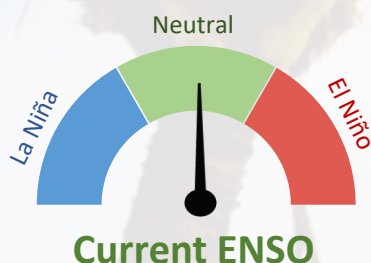


Recent

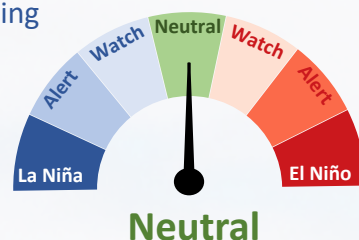


ENSO neutral conditions continued during September 2019, with sea surface temperatures (SSTs) near average for the time of year in the tropical Pacific. The Southern Oscillation Index (SOI) was in El Niño territory, an indication that the atmosphere was still responding to a residual warm pool of water in the west-central Pacific.

SSTs in the central equatorial Pacific were equal to the climatological value (i.e. zero anomaly) during September. The SOI was -1.3 (in the El Niño range).

61% chance for **ENSO-neutral** conditions persisting during **October-December 2019**.

Chance for **ENSO-neutral** conditions during **January – March 2020**. **55%**



Forecast

ENSO situation summary

Upper-oceanic heat content anomalies continued to decrease in the eastern and east-central equatorial Pacific during September. The core of the warm pool that had been associated with a central Pacific El Niño earlier in the year was located just west of the International Dateline. While this spatial pattern reflects **ENSO neutral conditions**, the atmosphere may respond to the growing coolness in the eastern equatorial Pacific during the next three to six months, suggesting that central Pacific El Niño-like patterns will be possible.

During September, rainfall patterns across the tropical Pacific were consistent with ENSO neutral conditions. For the first month in some time, **below normal rainfall** occurred near the International Dateline.

Trade winds were slightly stronger than normal in the tropical Pacific during September. This led to additional cooling of SSTs. During October, stronger than normal trade winds are forecast to develop in the west-central Pacific, which may contribute to **additional cooling in the NINO 3 and 4 regions**.

According to the consensus from international models, **oceanic ENSO-neutral conditions** are most likely at **61% chance for the October – December** period with El Niño at 35% chance. For the January – March 2020 period, the probability for neutral conditions is 55% with the chance for El Niño increasing to 40%. For the April – June 2020 period, the probability for neutral conditions and El Niño is 56% and 41%, respectively.

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Rainfall outlook for October – December 2019

Below normal rainfall for Palau, Kiribati (Phoenix, Line Islands), Vanuatu, New Caledonia, Tonga, Marquesas, and the Pitcairn Islands.

Near or below normal rainfall for Niue.

Near normal rainfall for the Federated States of Micronesia

Near or above normal rainfall for Kiribati (Gilbert Islands), Fiji, Samoa, American Samoa, and the Northern Cook Islands.

Above normal rainfall for the Northern Marianas, Guam, Papua New Guinea, the Marshall Islands, Nauru, the Solomon Islands, Tuvalu, Tokelau, Wallis & Futuna, the Society Islands, and Tuamotu/Gambier Islands.

No strong guidance (climatological forecast) for the Southern Cook Islands & Austral Islands.

