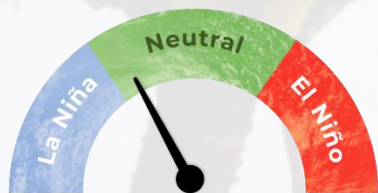


Recent



Current ENSO

ENSO-neutral conditions continued during June 2020, however the tropical Pacific Ocean is trending towards La Niña.

Sea surface temperatures (SSTs) were slightly cooler than average across the equatorial Pacific Ocean.

The Southern Oscillation Index (SOI) was -0.9 in June (on the El Niño side of neutral). The 3-month average SOI was -0.1 (neutral).

51%

chance for ENSO-neutral conditions persisting during July – September 2020.

Chance for La Niña conditions during October – December 2020.

45%



La Niña Watch

Forecast

ENSO situation summary

During June, the NINO3.4 Index anomaly (in the central Pacific) was -0.12°C . Upper-oceanic heat content decreased notably across the east-central equatorial Pacific. Anomalies were below average east of the International Dateline, suggestive of an ocean system that is moving towards La Niña.

In the subsurface ocean, cooler than average conditions pushed eastward during June with widespread anomalies of -0.5°C to -2.0°C . Warmth increased slightly at depth in the western Pacific. At this stage, the anomalies are consistent with developing oceanic La Niña conditions.

Rainfall and convection was below normal across the equatorial Pacific during June, consistent with the cooling trend in the ocean.

Trade winds during June were stronger than normal in the east-central Pacific. This is expected to continue over the next 1-3 months and could lead to more cooling in the eastern and/or central Pacific.

According to the consensus from international models, ENSO-neutral and La Niña conditions are about equally likely (51% and 47% chance, respectively) for the July-September period. For the October-December and January-March 2021 periods respectively, the probability for ENSO-neutral conditions is 42% and 53%. The probability for La Niña is 45% during October-December and 34% in January-March.

Based on the observations and forecast guidance, a La Niña watch is in place as of June 2020.

Rainfall outlook for July – September 2020

Below normal rainfall for Palau, Federated States of Micronesia, Northern Marianas, Guam, Nauru, Kiribati (Gilbert, Phoenix and Line Islands), Tuvalu, New Caledonia, Southern Vanuatu, and Pitcairn Islands.

Near or below normal rainfall for Marshall Islands and Austral Islands.

Near normal rainfall for the Tuamotu Archipelago and the Marquesas.

Near or above normal rainfall for Tonga, Southern Cook Islands and Society Islands.

Above normal rainfall for Papua New Guinea, Solomon Islands, Northern Vanuatu, Fiji, Wallis & Futuna, Tokelau, Samoa, American Samoa, Niue, and Northern Cook Islands.

Rainfall outlook table for July – September 2020


ISLAND	PROBABILITY (%)			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
Wallis & Futuna	16	16	68	ABOVE	Moderate
Solomon Islands	19	26	55	ABOVE	Moderate-High
Papua New Guinea	14	33	53	ABOVE	High
Samoa	22	27	51	ABOVE	Moderate-High
Northern Cook Islands	23	26	51	ABOVE	High
American Samoa	23	27	50	ABOVE	Moderate-High
Fiji	26	28	46	ABOVE	High
Vanuatu North	25	30	45	ABOVE	High
Niue	26	32	42	ABOVE	Moderate-High
Tokelau	30	31	39	ABOVE	Moderate
Tonga	27	34	39	AVG - ABOVE	High
Southern Cook Islands	31	34	35	AVG - ABOVE	High
Society Islands	31	35	34	AVG - ABOVE	High
Tuamotu Islands	32	41	27	NEAR NORMAL	High
Marquesas	15	67	18	NEAR NORMAL	High
Austral Islands	42	33	25	AVG - BELOW	High
Marshall Islands	43	42	15	AVG - BELOW	High
Vanuatu South	39	32	29	BELOW	High
Tuvalu	43	29	28	BELOW	Moderate-High
New Caledonia	42	31	27	BELOW	High
Palau	56	22	22	BELOW	High
Pitcairn Islands	54	26	20	BELOW	High
FSM	83	13	4	BELOW	High
Northern Marianas	89	7	4	BELOW	High
Guam	89	8	3	BELOW	High
Kiribati: Line Islands	89	9	2	BELOW	High
Kiribati: Phoenix Islands	100	0	0	BELOW	High
Kiribati: Gilbert Islands	100	0	0	BELOW	High
Nauru	100	0	0	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.

The Island Climate Update bulletin is currently being produced by NIWA in association with the Pacific Island Meteorological Services and other supporting meteorological organisations.

The Island Climate Update is prepared as soon as possible following the end of the month, once the data and information are received from the Pacific Island meteorological services. Delays in data collection and communication occasionally arise. While every effort is made to verify observational data, NIWA does not guarantee the accuracy and reliability of the analysis and forecast information presented, and accepts no liability for any losses incurred through the use of this advisory and its contents.

