

Climate and Ocean Support Program in the Pacific (COSPPac)

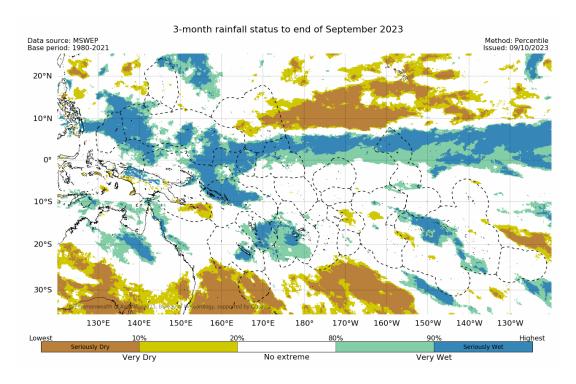
Regional Early Action Rainfall Watch October 2023

El Niño-Southern Oscillation Status: as of 30 September 2023

An El Niño and a positive Indian Ocean Dipole (IOD) are underway.

Sea surface temperatures (SSTs) in the tropical Pacific are exceeding El Niño thresholds and have Oceanic indicators firmly exhibit an El Niño state. Central and eastern Pacific sea surface temperatures (SSTs) continue to exceed El Niño thresholds. Models indicate further warming of the central to eastern Pacific is likely.

Rainfall Status: as of 30 September 2023



The 3-month rainfall status for July to Sepetmber 2023 was Very Wet or Seriously Wet stretching eastwards from Palau, FSM, southern RMI, Nauru, Kiribati (Gilbert, northern Phoenix and Line Islands). There was another band of Very Wet or Seriously Wet stretching from southern FSM, Solomon Islands, New Caledonia, Vanuatu and Fiji. Small patches over northern PNG, central Cook Islands, central and southern French Polynesia.

The rainfall status was Very Dry or Seriously Dry over the same period over central and eastern RMI extending eastwards towards Hawaii. The same status was also observed over southeastern PNG, Amercian Samoa and patches over central Cook Islands and French Polynesia.

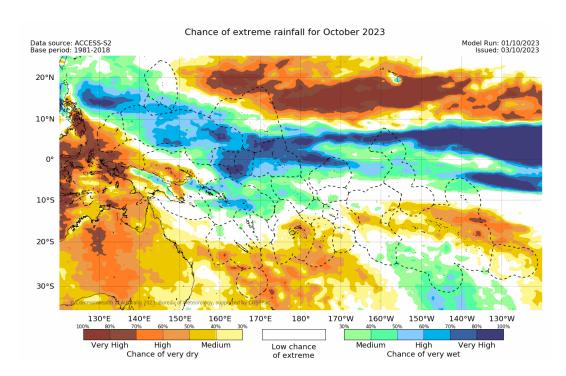
The regional maps are available via http://access-s.clide.cloud/files/project/EAR_watch/pacificx/

Three-month total rainfall is typically used for monitoring grasslands, shallow rooted plants and small water body (e.g. small water tanks, streams) mositure 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.

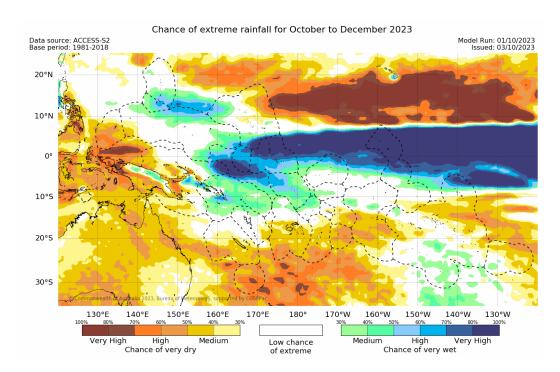
Monthly Rainfall Watch: October 2023



For October 2023, there is a medium to very high chance of rainfall in the Very Wet or Seriously Wet category in Guam, CNMI, FSM, most of RMI, Nauru, Kiribati (Gilbert, northern Phoenix and Line Islands), northern PNG mainland, eastern PNG, Solomon Islands, Tuvalu and patches over northern Vanuatu, Wallis and Futuna, Tokelau, southern Cook Islands and, northern and southern French Polynesia.

There is a medium to very high chance that rainfall will be in the Very Dry or Seriously Dry category in most of Palau, southern PNG mainland and most Islands, far northern RMI, southern New Caledonia, southern Vanuatu, most of Fiji, Tonga, American Samoa, Niue, central Cook Islands, northern and central French Polynesia, and Pitcairn Islands.

Seasonal Rainfall Watch: October – December 2023



For October to December 2023, there is a high to very high chance of rainfall in the Very Wet or Seriously Wet category stretching from northern FSM, southern RMI, Nauru, western Tuvalu, Kiribati (Gilbert, northern Phoenix and northern Line Islands), while there are medium chances of very wet for Guam, patches of CNMI, and patches over PNG mainland and Islands, Solomon Islands, northern Vanuatu, northern Fiji, Tuvalu, Wallis and Futuna, Tokelau, southern French Polynesia and Pitcairn Islands.

In contrast, there is a medium to high chance of rainfall in the Very Dry or Seriously Dry ranges in most of the PNG mainland and Islands region, Palau, eastern RMI, Coral Sea, southern New Caledonia, most of Fiji, Tonga, Samoa, American Samoa, Niue, central and southern Cook Islands, northern French Polynesia and eastern Pitcairn Islands.

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.

