

# Island Climate Update

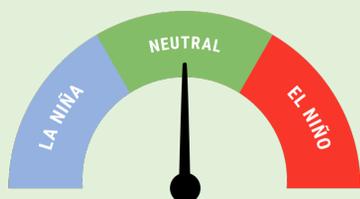


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**ENSO Watch**

April 2026

Recent



**ENSO-neutral**

ENSO-neutral conditions are currently in place in the tropical Pacific Ocean, but trends indicate a good chance for El Niño to form later this year.

The Southern Oscillation Index (SOI) was on the La Niña side of neutral (+0.5) from December 2025 – February 2026.

Tropical Pacific Ocean sea surface temperatures (SSTs) are currently in the ENSO-neutral range.

**85%** chance for **ENSO-neutral** during **April-June 2026**

Chance for **El Niño** conditions to emerge during **May-July 2026**

**60%**



**El Niño Watch**

Forecast

## ENSO situation summary

ENSO-neutral is currently in place in the tropical Pacific, but there are good indications that El Niño will form later this year, and it may potentially be a strong El Niño. There is about an 85% chance for ENSO-neutral to continue through April-June, with a 60% chance that El Niño will form during May-July.

As of 15 March 2026, the 30-day NINO3.4 Index (in the central equatorial Pacific) was  $-0.08^{\circ}\text{C}$ , in the neutral range. The 30-day relative Niño 3.4 Index (RONI) was  $-0.56^{\circ}\text{C}$ , on the La Niña side of the neutral range and reflective of the central equatorial Pacific being cooler than the average of the global tropics.

The Southern Oscillation Index (SOI) was on the La Niña side of the neutral range during December 2025 – February 2026 (+0.5), while the February value was +1.0 (i.e. just reaching the La Niña threshold).

Subsurface ocean temperatures in the equatorial Pacific are now above average or well above average nearly everywhere except for some shallow cool anomalies in the central Pacific.

Cooler than average temperatures are currently located in the central equatorial Pacific to depths of about 50 metres. However, elsewhere across the equatorial Pacific, warmer than average temperatures are observed at the surface and subsurface. Very warm water located at depths of 50-200 metres indicates a likely trend toward El Niño later this year.

During April-June, model guidance favours a continued chance of above normal rainfall across Micronesia, with rainfall chances also increasing along the equator. This may lead to enhanced rainfall for island groups such as Palau, Guam, the Northern Marianas, Federated States of Micronesia, the Marshall Islands, Nauru, and much of Kiribati.

Conversely, drier than normal or much drier than normal conditions are likely to occur for many island groups just south of the equator, particularly from Tuvalu east to northern French Polynesia (see pages 6-7 for more information).

Tropical cyclone season in the southwest Pacific continues through the end of April 2026.



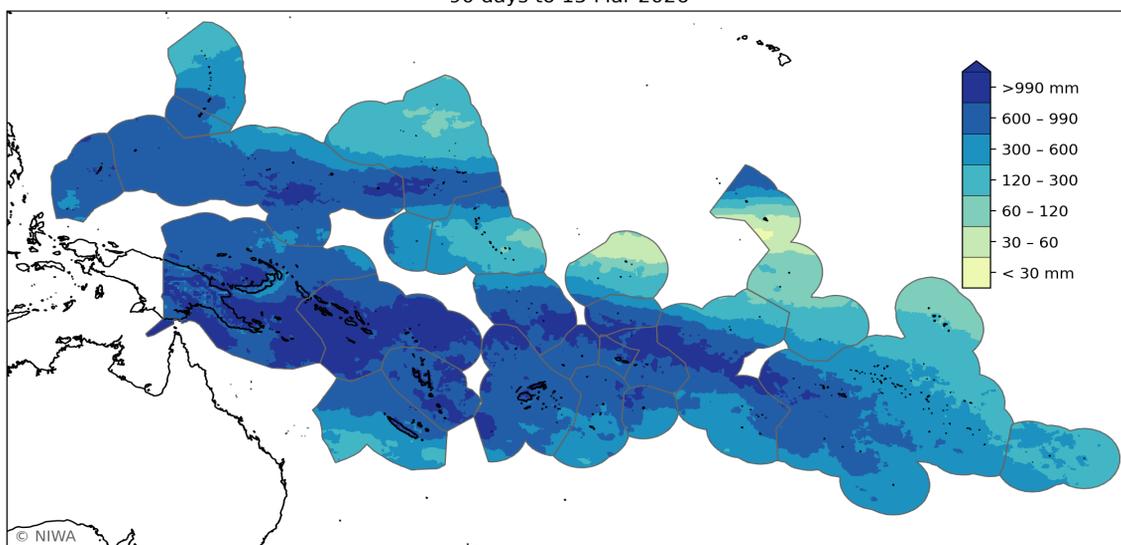
### Regional situation summary (15 March 2026)

