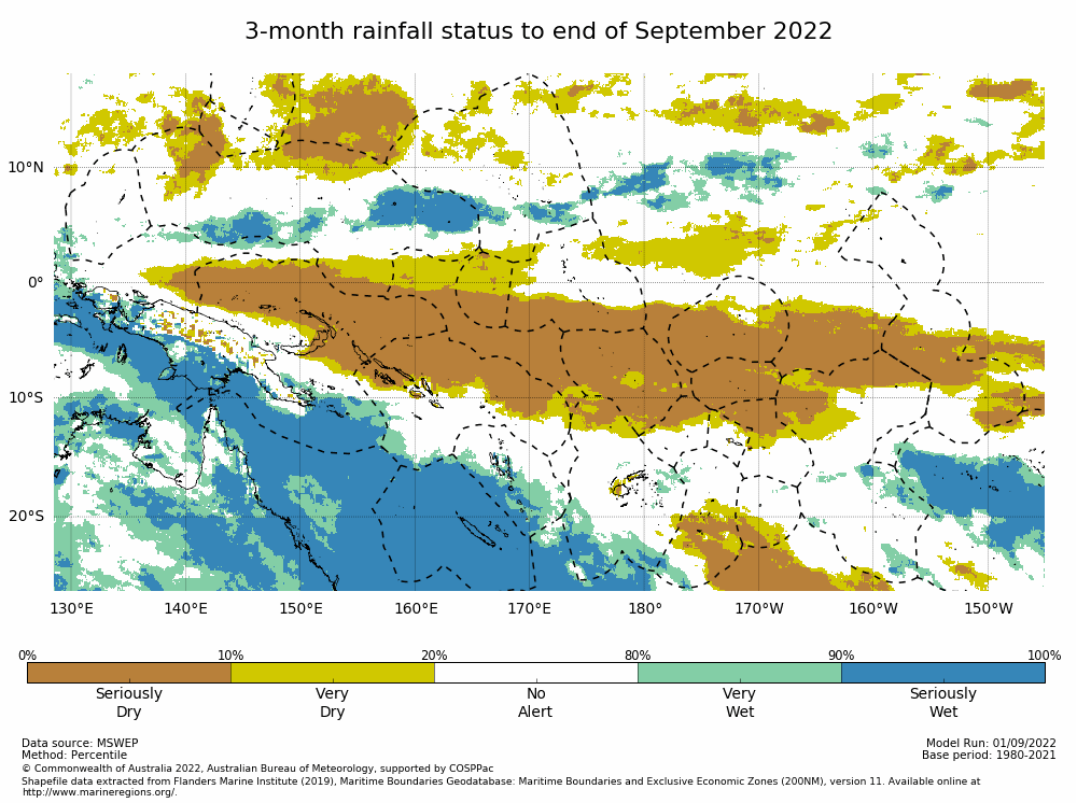
Climate and Ocean Support Program in the Pacific (COSPPac)
Regional Early Action Rainfall Watch
October 2022

El Niño-Southern Oscillation Status: as of 30 September 2022

Key atmospheric and oceanic indicators of ENSO show an established La Niña. Models indicate this La Niña event is likely to decline over spring, with a return to ENSO-neutral (neither La Niña nor El Niño) early in 2023.

Pacific Island countries in the western and central Pacific region such as PNG Islands, Nauru, Kiribati, Tuvalu, Tokelau and northern Cook Islands are likely to experience below normal rainfall during this period, while islands in the northwest and southwest Pacific are likely to experience higher than normal rainfall. These countries include, but are not limited to, Papua New Guinea, Solomon Islands, Vanuatu, Fiji, Tonga, Niue, Palau and the Fed. States of Micronesia.

Rainfall Status: as of 30 September 2022



The 3-month rainfall status for July to September was Very Dry or Seriously Dry in the New Guinea Islands, Solomon Islands, Nauru, Kiribati (except the northern Line Islands), Tuvalu, Tokelau, northern Cook Islands, the Marquesas and Society Islands in French Polynesia, Wallis Island, Rotuma in Fiji, and central and southern Tonga.

