

Island Climate Update



Earth Sciences
New Zealand

ENSO Watch
November 2026

Recent



El Niño continues to strengthen in the tropical Pacific Ocean, and this may become the strongest El Niño on record.

The Southern Oscillation Index (SOI) was in strong El Niño range (-2.3) from July-September 2026.

Tropical Pacific Ocean sea surface temperatures (SSTs) are now in very strong El Niño range and continue to strengthen.

100% chance for **El Niño** to continue during November 2026-January 2027

Chance for **El Niño** conditions during December 2026-February 2027

100%



Forecast

ENSO situation summary

The current El Niño has now reached very strong status and continues to strengthen. There is a 100% chance that El Niño will continue during November 2026-January 2027, and a 100% chance that El Niño will continue during December 2026-February 2027. This El Niño may become the strongest El Niño on record.

As of 12 October 2026, the 30-day NINO3.4 Index (in the central equatorial Pacific) was 3.16°C, in very strong El Niño range. The 30-day relative Niño 3.4 Index (RONI) was 2.38°C, in very strong El Niño range and reflective of the central equatorial Pacific being warmer than the average of the global tropics.

The Southern Oscillation Index (SOI) was in strong El Niño range during July-September 2026 (-2.3), while the September value was -2.2.

Subsurface ocean temperatures in the equatorial Pacific continue to be well above average in the eastern part of the basin, and upper-ocean heat content anomalies are well above average in the tropical eastern Pacific.

Extremely warm water continues to be located in the eastern equatorial Pacific from the surface to depths of about 150 metres, where temperature anomalies of 6-8°C are widespread, and reach 10°C in some places. This indicates that a very strong El Niño is now occurring, and further strengthening to record levels is possible by late 2026.

During November 2026-January 2027, model guidance favours above normal or well above normal rainfall for several island groups along the equator, including Naoero, Kiribati, northern Tuvalu, Tokelau, the northern Cook Islands, and the Marquesas.

Conversely, below normal or well below normal rainfall is likely to occur for many island groups in the Pacific, including nearly all of Micronesia and those along a line from Papua New Guinea east to the Pitcairn Islands. Most of these island groups will also have a high chance to be extremely dry during November-January (i.e. seasonal rainfall totals below the 25th percentile). See pages 6-7 for more information.

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Rainfall Watch



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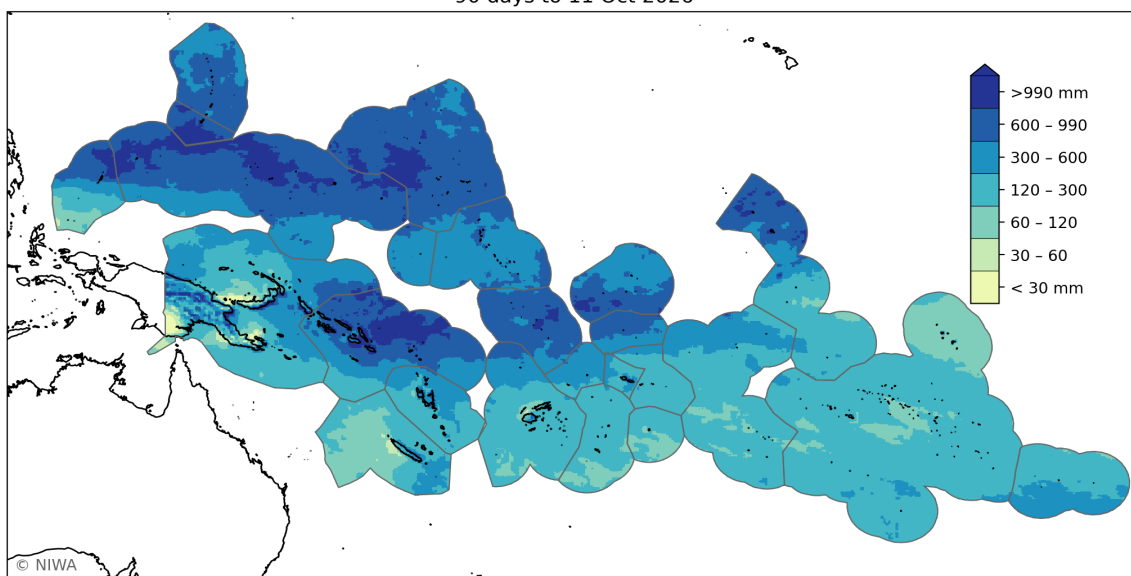
Regional situation summary (11 October 2026)

Rainfall summaries for the last month and three months are shown below.