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

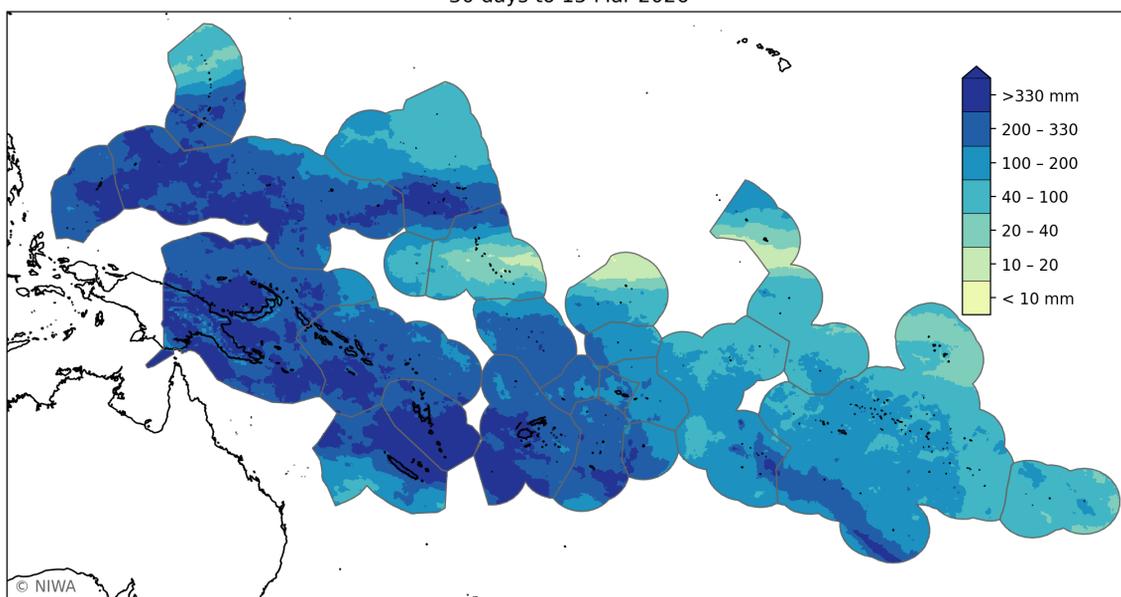
During the 90 days ending 15 March (top plot), over 990 mm of rain fell across parts of the central and eastern Federated States of Micronesia (FSM), southern Marshall Islands, parts of Papua New Guinea (PNG), the Solomon Islands, parts of Vanuatu, northern Fiji, southern Tuvalu, Samoa, and northern American Samoa. Less than 60 mm of rain was observed in a portion of Kiribati (parts of the northern Line Islands).

During the 30 days ending 15 March (bottom plot), over 330 mm of rain fell across parts of Palau, Guam, Northern Marianas, and FSM, southern Marshall Islands, parts of PNG, Solomon Islands, southern Vanuatu, New Caledonia, much of Fiji, and southern Tonga. Less than 40 mm of rain fell in parts of Kiribati (Gilbert, northern Phoenix, and northern Line Islands).