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For more information see: <https://www.niwa.co.nz/pacific-rim/publications>  <https://www.facebook.com/IslandClimateUpdate/>



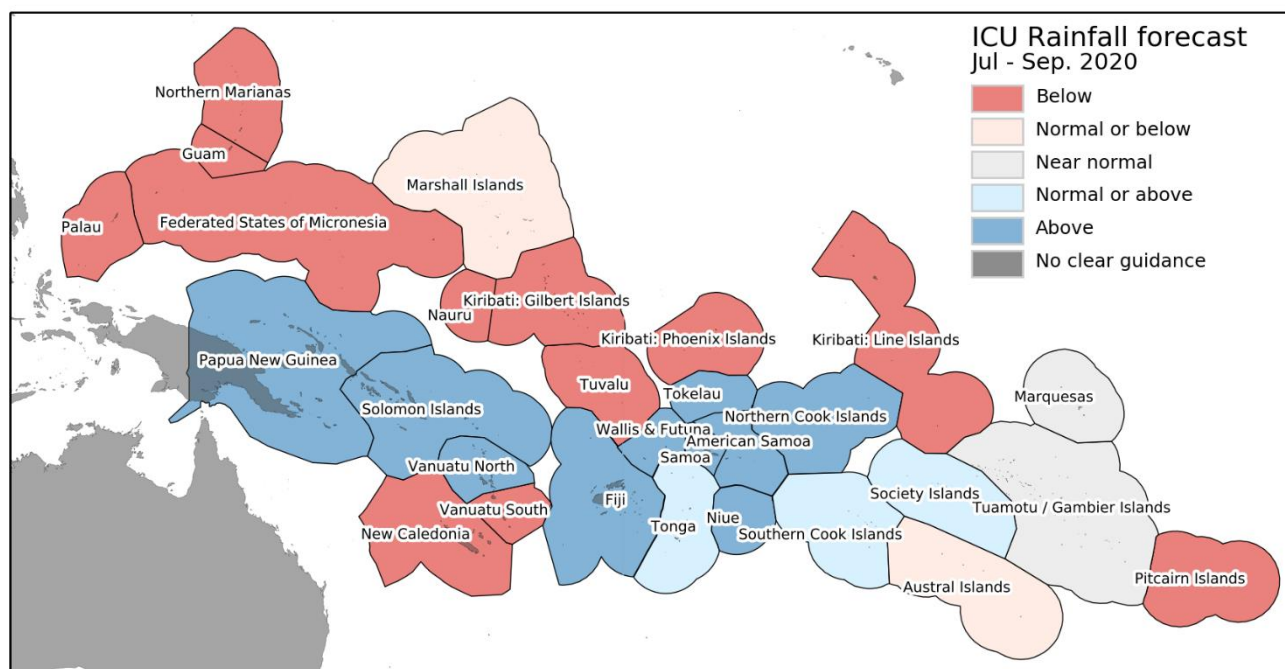
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The Island Climate Update

July – September 2020 rainfall forecast

Drought Watch

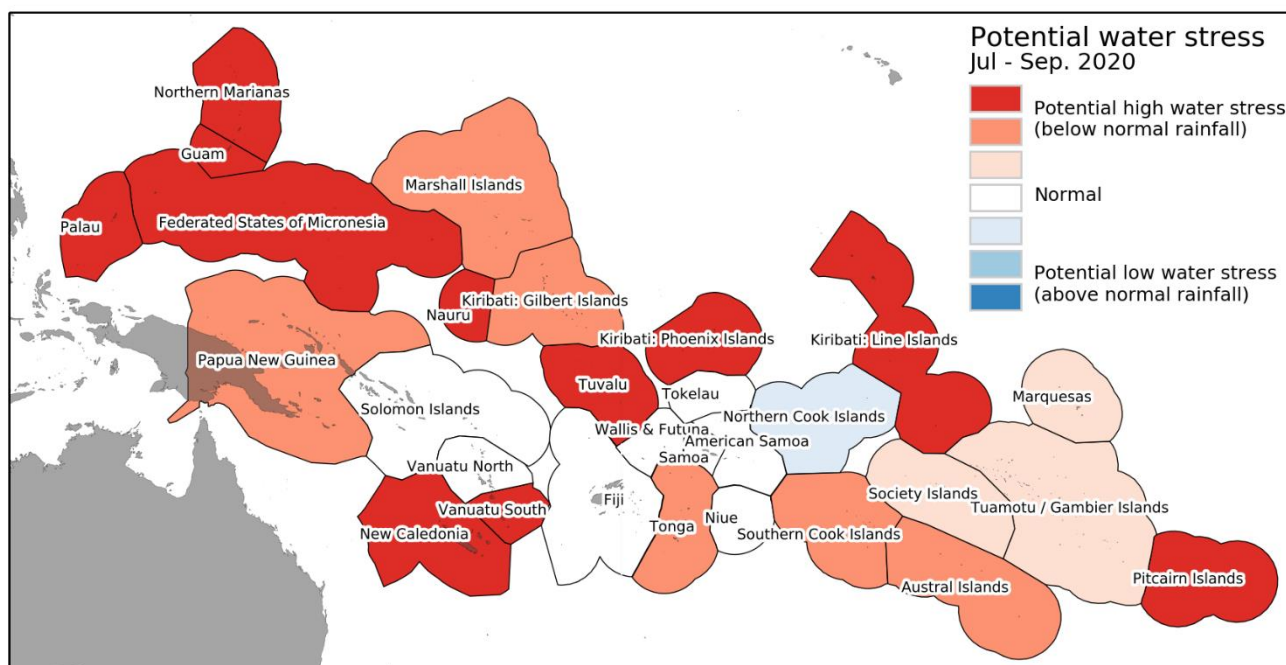
July 2020



Regional drought potential advisory

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

Many of the countries in the Pacific Region may expect some degree of water stress over the next three months (red and orange shades in the map below). High water stress may be experienced in **Palau, Northern Marianas, Guam, Federated States of Micronesia, Nauru, Kiribati (Phoenix and Line Islands), Tuvalu, New Caledonia, Southern Vanuatu, and Pitcairn Islands**. These countries have received low rainfall over part of the past six months, and dry conditions are forecast for the next three month period.



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