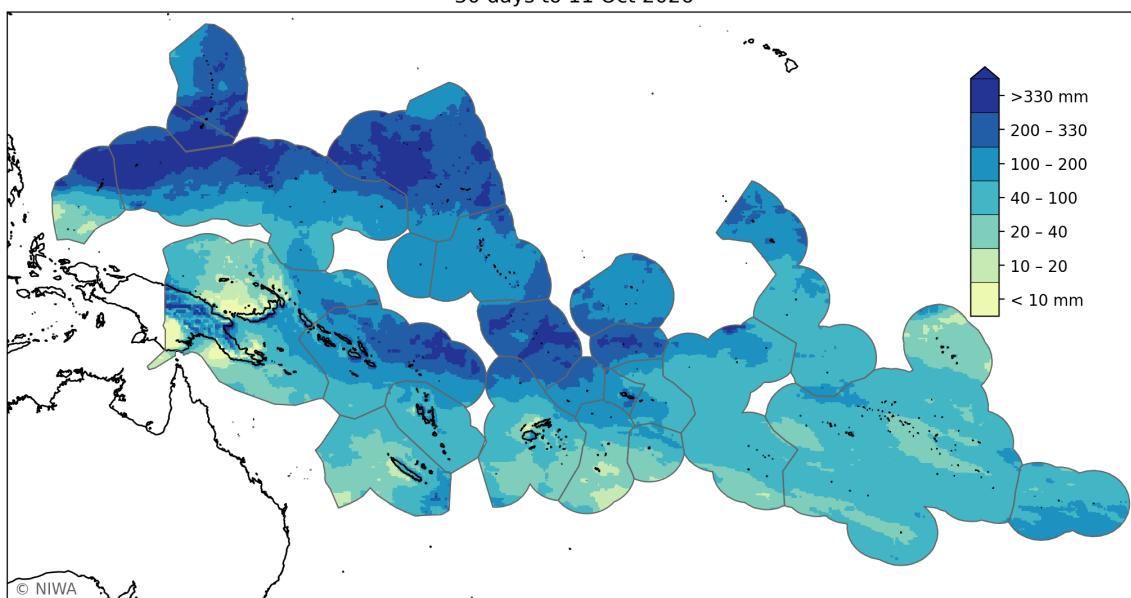
During the 90 days ending 11 October (top plot), over 990 mm of rain fell across Guam, parts of the Federated States of Micronesia (FSM), western Marshall Islands, and isolated parts of the Solomon Islands. Less than 60 mm of rain was observed in portions of Papua New Guinea (PNG).

During the 30 days ending 11 October (bottom plot), over 330 mm of rain fell across Guam, Northern Mariana Islands, northern Palau, western FSM, western Marshall Islands, and parts of Tuvalu and Tokelau. Less than 40 mm of rain fell in southern Palau, parts of PNG, New Caledonia, parts of Fiji and Tonga, Niue, parts of the Austral Islands and Tuamotu Archipelago, and the Marquesas.

