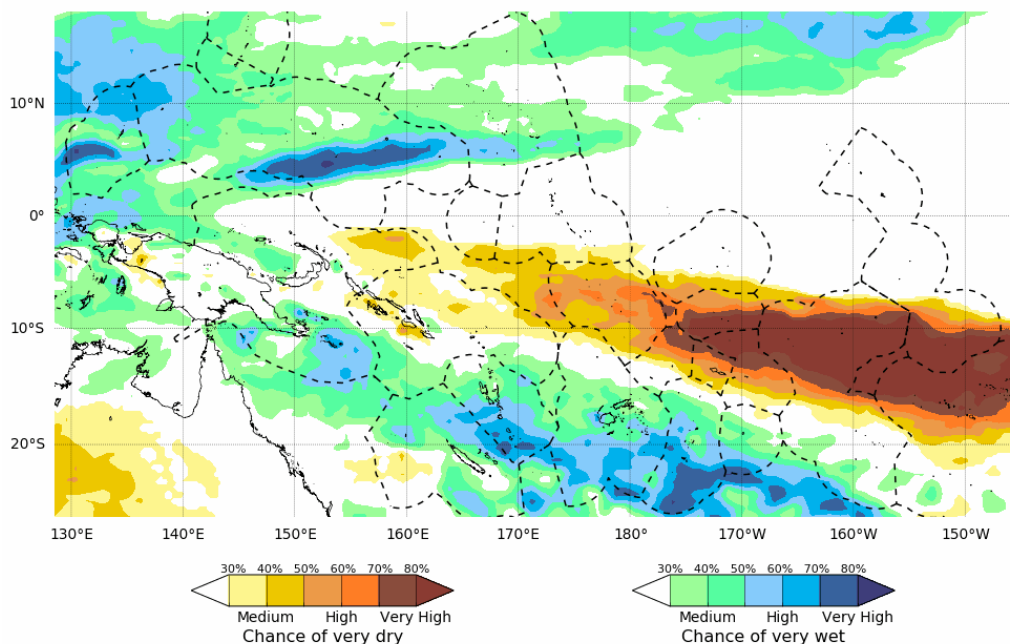


For February 2023, there is a high to very high chance that rainfall will be Very Dry in Kiribati (southern Gilbert, southern Phoenix, and southern and central Line Islands), central and eastern Tuvalu, northeastern Wallis and Futuna, Samoa, Tokelau, northern American Samoa, the northern Cook Islands and northern French Polynesia.

There is a high to very high chance of Very Wet across western and central FSM, southern RMI, patches in PNG island and southeast PNG, southern Vanuatu, the south of Fiji's EEZ, and central and southern Tonga.

# Seasonal Rainfall Watch: February– April 2023

Chance of extreme rainfall for February to April 2023



Data source: ACCESS-S2  
Issued: 15/02/2023

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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.marinerregions.org/>

Model Run: 01/02/2023  
Base period: 1961-2018

For February to April 2023, there is a high to very high chance of Very Dry in the northerneast of the PNG EEZ, northern Solomon Islands, southern Nauru, the far south of western Kiribati plus the southern halves of each of central and eastern Kiribati, Tuvalu, northeastern Willis and Futuna, Tokelau, Samoa, American Samoa, central to northern Cook Islands, and central to northern French Polynesia.

There is a high to very high chance Very Wet in northern and central Palau, western and central FSM, southern RMI, the Milne Bay islands of PNG, Vanuatu, northeast New Caledonia, the southern half of Fiji's EEZ, southern to central Tonga and southern Niue.

## Monthly and Seasonal Rainfall Watch

- Information provided has been interpreted on a divisional scale where possible 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.

- Definitions: "Chance of Very Dry" = percent chance of rainfall in the lowest 20% of the historical record for that location and season, "Chance of Very Wet" = percent chance of rainfall in the highest 20% for that location and season. Medium, High and Very High refer to the percent probability level where Very High has the highest confidence and represents the range 70% and above.

- Local Met Services should be contacted for detailed information and outlooks. This product is not to be distributed to the public or other organisations.