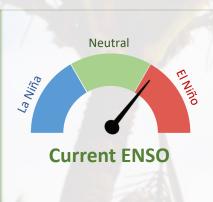
# **The Island Climate Update**

**ENSO Watch** August 2019



Sea surface temperatures (SSTs) in the central equatorial Pacific were 0.5°C above average in July, down from 0.7°C during June, suggesting that the El Niño event is weakening.

The Southern Oscillation Index (SOI) in July was -0.5 (on the El Niño side of neutral).

Rainfall and convection patterns remained generally consistent with a weak, central Pacific El Niño.

38%

chance for **El Niño** conditions persisting during August - October 2019.

Chance for **El Niño** conditions during November 2019 - January 2020.

**47%** 



#### **ENSO situation summary**

During July 2019, SSTs dipped below El Niño thresholds in the central Pacific for the first time in 5 months. The NINO3.4 Index anomaly (in the central Pacific) for the month of July was +0.54°C (the threshold for El Niño is +0.70°C). Meanwhile, warmth was steadfast in the NINO4 region (western Pacific) with a monthly value of +0.79°C.

The Southern Oscillation Index (SOI) was -0.5 during July. The conventional threshold for El Niño wasn't reached (SOI values below -1.0 for three consecutive months), but a weakly coupled central Pacific El Niño remains present.

Across the tropical Pacific, rainfall and convection patterns remained generally consistent with a weak, central Pacific El Niño. Rainfall was above normal just west of the International Dateline as well as between 10-20°N and 10-20°S in the central Pacific.

The probability for oceanic El Niño conditions, according to the consensus from international models, is 38% for the August – October 2019 period with a 56% chance for the development of ENSO-neutral conditions. This Is the first time since July 2018 that ENSO neutral is the most likely outcome. For the November 2019 - January 2020 period, the probability for El Niño is 47% and neutral 42%. For the February – April 2020 period, the probability for El Niño is 51% and neutral 46%.

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Rain Watch

August 2019

## **The Island Climate Update**

Rainfall outlook for August – October 2019

Below normal rainfall for Kiribati (Gilbert Islands), Palau, Niue, Tonga, Papua New Guinea, northern Vanuatu, Fiji, Kiribati (Phoenix Islands), southern Vanuatu, and New Caledonia.

Near or below normal rainfall for American Samoa, the Southern Cook Islands, the Society Islands, Kiribati (Line Islands).

Near normal rainfall for the Marquesas.

Near or above normal rainfall for the Tuamotu Islands.

Above normal rainfall for Federated States of Micronesia, the Northern Marianas Islands, Guam, the Marshall Islands, the Northern Cook Islands, Tokelau, Nauru, Tuvalu, Solomon Islands, and the Pitcairn Islands, and the Austral Islands.

No strong guidance (i.e. climatological forecast) for Wallis & Futuna and Samoa.

### Rainfall outlook table for August – October 2019

ISLAND	PROBABILITY (%)			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
FSM	14	19	67	ABOVE	High
Northern Marianas	19	22	59	ABOVE	Moderate-High
Guam	20	21	59	ABOVE	Moderate
Marshall Islands	17	30	53	ABOVE	High
Northern Cook Islands	22	25	53	ABOVE	High
Tokelau	23	24	53	ABOVE	Moderate-High
Nauru	23	25	52	ABOVE	Moderate
Tuvalu	24	25	51	ABOVE	Moderate-High
Solomon Islands	24	26	50	ABOVE	Moderate
Pitcairn Islands	24	27	49	ABOVE	High
Austral Islands	30	30	40	ABOVE	High
Tuamotu Islands	23	36	41	AVG - ABOVE	High
Wallis & Futuna	33	33	34	CLIMATOLOGY	Moderate-High
Samoa	36	32	32	CLIMATOLOGY	Moderate-High
Marquesas	26	61	13	NEAR NORMAL	High
American Samoa	36	35	29	AVG - BELOW	Moderate
Southern Cook Islands	37	36	27	AVG - BELOW	High
Society Islands	43	34	23	AVG - BELOW	High
Kiribati: Line Islands	43	38	19	AVG - BELOW	High
Kiribati: Gilbert Islands	39	31	30	BELOW	Moderate-High
Palau	41	30	29	BELOW	Moderate
Niue	44	29	27	BELOW	High
Tonga	45	30	25	BELOW	High
Papua New Guinea	44	32	24	BELOW	High
Vanuatu North	65	19	16	BELOW	High
Fiji	65	21	14	BELOW	High
Kiribati: Phoenix Islands	66	21	13	BELOW	High
Vanuatu South	67	20	13	BELOW	High
New Caledonia	67	25	8	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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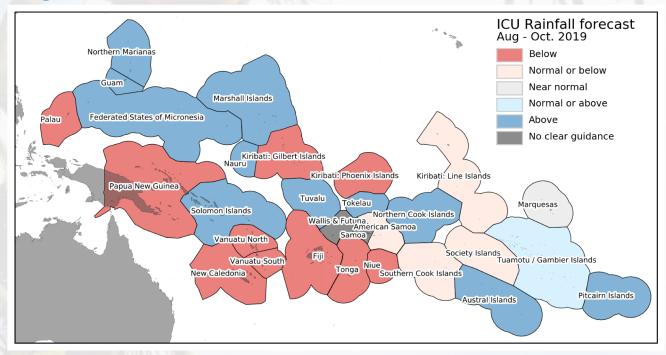




### **The Island Climate Update**

### **Drought Watch** August 2019

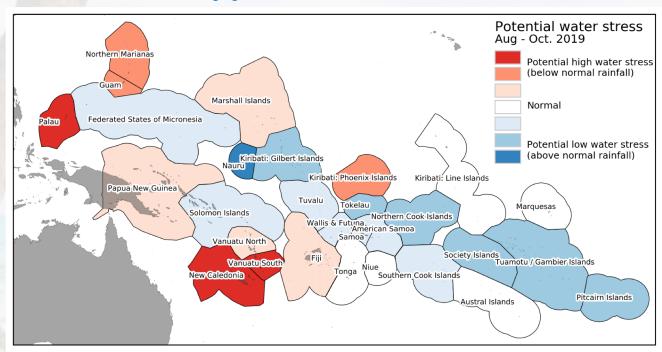
### **August to October 2019 rainfall forecast**



### Regional drought potential advisory

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

Countries to watch for potential water stress are southern Vanuatu, New Caledonia, and Palau as they have received low rainfall over part of the past 6 months, and dry conditions are forecast for the next three month period (August – October 2019). Note that islands in the northern Marshall Islands are also experiencing exceptional drought conditions. A number of island groups, particularly to the west of the International Dateline, are showing signs of water stress.



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