Cumulative rainfall (mm), source: MSWEP 2.8.0  
90 days to 15 Mar 2026



Cumulative rainfall (mm), source: MSWEP 2.8.0  
30 days to 15 Mar 2026



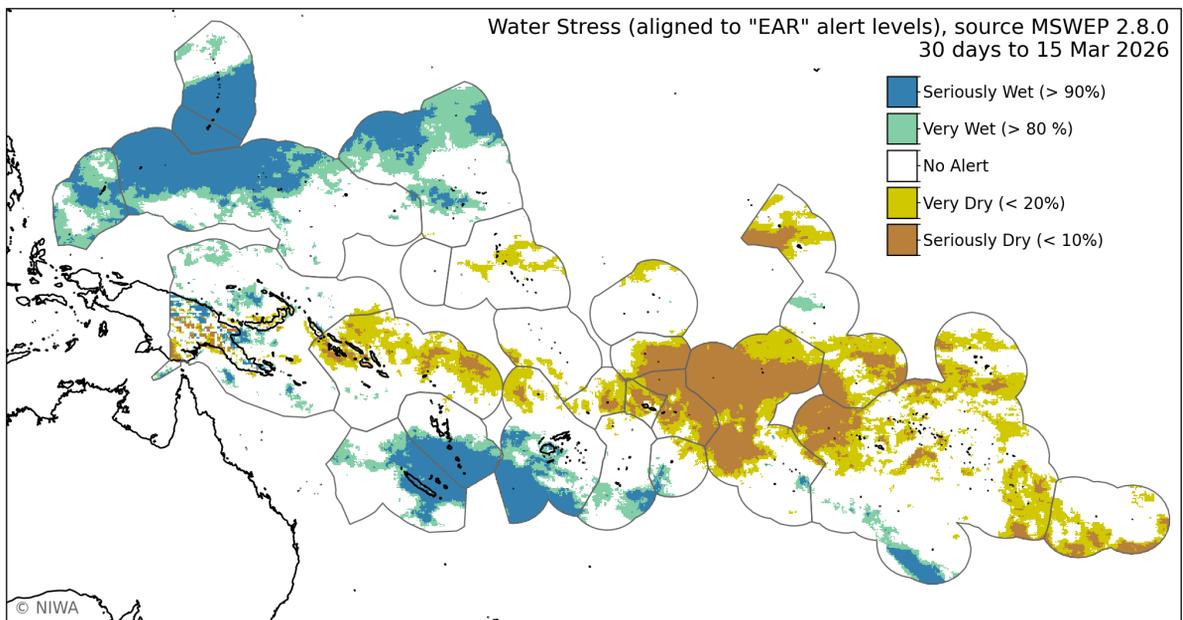
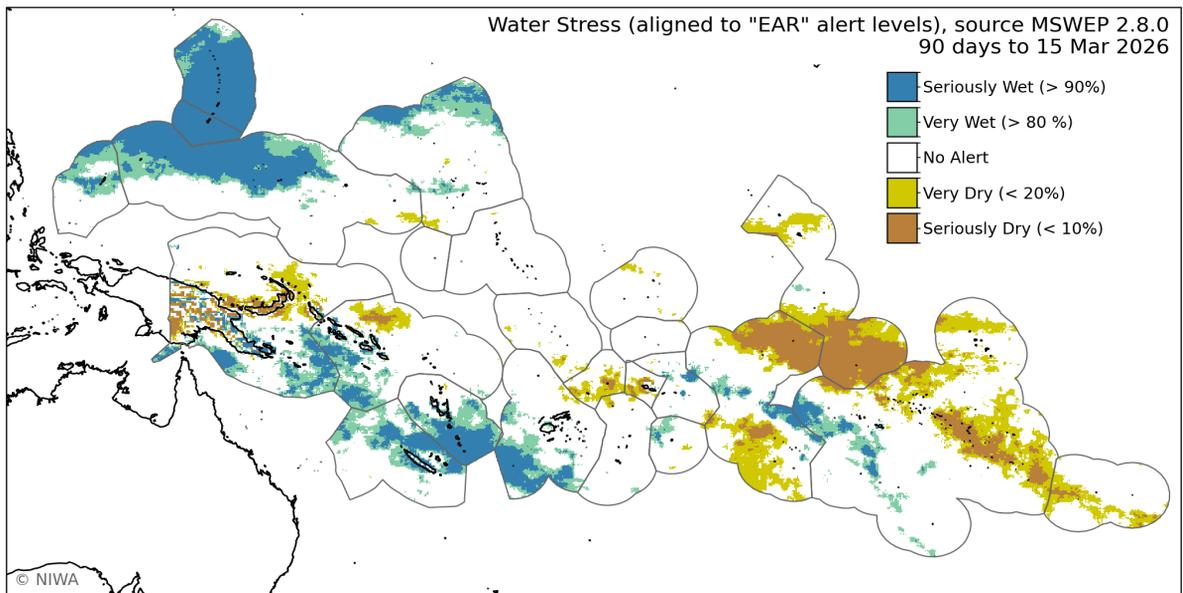


### EAR regional situation summary (15 March 2026)

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 15 March (top plot), seriously dry or very dry conditions affected northern PNG, Wallis and Futuna, Samoa, parts of the northern and southern Cook Islands, the Tuamotu Archipelago, and parts of the Marquesas.

During the 30 days ending 15 March (bottom plot), seriously dry or very dry conditions affected isolated parts of PNG, Solomon Islands, northern Fiji, Wallis and Futuna, Samoa, American Samoa, Tokelau, northern Cook Islands, parts of the Society Islands, Tuamotu Archipelago, and Marquesas, and parts of Kiribati (Gilbert and northern Line Islands).



