

El Niño-Southern Oscillation Status: as of 31 January 2024

The El Niño continues in the tropical Pacific Ocean. Model forecasts and observations indicate sea surface temperatures in the central tropical Pacific have peaked and are now declining. Sea surface temperatures in the tropical Pacific are expected to return to neutral El Niño–Southern Oscillation (ENSO) levels in the southern hemisphere autumn 2024. Most atmospheric indicators are close to normal levels, although trade winds have temporarily weakened in line with the passage of the Madden-Julian Oscillation through the region.



Rainfall Status: as of 31 January 2024

The 3-month rainfall status for November 2023 to January 2024 was Very Wet or Seriously Wet in a near-equatorial region covering some of PNG's eastern EEZ, most of the Solomon Islands, southern RMI, Nauru, and Kiribati (Gilbert, and northern Line Islands). Patches of Very Wet or Seriously Wet were observed in southeastern French Polynesia, and western Pitcairn Islands.

The rainfall status was Very Dry or Seriously Dry over the same period over southern CNMI, parts of central and eastern FSM, scattered patches in PNG's Momase region and east of New Britian, and in a broad zone from northern RMI extending eastwards towards southern Hawaii. The same status was also observed over New Caledonia, Vanuatu, northern Fiji, southern Tuvalu, northern Tonga, Wallis and Futuna, Samoa, southern Cook Islands, southwestern and parts of northeastern French Polynesia, and eastern Pitcairn Islands EEZ.

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: January 2024

For February 2024, there is a medium to very high chance of rainfall in the Very Wet category (highest quintile, which includes the Seriously Wet category) in a band stretching in an eastsoutheast direction from PNG's northern mainland in the far west to Pitcairn Islands in the east. A second band extends from the northern Phoenix Islands across the northern Line Islands and then to areas further east across the Pacific.

There is a medium to very high chance that rainfall will be in the Very Dry category (lowest quintile, which includes the Seriously Dry category) in northern Palau, western and eastern FSM, southern RMI, PNG's southern EEZ, southern Solomon Islands, New Caledonia, most of Vanuatu, most of Fiji, central and southern Tonga, Niue, southern Cook Islands, southern French Polynesia, plus the northeast of French Polynesia.

Seasonal Rainfall Watch: February – April 2024



For February to April 2024, there is a medium to very high chance of rainfall in the Very Wet category (highest quintile, which includes the Seriously Wet category) stretching east-southeast from PNG (mainland, Islands, far eastern EEZ) to most of Solomon Is, southern Nauru, Tuvalu, Wallis and Futuna, Tokelau, Kiribati (southern Gilbert, southern Phoenix, northern Line Islands), Samoa, American Samoa, northern half of the Cook Islands, central French Polynesia, and Pitcairn Islands.

In contrast, there is a medium to very high chance of rainfall in the Very Dry category (lowest quintile, which includes the Seriously Dry category) in a band stretching from northern half of Palau to Hawaii in the northern hemisphere. Another band of Very Dry Category stretches from Australia, across PNG's southern EEZ, southern Solomon Islands, New Caledonia, Vanuatu, Fiji, Tonga, Niue, southern Cook Islands, and southern and northern French Polynesia.

Monthly and Seasonal Rainfall Watch

M/ M

- 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.