Cumulative rainfall (mm), source: MSWEP 2.8.0
90 days to 11 Oct 2026



Cumulative rainfall (mm), source: MSWEP 2.8.0
30 days to 11 Oct 2026



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Water Stress Watch



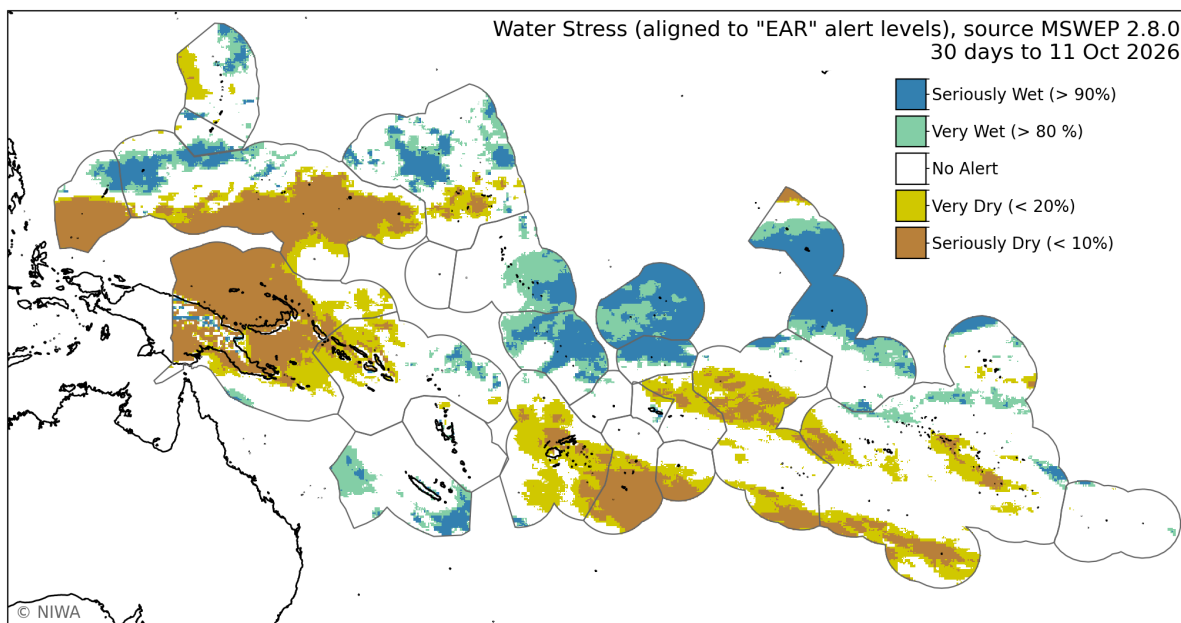
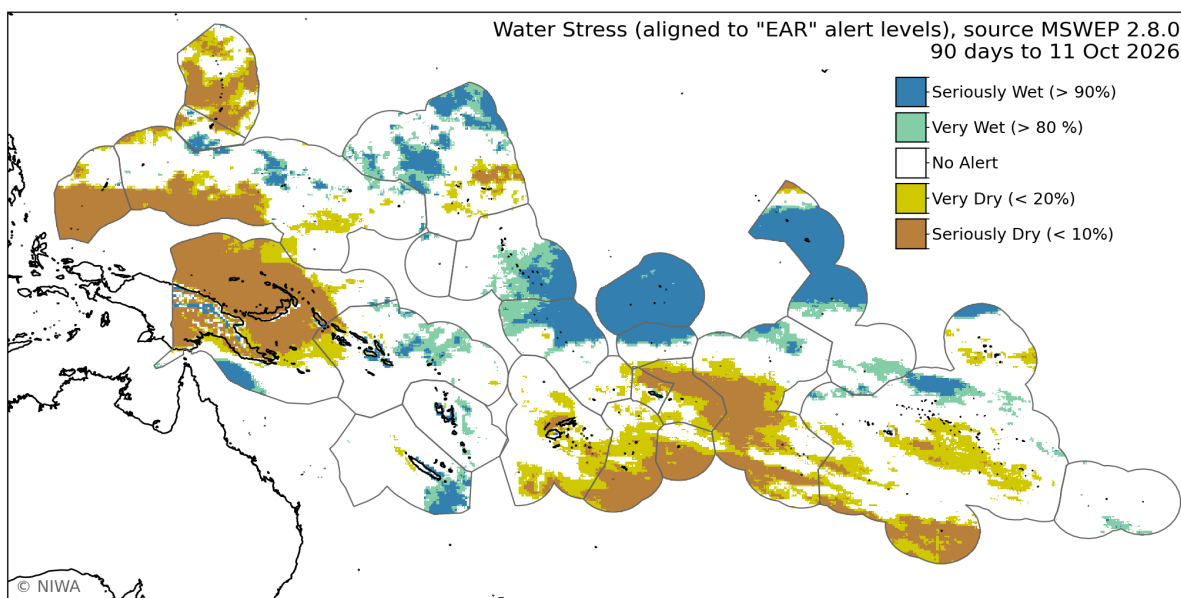
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EAR regional situation summary (11 October 2026)

Cumulative rainfall categories aligned to the Early Action Rainfall (EAR) Watch over the last 90 and 30 days are shown in the plots below.

During the 90 days ending 11 October (top plot), seriously dry or very dry conditions affected Guam, the Northern Marianas, much of Palau, western FSM, parts of the Marshall Islands, most of PNG, parts of the Solomon Islands, Fiji, Tonga, Niue, parts of Samoa and American Samoa, southern Cook Islands, Austral Islands, and parts of the Tuamotu Archipelago and Marquesas.

During the 30 days ending 11 October (bottom plot), seriously dry or very dry conditions affected much of Palau, central and eastern FSM, parts of the Marshall Islands, much of PNG, the Solomon Islands, Fiji, Tonga, Niue, northern Cook Islands, as well as parts of the Austral Islands, Society Islands, and Tuamotu Archipelago.