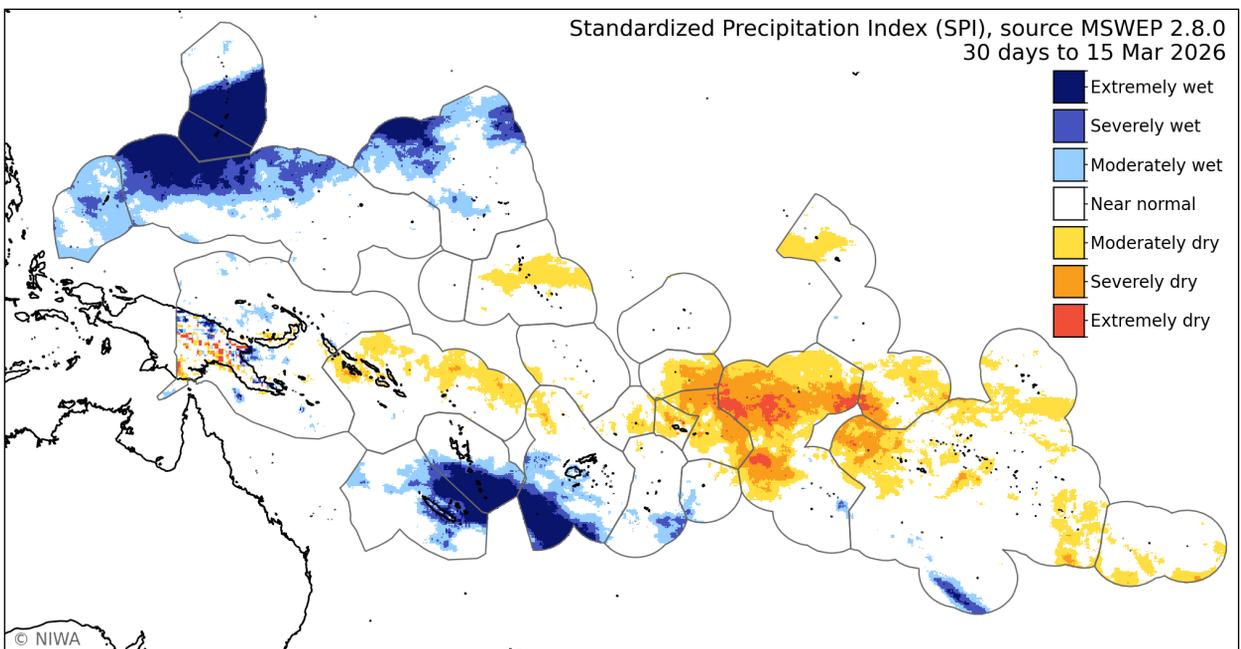
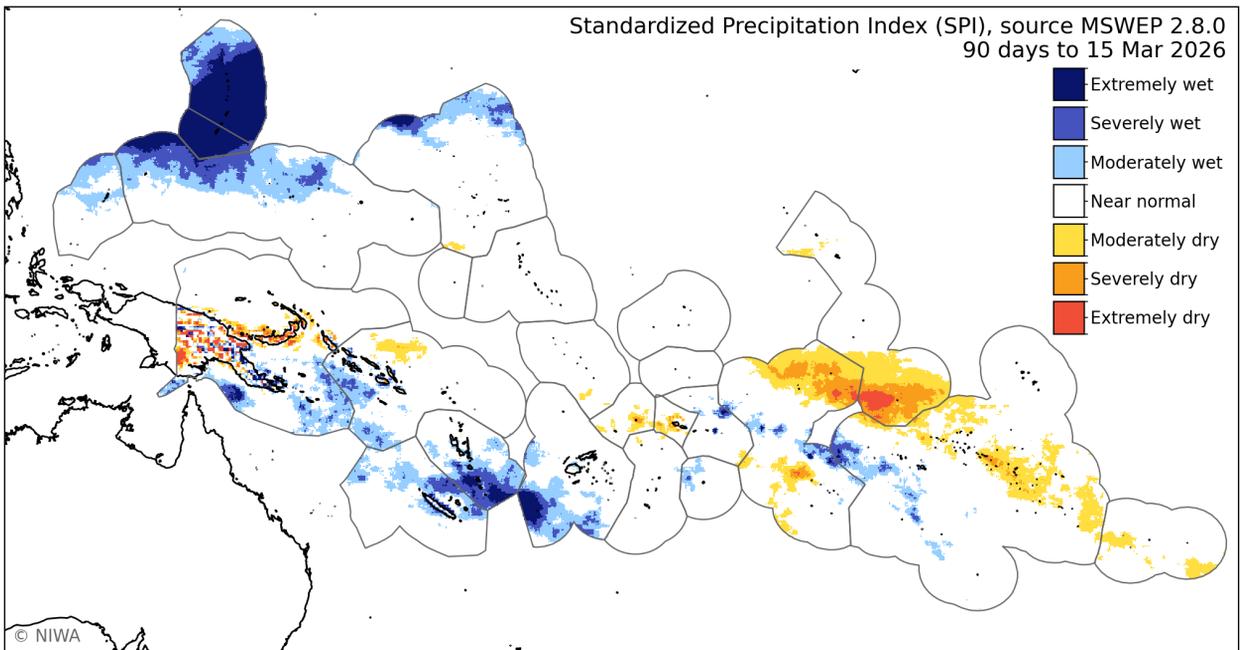


### SPI Regional situation summary (15 March 2026)

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 15 March (top plot), extremely dry or severely dry conditions occurred in parts of PNG, Wallis and Futuna, Samoa, northern Cook Islands, and parts of the Tuamotu Archipelago.