Conversely, the status was Very Wet or Seriously Wet over the same period in central and eastern FSM, southern RMI, southern and southeast PNG, Vanuatu, New Caledonia, southern Fiji, parts of the Southern Cook Islands and parts of southern French Polynesia.

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

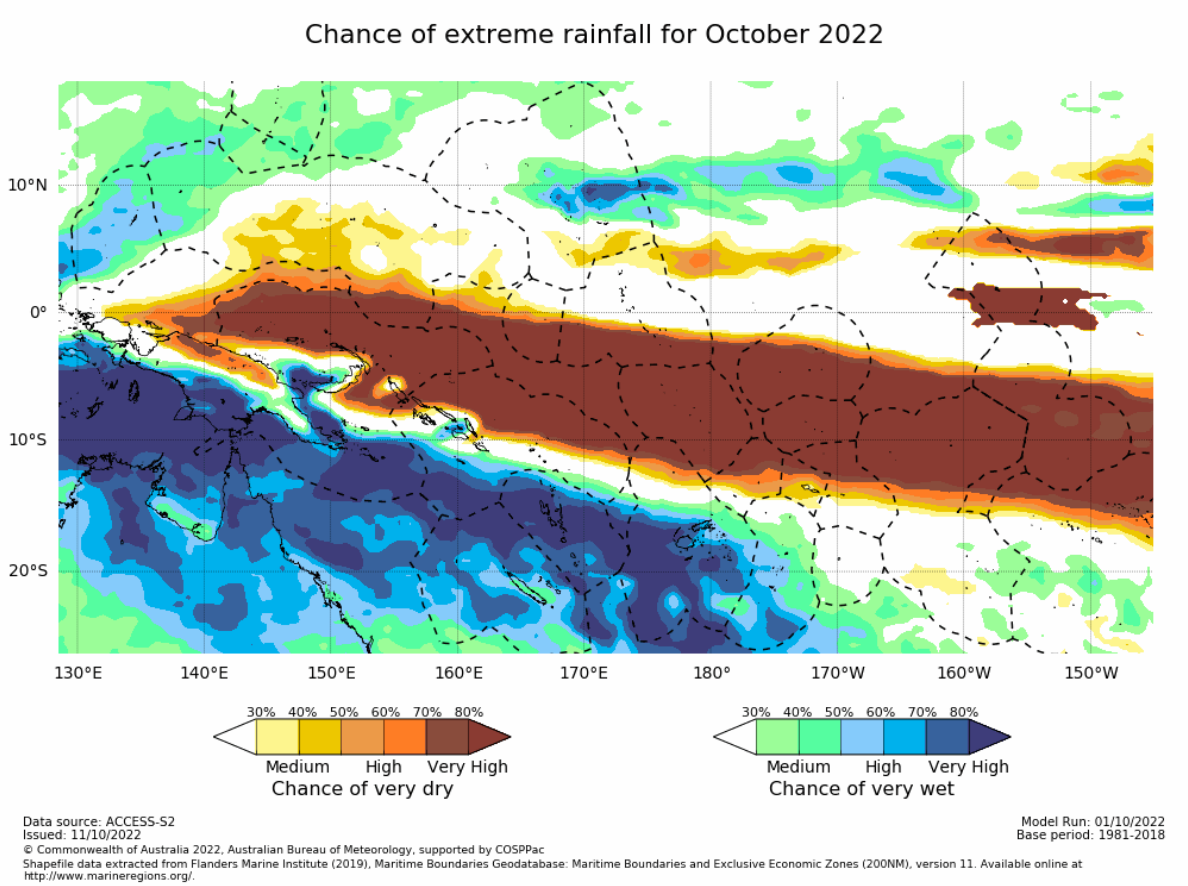
Three-month total rainfall is typically used for monitoring grasslands, shallow rooted plants and small water body (e.g. small water tanks, streams) mositure deficits. Allow for uncertainty associated with island size, topography, geology and soil type.

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.