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Water Stress Watch



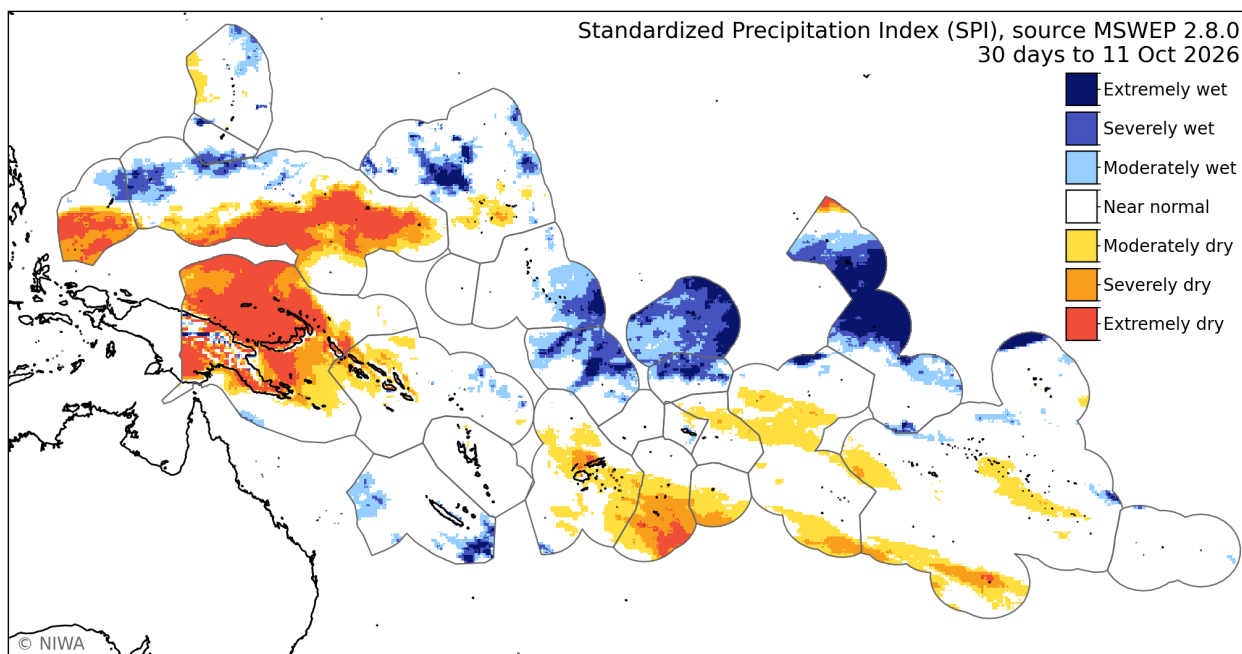
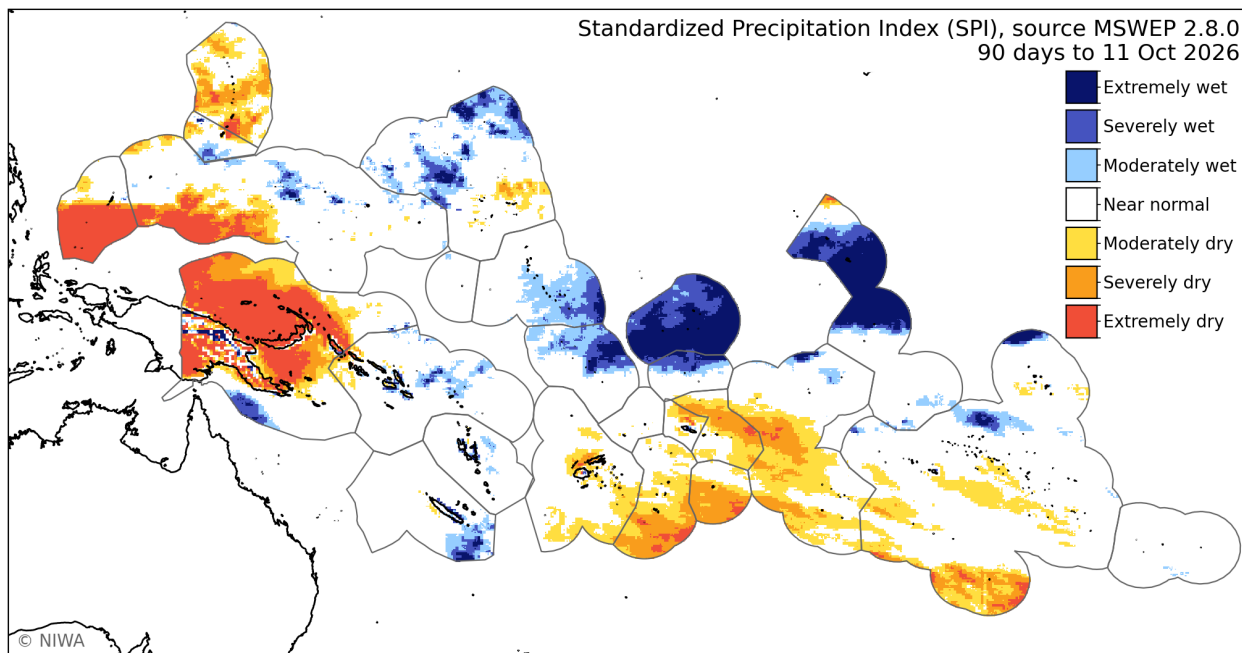
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SPI Regional situation summary (11 October 2026)

The Standardized Precipitation Index (SPI) categories for cumulative rainfall over the last 90 and 30 days are shown in the plots below.

During the 90 days ending 11 October (top plot), extremely dry or severely dry conditions occurred in the Northern Marianas, much of Palau, western FSM, much of PNG, far northern Solomon Islands, parts of Fiji, southern Tonga, Niue, and a portion of the Austral Islands.