Forecast

Rainfall outlook table for October – December 2019

ISLAND	PROBABILITY (%)			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
Marshall Islands	10	19	71	ABOVE	High
Nauru	17	21	62	ABOVE	Moderate
Solomon Islands	20	22	58	ABOVE	Moderate-High
Northern Marianas	25	26	49	ABOVE	High
Papua New Guinea	25	28	47	ABOVE	High
Tuvalu	25	28	47	ABOVE	Moderate
Guam	27	28	45	ABOVE	Moderate-High
Tuamotu Islands	25	31	44	ABOVE	High
Wallis & Futuna	26	30	44	ABOVE	Moderate
Society Islands	30	32	38	ABOVE	Moderate-High
Tokelau	32	32	36	ABOVE	Moderate
Kiribati: Gilbert Islands	30	34	36	AVG - ABOVE	Moderate
Northern Cook Islands	28	38	34	AVG - ABOVE	Moderate-High
Samoa	29	37	34	AVG - ABOVE	Moderate
American Samoa	31	35	34	AVG - ABOVE	Moderate
Fiji	30	37	33	AVG - ABOVE	Moderate-High
Southern Cook Islands	33	33	34	CLIMATOLOGY	High
Austral Islands	34	34	32	CLIMATOLOGY	High
FSM	32	36	32	NEAR NORMAL	High
Niue	38	32	30	AVG - BELOW	Moderate-High
Tonga	42	31	27	BELOW	High
Pitcairn Islands	44	29	27	BELOW	Moderate-High
Vanuatu North	52	24	24	BELOW	Moderate-High
Palau	58	22	20	BELOW	Moderate-High
Kiribati: Phoenix Islands	57	24	19	BELOW	Moderate-High
Vanuatu South	72	16	12	BELOW	High
Marquesas	63	27	10	BELOW	High
New Caledonia	76	15	9	BELOW	High
Kiribati: Line Islands	72	24	4	BELOW	High

Note: Rainfall estimates for Pacific Islands for the next three months are given in terms of tercile probabilities (e.g. 20:30:50). These are derived from the averages of several global climate models. They correspond to the odds of the observed rainfall being in the lowest one third of the distribution, the middle one third, or the highest one third of the distribution. For the long term average, it is equally likely (33% chance) that conditions in any of the three terciles will occur. *If conditions are climatology, we expect an equal chance of the rainfall being in any tercile.

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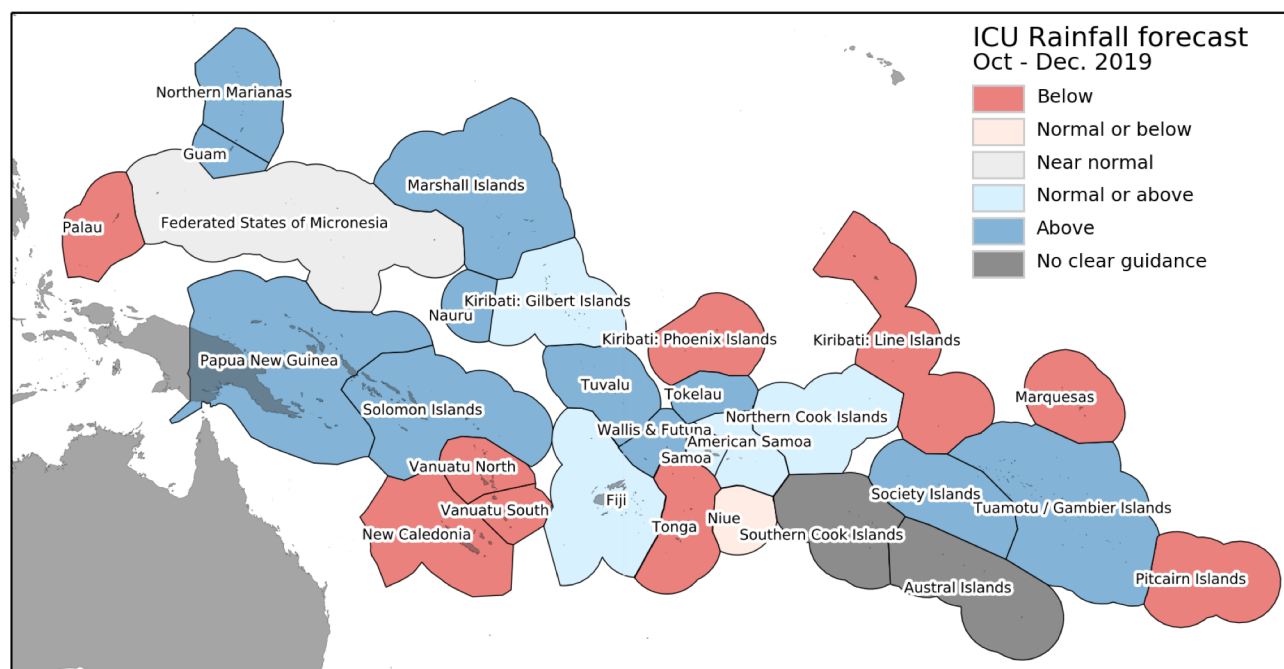