During the 30 days ending 15 March (bottom plot), extremely dry or severely dry conditions occurred in parts of PNG, western Solomon Islands, Samoa, American Samoa, Tokelau, northern Cook Islands, and western Society Islands.



# Island Climate Update

## Water Stress Watch



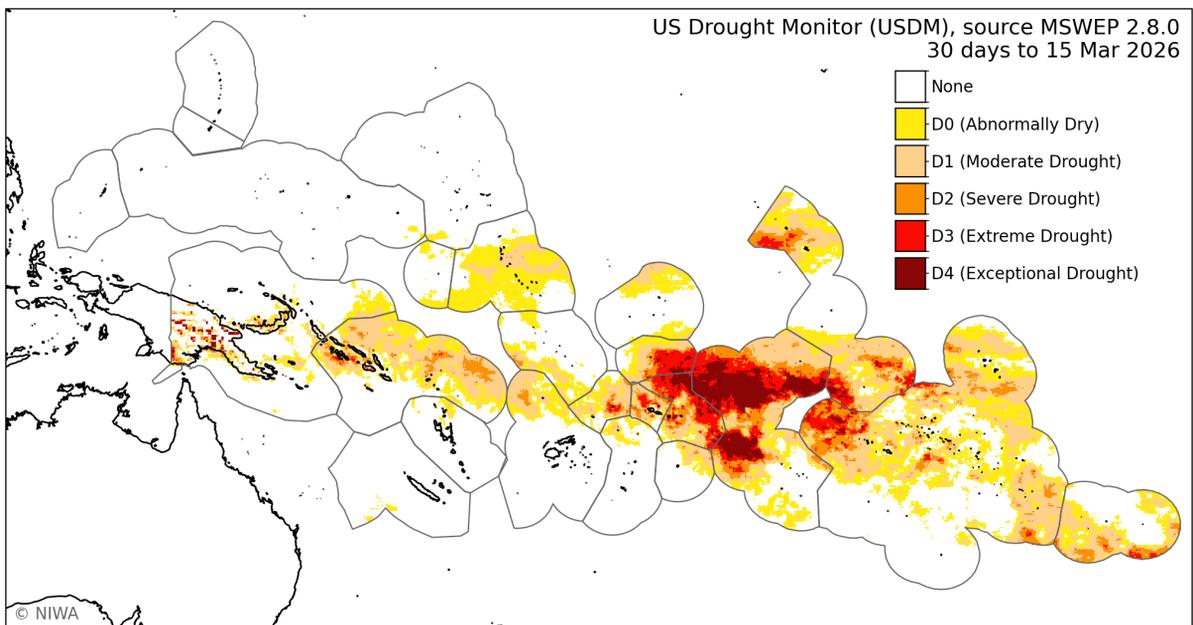
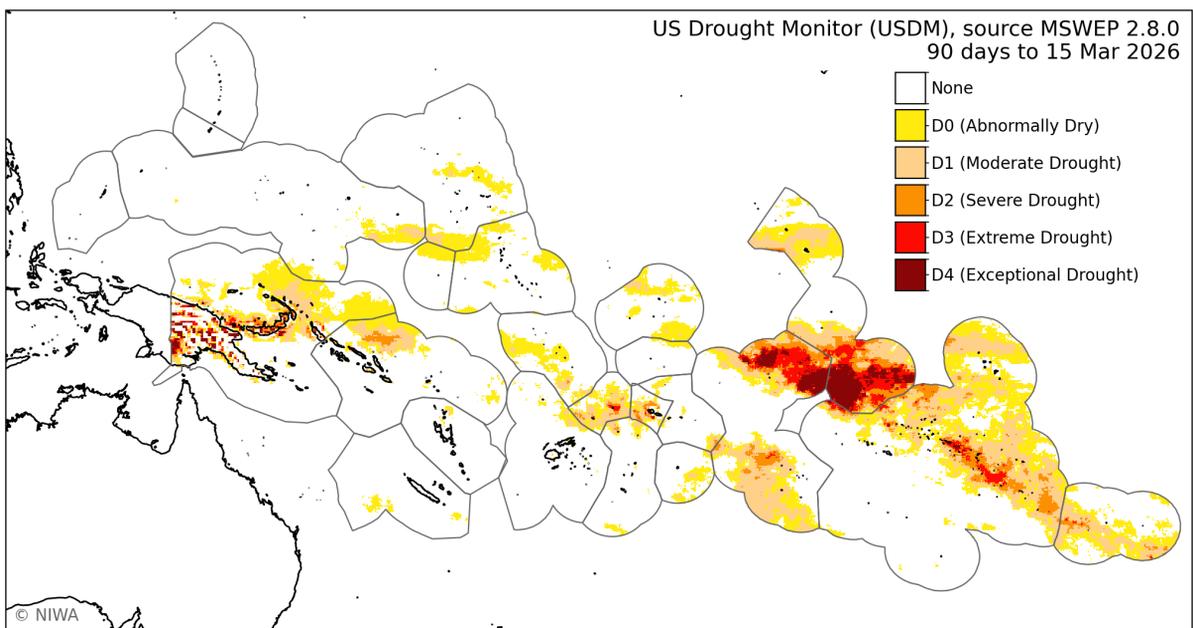
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### USDM Regional situation summary (15 March 2026)