During the 30 days ending 11 October (bottom plot), extremely dry or severely dry conditions occurred in southern Palau, central and eastern FSM, most of PNG, parts of the Solomon Islands, and parts of Fiji, Tonga and the Austral Islands.



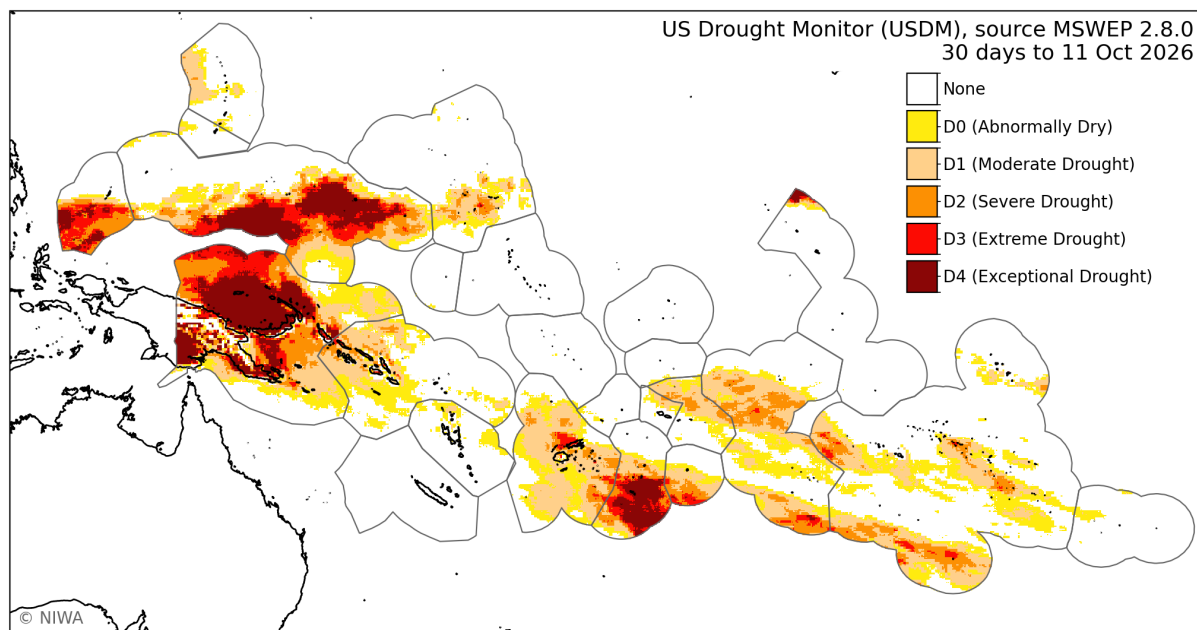
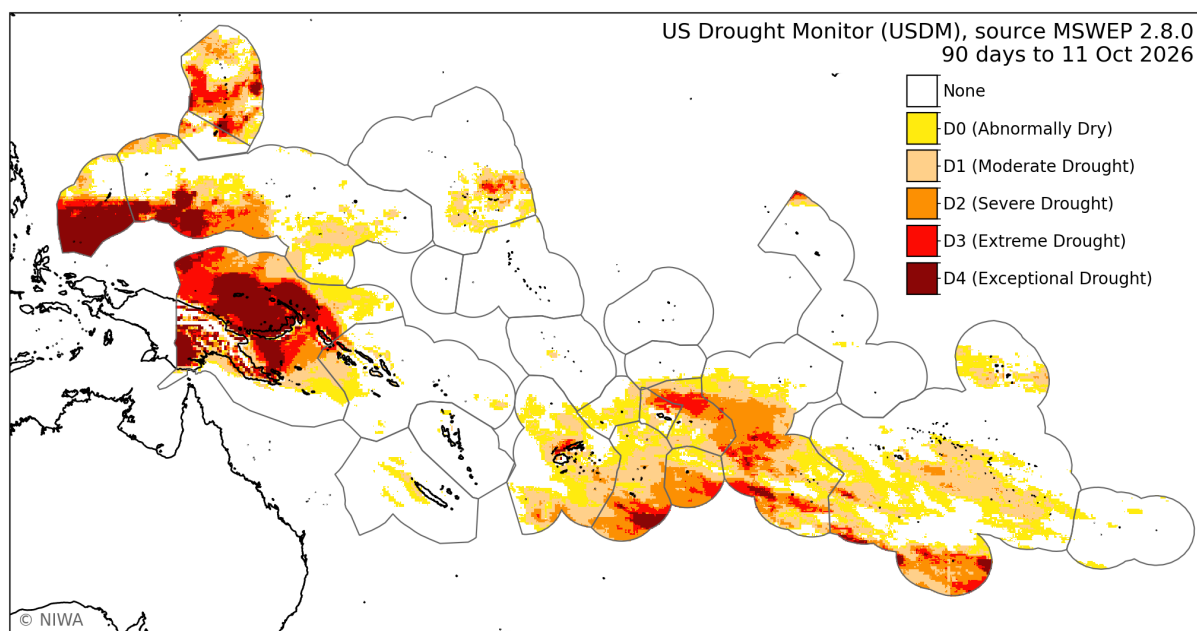


USDM Regional situation summary (11 October 2026)

The US Drought Monitor Index (USDM) categories for cumulative rainfall over the last 90 and 30 days are shown in the plots below.