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The Island Climate Update

October to December 2019 rainfall forecast

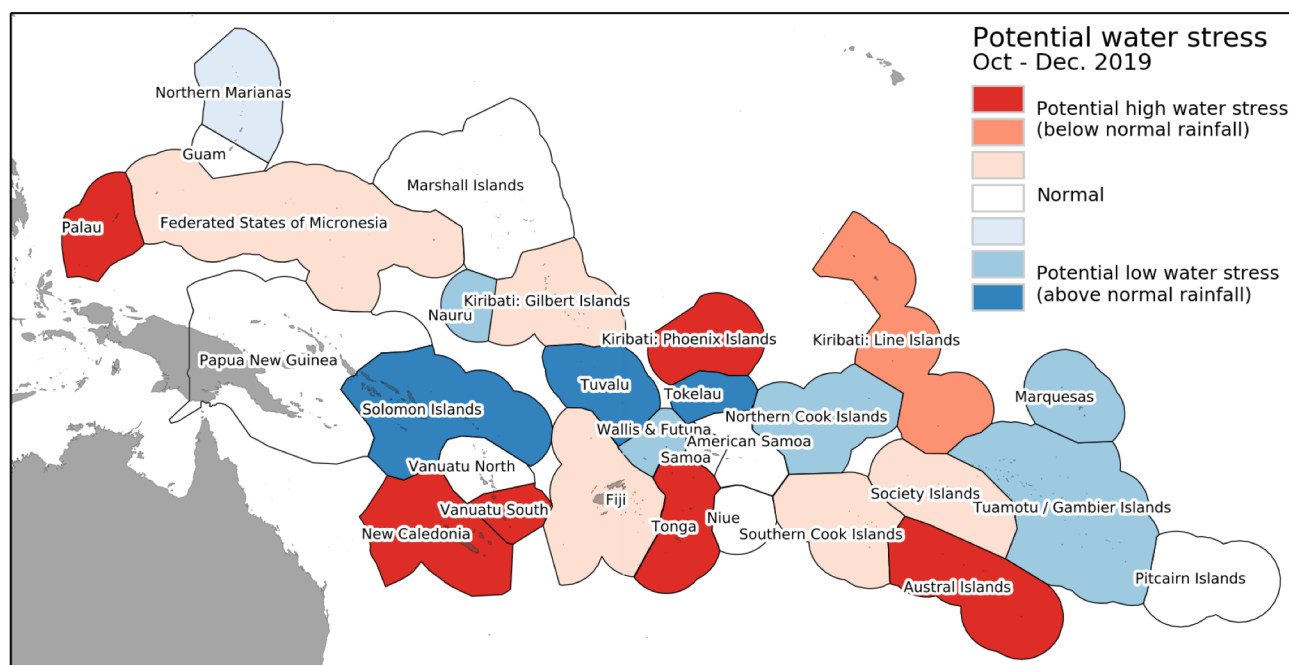
Drought Watch
October 2019



Regional drought potential advisory

Based on rainfall anomaly classification over the past six months and forecast rainfall anomaly classification over the next 3 months

Countries to watch for potential water stress are **Palau, New Caledonia, southern Vanuatu, Kiribati (Phoenix Islands, Line Islands), Tonga, and the Austral Islands** as they have received low rainfall over part of the past 6 months, and dry conditions are forecast for the next three month period (October-December 2019).



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