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 15 March (top plot), extreme or exceptional drought occurred in parts of PNG, parts of Wallis and Futuna, and Samoa, northern Cook Islands, and the Tuamotu Archipelago.

During the 30 days ending 15 March (bottom plot), extreme or exceptional drought occurred in the western Solomon Islands, Wallis and Futuna, Samoa, American Samoa, Tokelau, northern Cook Islands, and western Society Islands.



# Island Climate Update

## Water Stress Outlook



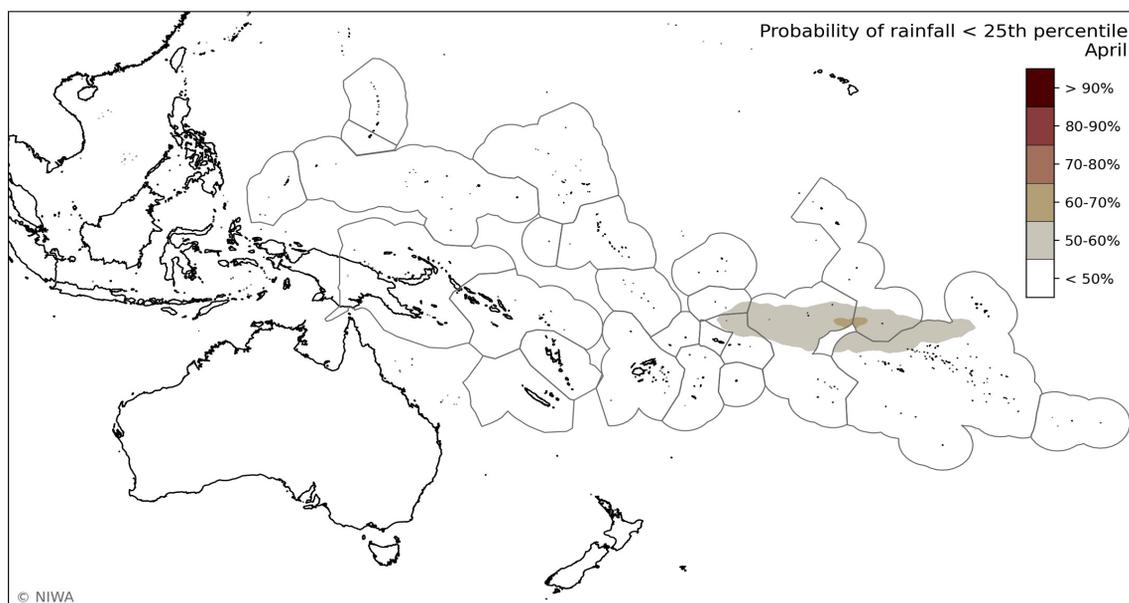
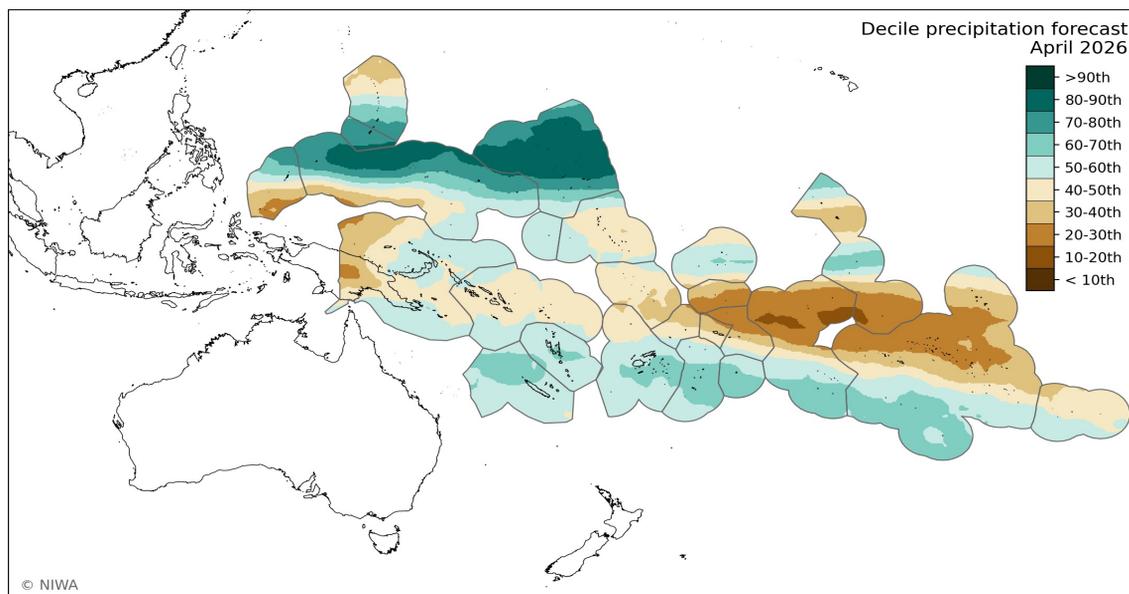
### April 2026 forecast & probabilities of rainfall < 25<sup>th</sup> percentile

