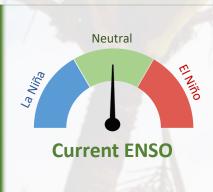
The Island Climate Update

ENSO Watch August 2018

Recent



ENSO (El Niño – Southern Oscillation) neutral conditions persisted in the tropical Pacific during July 2018.

Sea surface temperatures in the central and eastern Pacific continued to warm in July 2018.

The Southern Oscillation Index (SOI) was in the neutral range (+0.2 in July 2018).

55%

chance for **El Niño** conditions to emerge during **August** – **October 2018.**

Chance for El Niño conditions during February – April 2019





ENSO situation summary

El Niño – Southern Oscillation (ENSO) neutral conditions continued across the tropical Pacific during July 2018. Sea surface temperatures (SSTs) in the central equatorial Pacific warmed for the fourth consecutive month and are currently slightly above average. The NINO3.4 is currently positive with a value of + 0.46°C for July 2018.

The subsurface ocean remained warmer than average in the eastern equatorial Pacific during July, but anomalies weakened slightly compared to June. Waters remained 2.0°C above average between approximately 20m and 100m depth east of about 130 °W. Trade winds were very close to normal over most of the tropical Pacific, in contrast with the strong positive anomalies (i.e. weaker trade winds) that were present around the International Dateline during June. The Southern Oscillation Index (SOI) was slightly positive (i.e. on the La Niña side of Neutral) with a preliminary value of +0.2 for July 2018. This is consistent with a general weakening of the El Niño-like signals that emerged over during June 2018.

In summary, despite a continued slow warming of ocean surface temperatures in the central and eastern equatorial Pacific, July 2018 witnessed a slight weakening of the El Niño-like signals that previously emerged in June 2018, notably in the subsurface ocean and in the atmosphere.

The consensus from international models is for the tropical Pacific to transition toward El Niño over the next three-month period (55% chance over August – October 2018). The probability for El Niño conditions increases in to 2019, with a 78% chance for El Niño conditions over the February – April 2019 period. The strength and characteristics of this event – if it eventuates – remain uncertain at this point, but indications so far are that it is unlikely to be in the strong category.

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The Island Climate Update

Rainfall outlook for August - October 2018

Below normal rainfall for northern Vanuatu, New Caledonia, Tuvalu, Tokelau, the northern Cook Islands, the Tuamotu archipelago and the Marquesas.

Normal or below normal rainfall for Palau, Papua New Guinea, southern Vanuatu, the Gilbert and Phoenix Islands of Kiribati, Wallis and Futuna, Samoa, American Samoa and the Society Islands.

Near normal rainfall for Nauru, Fiji, Tonga, and the Line Islands of Kiribati.

Normal or above normal rainfall for the northern Marianas, Guam, the Federated States of Micronesia, the Marshall Islands, the Solomon Islands, Niue, the southern Cook Islands, the Austral Islands, and Pitcairn Island.

Rainfall outlook table for August - October 2018

ISLAND	PROBABILITY (%)			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
N. Marianas	20	40	40	AVG - ABOVE	High
Marshall Islands	20	40	40	AVG - ABOVE	High
Niue	25	35	40	AVG - ABOVE	High
Cook Islands (Southern)	25	40	35	AVG - ABOVE	Moderate-High
Austral Islands	25	40	35	AVG - ABOVE	Moderate
FSM	25	40	35	AVG - ABOVE	Moderate
Pitcairn Island	25	40	35	AVG - ABOVE	Moderate
Solomon Islands	25	40	35	AVG - ABOVE	Moderate-High
Guam	15	40	35	AVG - ABOVE	High
Fiji	30	40	30	NEAR NORMAL	Moderate-High
Tonga	30	40	30	NEAR NORMAL	Moderate
Kiribati (Eastern)	30	40	30	NEAR NORMAL	Moderate
Nauru	30	40	30	NEAR NORMAL	Moderate
Kiribati (Western)	35	40	25	AVG - BELOW	Moderate
American Samoa	35	40	25	AVG - BELOW	Moderate
Central Kiribati (Phoenix)	35	40	25	AVG - BELOW	Moderate
Palau	40	35	25	AVG - BELOW	Moderate
Papua New Guinea	40	35	25	AVG - BELOW	Moderate
Vanuatu (South)	40	35	25	AVG - BELOW	Moderate-High
Samoa	40	35	25	AVG - BELOW	High
Society Islands	40	35	25	AVG - BELOW	Moderate-High
Wallis & Futuna	40	35	25	AVG - BELOW	Moderate
Cook Islands (Northern)	55	35	20	BELOW	High
Vanuatu (North)	45	35	20	BELOW	Moderate-High
Tuamotu Islands	45	35	20	BELOW	Moderate
Marquesas	45	35	20	BELOW	Moderate
Tuvalu	45	35	20	BELOW	Moderate
New Caledonia	55	30	15	BELOW	High
Tokelau	55	30	15	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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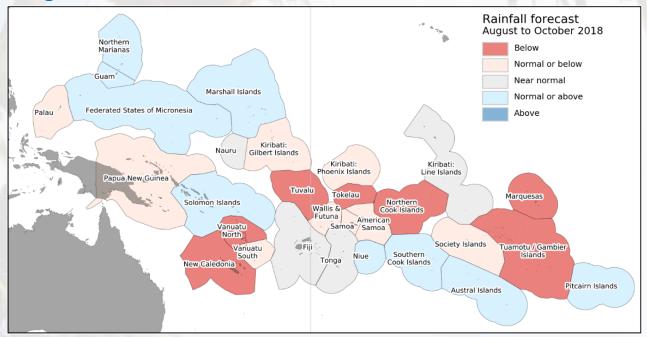
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N-LWA Taihoro Nukurangi

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Drought Watch August 2018

August to October 2018 rainfall forecast

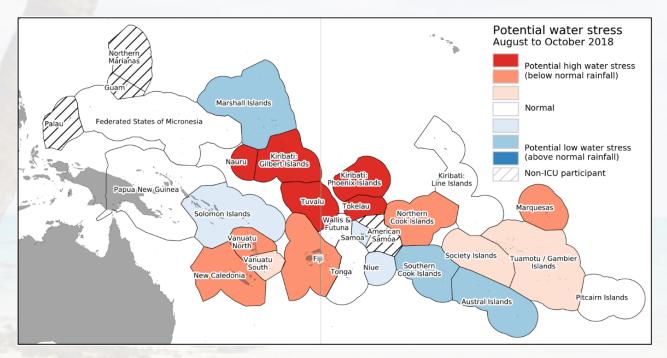


Regional drought potential advisory

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

A number of island groups are at risk from high water stress over the next three months, as they have received low rainfall over the past few months and dry conditions are forecast. These island groups are Nauru, the Gilbert and Phoenix Islands of Kiribati, Tuvalu, and Tokelau.

Other countries to watch for water stress are New Caledonia, northern Vanuatu, Fiji, the northern Cook Islands, and the Marquesas.



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