During the 90 days ending 11 October (top plot), extreme or exceptional drought occurred in the Northern Marianas, southern Palau, western FSM, a small portion of the Marshall Islands, much of PNG, far northern Solomon Islands, and parts of Fiji, southern Tonga, southern Cook Islands, and Austral Islands.

During the 30 days ending 11 October (bottom plot), extreme or exceptional drought occurred in southern Palau, central and eastern FSM, much of PNG, and parts of Fiji, Tonga, and Austral Islands.





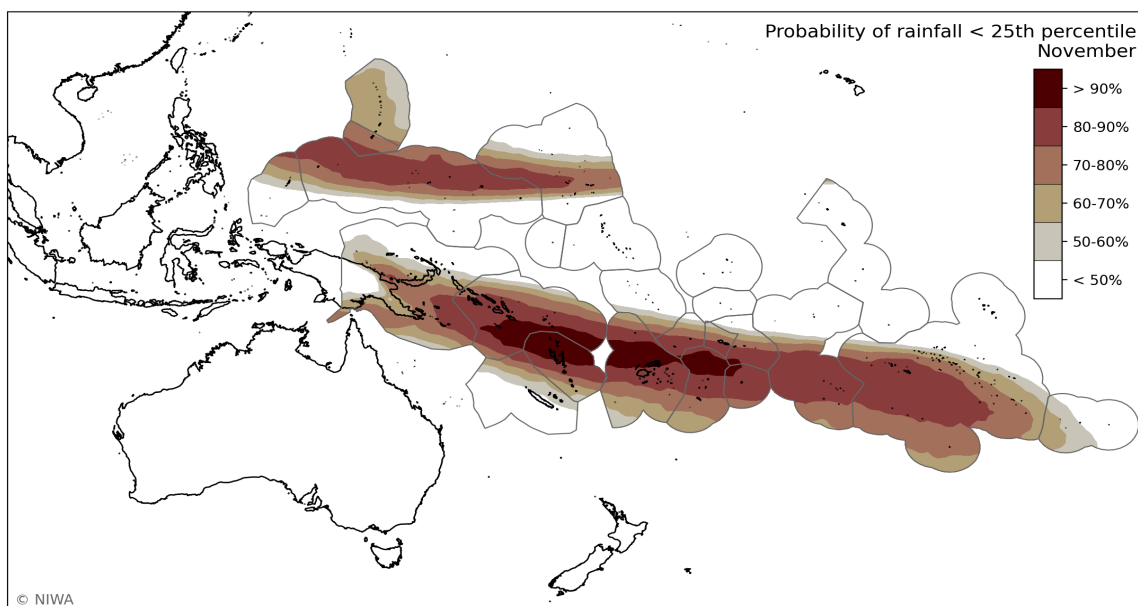
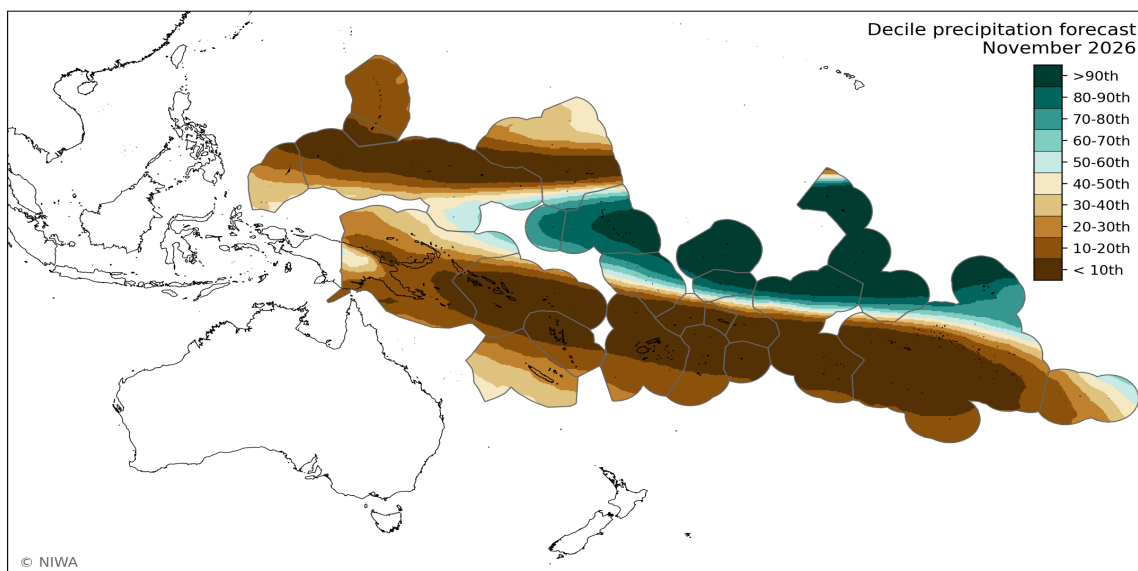
Nov 2026 forecast & probabilities of rainfall < 25th percentile