During April, significantly below normal rainfall is favoured in southern Palau, parts of PNG, southern Tuvalu, Tokelau, Samoa, American Samoa, northern Cook Islands, Society Islands, Tuamotu Archipelago, Marquesas, and Kiribati (northern Line Islands).

Significantly above normal rainfall is favoured in Guam, Northern Marianas, much of FSM, the Marshall Islands, and parts of Vanuatu, Fiji, Tonga, Niue, southern Cook Islands, and Austral Islands.

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

For April, the highest chances for very dry conditions are located in northern American Samoa and the northern Cook Islands.



# Island Climate Update

## Water Stress Outlook



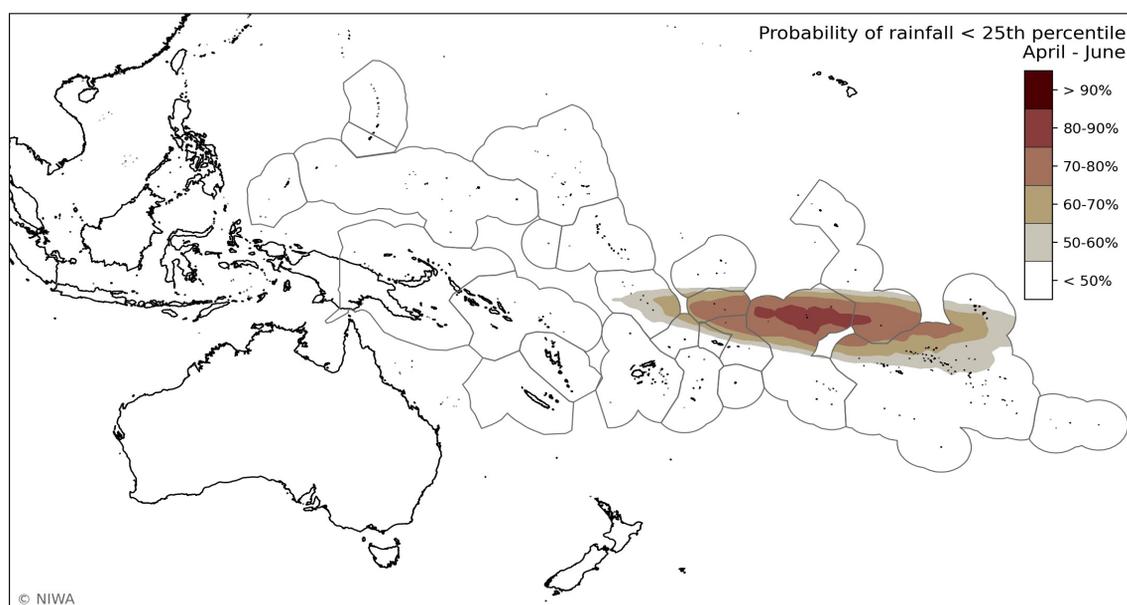
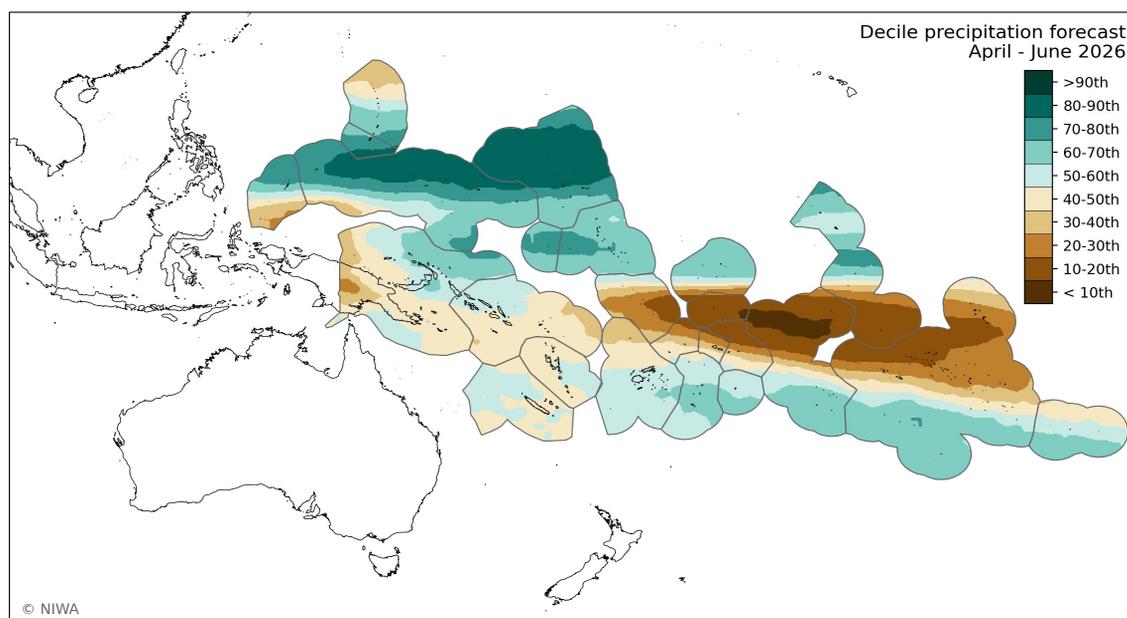
### April-June 2026 forecast & probabilities of rainfall < 25<sup>th</sup> percentile

