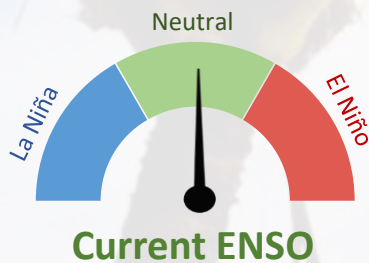


Recent



Current ENSO

ENSO-neutral conditions continued during April 2020, albeit with a slight El Niño lean.

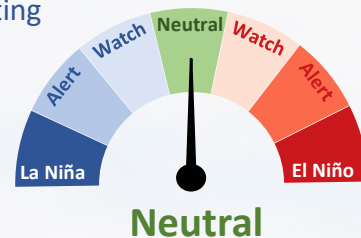
Sea surface temperatures (SSTs) were above average in the central Pacific during April but still in the ENSO-neutral range.

The Southern Oscillation Index (SOI) was +0.1 in April (in ENSO-neutral territory). The 3-month average SOI was -0.2.

76% chance for ENSO-neutral conditions persisting during May – July 2020.

Chance for ENSO-neutral conditions during August – October 2020.

50%



Neutral

Forecast

ENSO situation summary

El Niño-Southern Oscillation (ENSO) neutral conditions continued during April 2020. The Southern Oscillation Index (SOI) was +0.1.

The NINO3.4 Index anomaly (in the central Pacific) for April was +0.54°C (on the El Niño side of neutral). During April 2020, upper-oceanic heat content continued to decrease across the equatorial Pacific. This is the first time in at least a year that heat content was below average in the vicinity of the International Dateline. Heat content was slightly above average in the eastern part of the basin, closer to South America.

Trade winds during April were slightly stronger than normal along the equator. This pattern is expected to continue over the next 1-2 months, most likely leading to continued cooling in the west-central Pacific.

In the subsurface ocean, cooler than average temperatures extended across the Pacific below 50m depth and were buffered by a slightly warmer layer above. While there is no immediate indication that these cooler seas will surface, it lends credence to the idea that oceanic La Niña conditions might arrive later in 2020 as some models suggest.

According to the consensus from international models, ENSO-neutral conditions are very likely (76% chance) for the May – July period. For the August – October and November – January periods respectively, the probability for ENSO-neutral conditions is 50% and 40% with the probability for La Niña increasing to 30% by late 2020.

Rainfall outlook for May – July 2020

Below normal rainfall for Palau, Northern Marianas, Guam, Nauru, Kiribati (Gilbert and Phoenix Islands), New Caledonia, Southern Vanuatu, Tuvalu, Tokelau, Fiji, Samoa, the Austral Islands, Marquesas, and Pitcairn Islands.

Near or below normal rainfall for Federated States of Micronesia, Papua New Guinea, Northern Vanuatu, Tonga, Niue, and Northern and Southern Cook Islands.

Near normal rainfall for Solomon Islands and Kiribati (Line Islands).

Above normal rainfall for the Marshall Islands, Wallis and Futuna, and the Society Islands.

No clear guidance (climatology forecast) for American Samoa and the Tuamotu Archipelago.

Forecast

Rainfall outlook table for May – July 2020

ISLAND	PROBABILITY (%)			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
Marshall Islands	17	31	52	ABOVE	High
Wallis & Futuna	24	26	50	ABOVE	Moderate-High
Society Islands	31	32	37	ABOVE	High
Solomon Islands	32	36	32	NEAR NORMAL	Moderate-High
Kiribati: Line Islands	31	38	31	NEAR NORMAL	High
American Samoa	32	35	33	CLIMATOLOGY	Moderate-High
Tuamotu Islands	34	34	32	CLIMATOLOGY	High
Southern Cook Islands	40	33	27	AVG - BELOW	High
Northern Cook Islands	41	32	27	AVG - BELOW	High
FSM	40	34	26	AVG - BELOW	High
Niue	35	35	30	AVG-BELOW	High
Vanuatu North	36	35	29	AVG-BELOW	Moderate-High
Papua New Guinea	37	35	28	AVG-BELOW	High
Tonga	35	38	27	AVG-BELOW	High
Samoa	30	31	39	BELOW	Moderate-High
Palau	42	29	29	BELOW	High
Fiji	44	28	28	BELOW	High
Austral Islands	46	29	25	BELOW	High
New Caledonia	46	31	23	BELOW	High
Tuvalu	56	23	21	BELOW	Moderate-High
Vanuatu South	51	29	20	BELOW	High
Tokelau	55	25	20	BELOW	Moderate-High
Pitcairn Islands	59	23	18	BELOW	High
Guam	60	22	18	BELOW	Moderate-High
Northern Marianas	64	20	16	BELOW	High
Nauru	83	10	7	BELOW	High
Marquesas	65	29	6	BELOW	High
Kiribati: Phoenix Islands	78	17	5	BELOW	High
Kiribati: Gilbert Islands	87	10	3	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/>