During November, significantly below normal rainfall is favoured in Palau, Guam, the Northern Marianas, FSM, Marshall Islands, PNG, Solomon Islands, New Caledonia, Vanuatu, Fiji, Tonga, Niue, southern Tuvalu, Wallis and Futuna, Samoa, American Samoa, southern Cook Islands, Austral Islands, Society Islands, Tuamotu Archipelago, and Pitcairn Islands.

Significantly above normal rainfall is favoured in Naoero, Kiribati (Gilbert, Phoenix, and Line Islands), northern Tuvalu, Tokelau, northern Cook Islands, and Marquesas.

All other island groups are expected to see near normal rainfall amounts during November.

During November, the highest chances for very dry conditions are located in northern Palau, Guam, the Northern Marianas, much of FSM, central Marshall Islands, PNG, Solomon Islands, parts of New Caledonia, Vanuatu, Fiji, Tonga, Niue, southern Tuvalu, Wallis and Futuna, Samoa, American Samoa, southern Cook Islands, Austral Islands, Society Islands, Tuamotu Archipelago, and Pitcairn Islands.





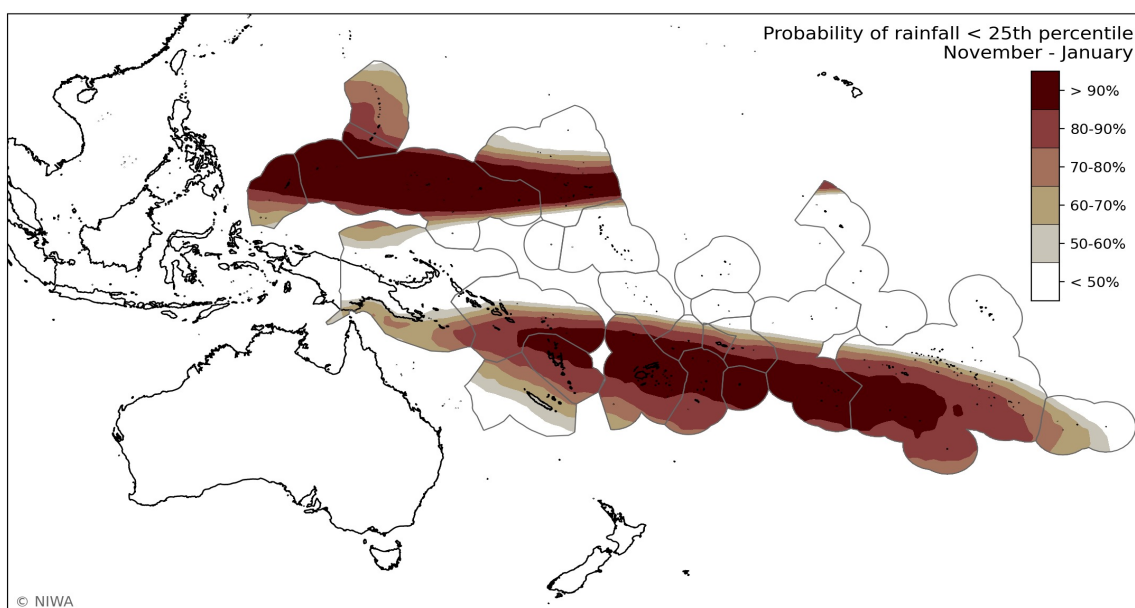
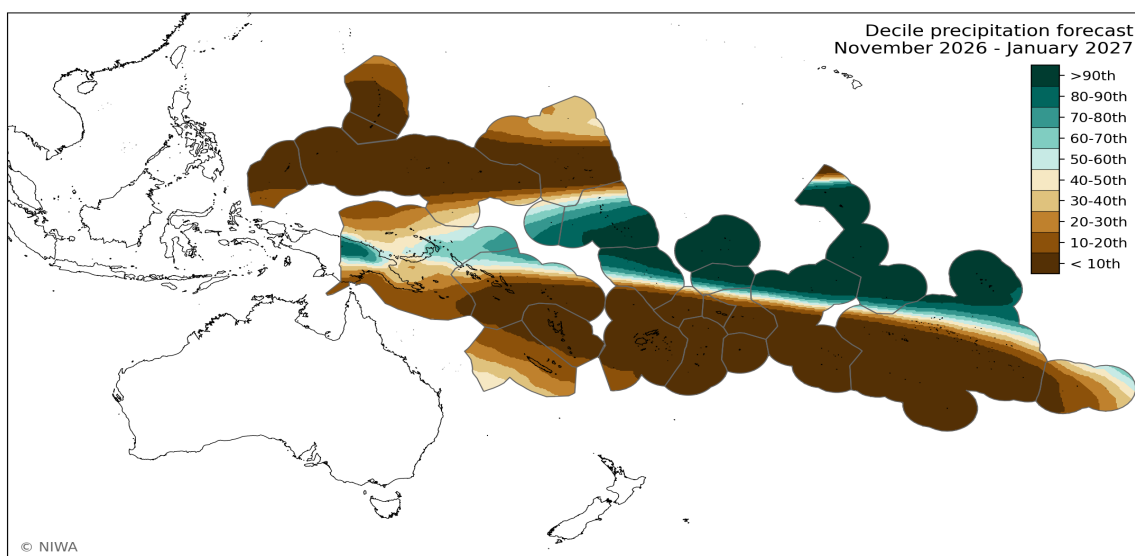
Nov-Jan forecast & probabilities of rainfall < 25th percentile