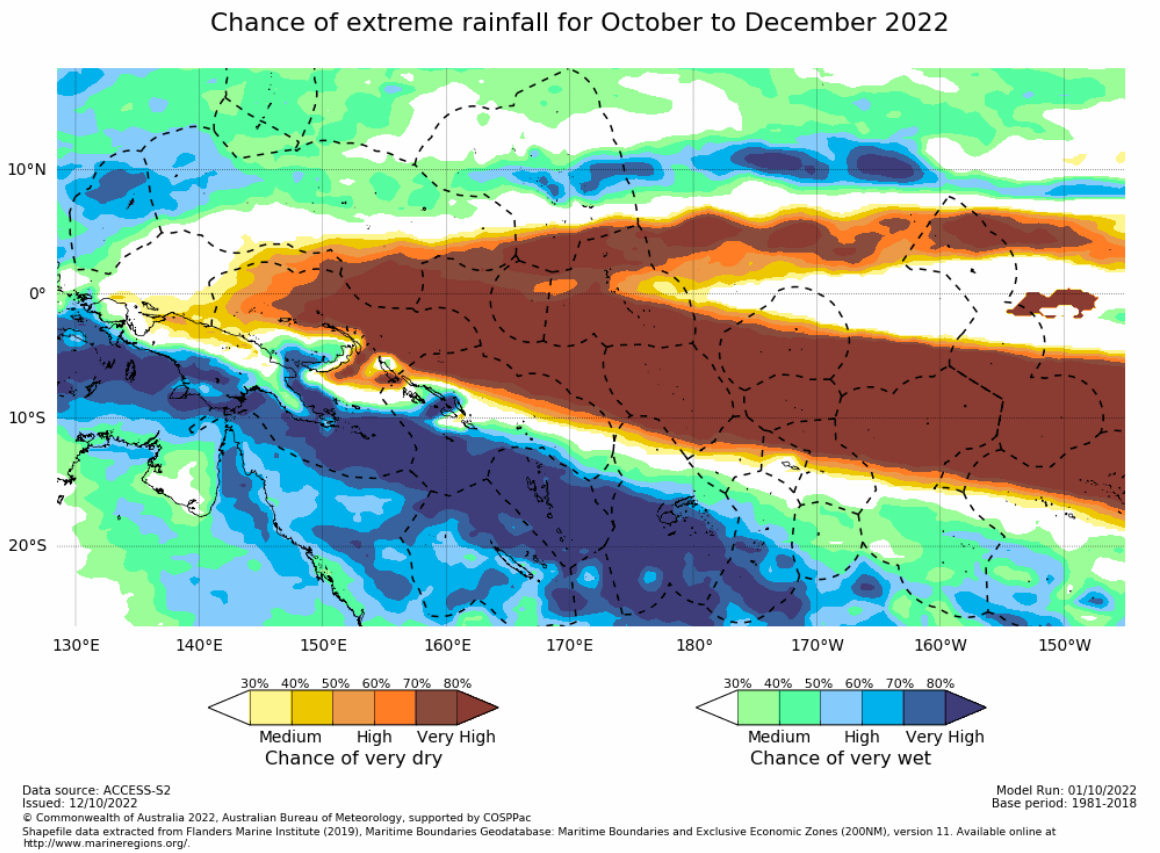
Monthly Rainfall Watch: October 2022



For October 2022, there is a high to very high chance that rainfall will be in the Very Dry range in northern and eastern New Guinea Islands, northern PNG, Nauru, Kiribati (except the northern Gilbert and Line Islands), Tuvalu, Wallis and Futuna,Tokelau, northern Cook Islands, and northern French Polynesia.

There is a high to very high chance that rainfall will be in the Very Wet range across southern and eastern PNG, central RMI, southern Solomon Islands, Vanuatu, Fiji (except Rotuma), and southern Tonga.

Seasonal Rainfall Watch: October – December 2022



For October to December 2022, there is a high to high chance of rainfall in the Very Dry range in southeastern FSM, southern RMI, northern and eastern New Guinea Islands, northern PNG, Nauru, Kiribati (except the central northern Line Islands), Tuvalu, Tokelau, northern Cook Islands and northern French Polynesia.

There is a high to very high chance of rainfall in the Very Wet range across southern and eastern PNG, central and southern Solomon Islands, Vanuatu, New Caledonia, Fiji (except Rotuma), central and southern Tonga.

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.