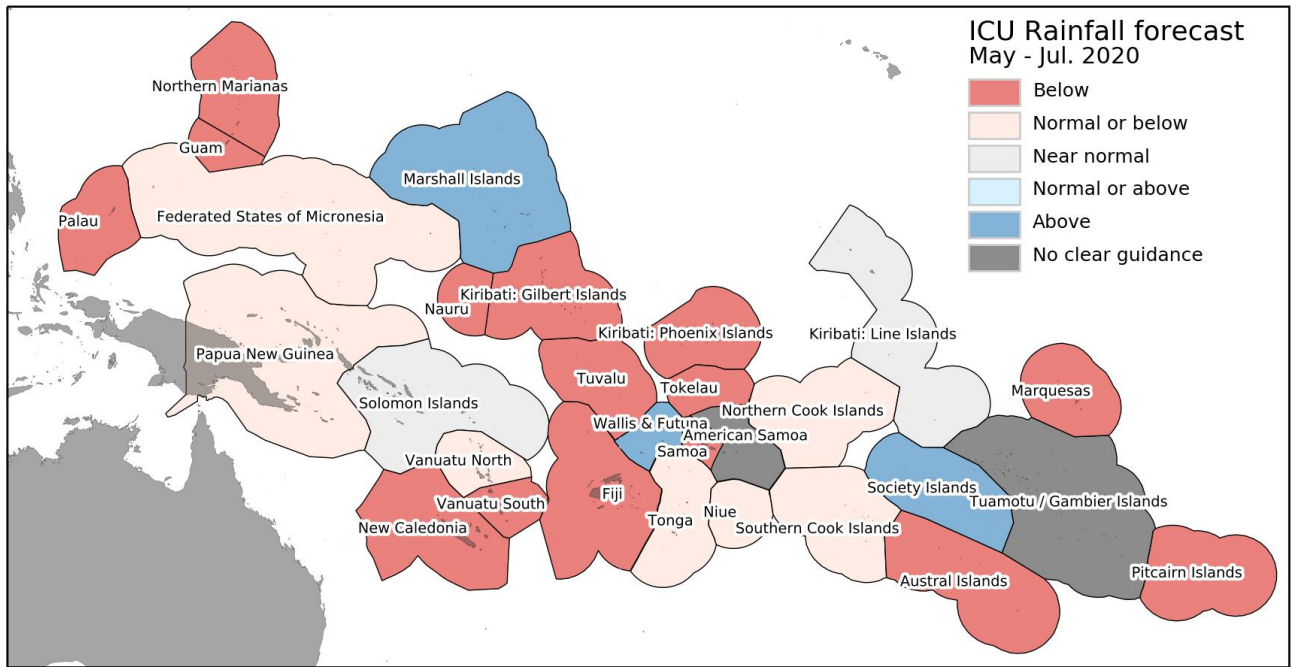


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The Island Climate Update

Drought Watch
May 2020

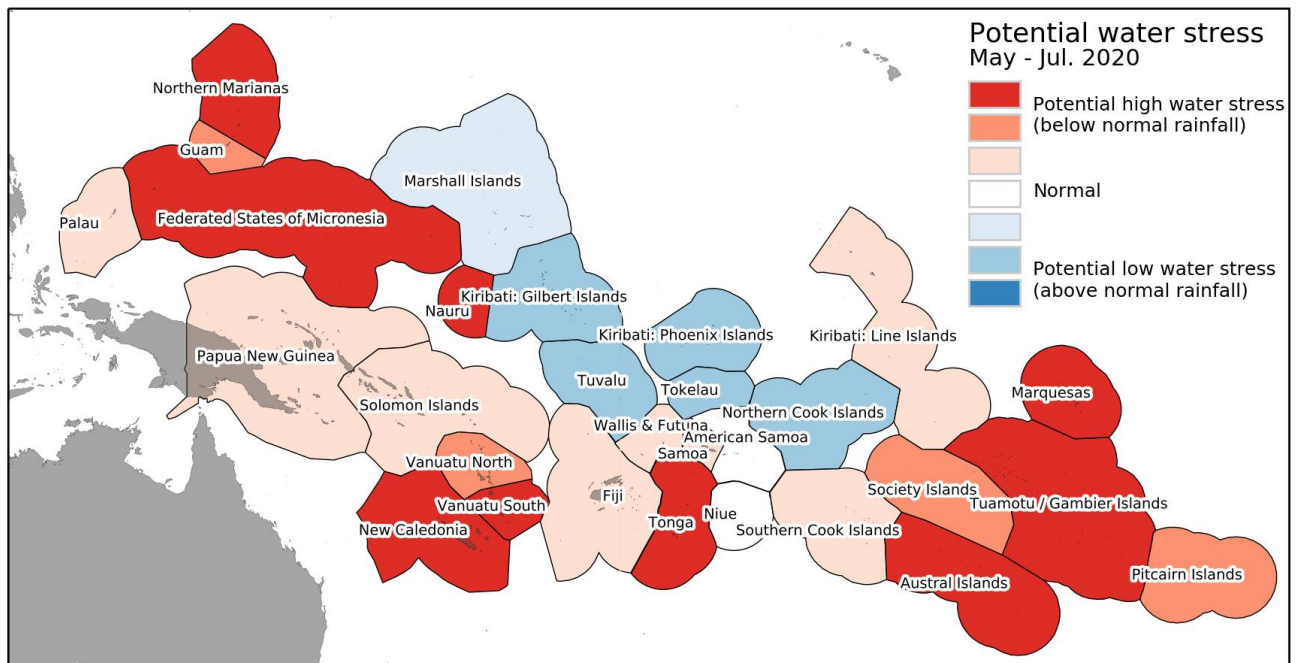
May – July 2020 rainfall forecast



Regional drought potential advisory

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

Many of the countries in the Southwest Pacific Basin may expect some degree of water stress over the next three months (red shades in the map below). High water stress may be experienced in **Northern Marianas, Federated States of Micronesia, Nauru, New Caledonia, southern Vanuatu, Tonga, Austral Islands, Tuamotu Archipelago and the Marquesas**. These countries they 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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