During November 2026-January 2027, significantly below normal rainfall is favoured in Palau, Guam, the Northern Marianas, FSM, Marshall Islands, parts of PNG, Solomon Islands, New Caledonia, Vanuatu, Fiji, southern Tuvalu, Wallis and Futuna, Tonga, Niue, Samoa, American Samoa, southern Cook Islands, Austral Islands, Society Islands, Tuamotu Archipelago, and Pitcairn Islands.

Significantly above normal rainfall is favoured in Naoero, Kiribati (Gilbert, Phoenix, and Line Islands), northern Tuvalu, Tokelau, northern Cook Islands, and Marquesas.

All other island groups are expected to see near normal rainfall amounts during November-January.

During November-January, the highest chances for very dry conditions are located in Palau, Guam, the Northern Marianas, much of FSM and the Marshall Islands, southern PNG, parts of the Solomon Islands, New Caledonia, Vanuatu, Fiji, southern Tuvalu, Wallis and Futuna, Tonga, Niue, Samoa, American Samoa, southern Cook Islands, Austral Islands, Society Islands, parts of the Tuamotu Archipelago, and Pitcairn Islands.



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About

Understanding the Island Climate Update bulletin

The ICU utilises rainfall data from the [Multi-Source Weighted-Ensemble Precipitation](#) (MSWEP) and a multi-model ensemble forecast utilising 550+ members derived from ten global climate models available from the [Copernicus Data Store](#).

Bulletin page	Description
Rainfall watch	Rainfall plots are derived from MSWEP data. Regional rainfall accumulation is shown for the last 30 days (1 month) and 90 days (3 months).
Water stress watch	Plots are derived from MSWEP data. Different Pacific Island Meteorological Services use different approaches to defining drought and water stress. Current regional water stress classifications are shown for the Early Action Rainfall (Page 3), Standard Precipitation Index (Page 4), and US Drought Monitoring (Page 5) alert levels for the last 90 and 30 days of accumulated rainfall.
Water stress outlook	Outlook water stress classifications are based on both realtime rainfall data and a multi-model ensemble forecast derived from ten global climate models for the next month and three months. The top plots on each page show the rainfall decile band for the next 1 and 3 months for which the cumulative probability derived from the multi-model ensemble forecasts reaches 50%. The bottom plots bring together conditions over the past 3 months and forecast conditions over the next month: • Current water stress conditions potentially easing: Past 3 month accumulation less than 25th percentile. 1 month / seasonal accumulation forecast greater than 25th percentile. • Areas moving into water stress: Past 3 month accumulation between the 40th and 25th percentile. 1 month / seasonal accumulation forecast less than 25th percentile. • Current water stress conditions persisting: Past 3 month accumulation less than 25th percentile. 1 month / seasonal accumulation forecast less than 25th percentile. The final page shows the probability that forecast rainfall over the next 1 or 3 months is within the lowest 25% of cumulative rainfall over the same period (a measure of the confidence in a low rainfall forecast).
Online Resources	Additional regional and country-level resources are available online: • Daily updated plots for 30, 60, 90, 180 and 365 day: accumulative rainfall, number of dry days, number of days since last rainfall > 1 mm, EAR, SPI and USDM indices. • A range of probabilistic one to five monthly and seasonal forecast plots updated around the 11th of each month. • Click here for the imagery and here for the underlying forecast data [forecast].



Earth Sciences New Zealand is the Network co-lead for the [WMO RA V Regional Climate Centre Node](#) on Long Range Forecast and consortium member for nodes on Climate Monitoring, Operational Data Services, and Training.

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