During April-June, significantly below normal rainfall is favoured in southern Palau, parts of PNG, northern Fiji, Tuvalu, Tokelau, Wallis and Futuna, Samoa, American Samoa, northern Cook Islands, Society Islands, Tuamotu Archipelago, and Marquesas.

Significantly above normal rainfall is favoured in northern Palau, Guam, Northern Marianas, FSM, Marshall Islands, Nauru, Kiribati (Gilbert, Phoenix, and northern Line Islands), parts of Tonga, southern Cook Islands, and Austral Islands.

All other island groups are expected to see near normal rainfall amounts during April-June.

For April-June, the highest chances for very dry conditions are located in Tuvalu, Tokelau, northern American Samoa, northern Cook Islands, as well as parts of the Society Islands, northern Tuamotu Archipelago, and Marquesas.



# Island Climate Update



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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
<b>Rainfall watch</b>	Rainfall plots are derived from MSWEP data. Regional rainfall accumulation is shown for the last 30 days (1 month) and 90 days (3 months).
<b>Water stress watch</b>	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.
<b>Water stress outlook</b>	<p>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.</p> <p>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%.</p> <p>The bottom plots bring together conditions over the past 3 months and forecast conditions over the next month:</p> <ul style="list-style-type: none"> <li>• Current water stress conditions potentially easing: Past 3 month accumulation less than 25<sup>th</sup> percentile. 1 month / seasonal accumulation forecast greater than 25<sup>th</sup> percentile.</li> <li>• Areas moving into water stress: Past 3 month accumulation between the 40<sup>th</sup> and 25<sup>th</sup> percentile. 1 month / seasonal accumulation forecast less than 25<sup>th</sup> percentile.</li> <li>• Current water stress conditions persisting: Past 3 month accumulation less than 25<sup>th</sup> percentile. 1 month / seasonal accumulation forecast less than 25<sup>th</sup> percentile.</li> </ul> <p>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).</p>
<p>Online Resources</p>	<p><b>Additional regional and country-level resources are available online:</b></p> <ul style="list-style-type: none"> <li>• Daily updated plots for 30, 60, 90, 180 and 365 day: accumulative rainfall, number of dry days, number of days since last rainfall &gt; 1 mm, EAR, SPI and USDM indices.</li> <li>• A range of probabilistic one to five monthly and seasonal forecast plots updated around the 11<sup>th</sup> of each month.</li> <li>• Click <a href="#">here for the imagery</a> and here for the underlying forecast data <a href="#">[forecast]</a>.</li> </ul>



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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