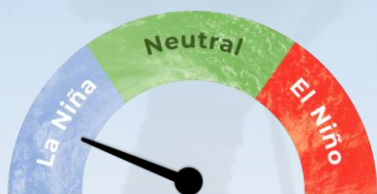


Recent



Current ENSO

La Niña conditions continued in the equatorial Pacific during May.

Sea surface temperatures (SSTs) were near the La Niña threshold in the central equatorial Pacific during May, on -0.71°C .

The Southern Oscillation Index (SOI) was $+1.9$ during May, well within the La Niña range.

60% chance for **La Niña** conditions during **June – August 2022**.

Chance for **La Niña** conditions during **September - November 2022**.

55% **La Niña event**



Forecast

ENSO situation summary

The NINO3.4 Index anomaly over the last month (to 5 June) was -0.71°C , near the La Niña threshold and a slight decrease compared to April. The May monthly SOI was $+1.9$, well within the La Niña range and the equal-2nd highest May value on record since at least 1876 (May 1917 was higher and May 1956 was equal); this suggests that the atmospheric imprint of La Niña is strong.

In the subsurface equatorial Pacific, warmer than average water was pushing across the western and central part of the basin at 100-150 m depth. Spurred by a downwelling Kelvin Wave, these warmer waters could surface in the eastern Pacific in mid-winter. Meanwhile, cooler than average waters continued from the surface to 75 m depth in the central Pacific, reflective of the ongoing La Niña. These signatures were reflected in upper-oceanic heat content (OHC). During May, OHC decreased in the eastern equatorial Pacific and increased slightly in the central part of the basin.


Trade winds across the equatorial Pacific were stronger than normal during May, except for a corridor in the north-east, west of Central America. A period of reduced trades is expected in early June, followed by a re-enhancement of trades from mid-month. The latter may induce a cooling effect in the central Pacific during mid-winter.

La Niña conditions are favoured to continue during June-August (60% chance, an increase of 13% compared to last month). During September-November, there is around a 55% chance for La Niña and a 40% chance for ENSO neutral. Should La Niña persist through or redevelop by December-February 2022-23, the current event would qualify as a “triple-dip”. Since 1900, using an Oceanic Niño threshold of -0.5 , the following would qualify as triple-dip events: 1998-2000, 1983-1985, 1973-1975, and 1908-1910.

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Rainfall outlook for June – August 2022

Above normal rainfall for the Marshall Islands, Papua New Guinea, Vanuatu (North & South), New Caledonia, Fiji, Tonga, Niue, and Austral Islands.

Normal or above normal rainfall for the Southern Cook Islands.

Below normal rainfall for Palau, FSM, Northern Marianas, Guam, Solomon Islands, Nauru, Kiribati, Tuvalu, Wallis & Futuna, Tokelau, Samoa, American Samoa, Northern Cook Islands, Society Islands, Tuamotu/Gambier Islands, Marquesas, Pitcairn Islands.

Forecast

Rainfall outlook table for June – August 2022


ISLAND	PROBABILITY (%)			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
Vanuatu North	8	9	83	ABOVE	Moderate-High
New Caledonia	9	16	75	ABOVE	High
Vanuatu South	9	19	72	ABOVE	Moderate-High
Fiji	11	19	70	ABOVE	High
Niue	19	23	58	ABOVE	Moderate-High
Tonga	21	21	58	ABOVE	High
Marshall Islands	19	28	53	ABOVE	High
Papua New Guinea	25	26	49	ABOVE	Moderate-High
Austral Islands	29	32	39	ABOVE	High
Southern Cook Islands	26	36	38	AVG - ABOVE	High
Solomon Islands	43	29	28	BELOW	Moderate
Northern Marianas	45	31	24	BELOW	Moderate-High
Wallis & Futuna	51	26	23	BELOW	Moderate-High
Society Islands	47	32	21	BELOW	High
Guam	57	23	20	BELOW	Moderate-High
American Samoa	62	20	18	BELOW	Moderate-High
Samoa	64	19	17	BELOW	High
Pitcairn Islands	69	17	14	BELOW	High
Palau	75	13	12	BELOW	Moderate-High
FSM	79	12	9	BELOW	High
Kiribati: Line Islands	80	13	7	BELOW	High
Tuamotu Islands	72	22	6	BELOW	High
Tokelau	97	2	1	BELOW	High
Marquesas	72	28	0	BELOW	High
Northern Cook Islands	98	2	0	BELOW	High
Kiribati: Phoenix Islands	99	1	0	BELOW	High
Tuvalu	99	1	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.

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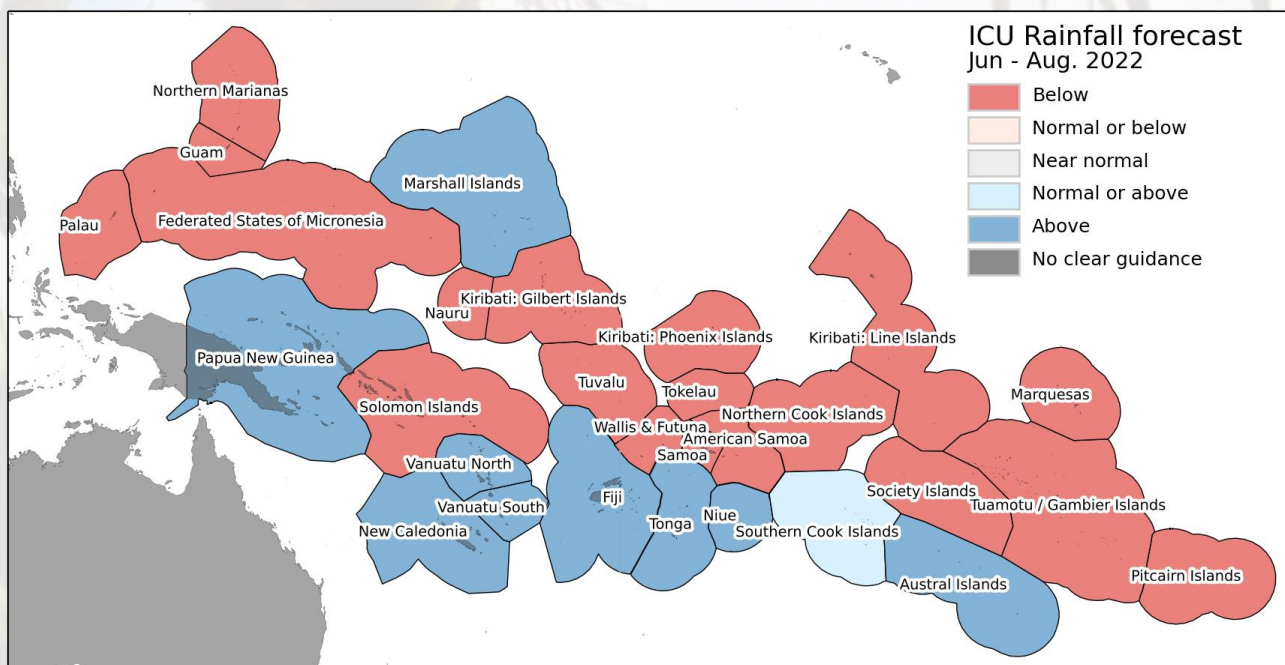
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The Island Climate Update

Drought Watch

June 2022

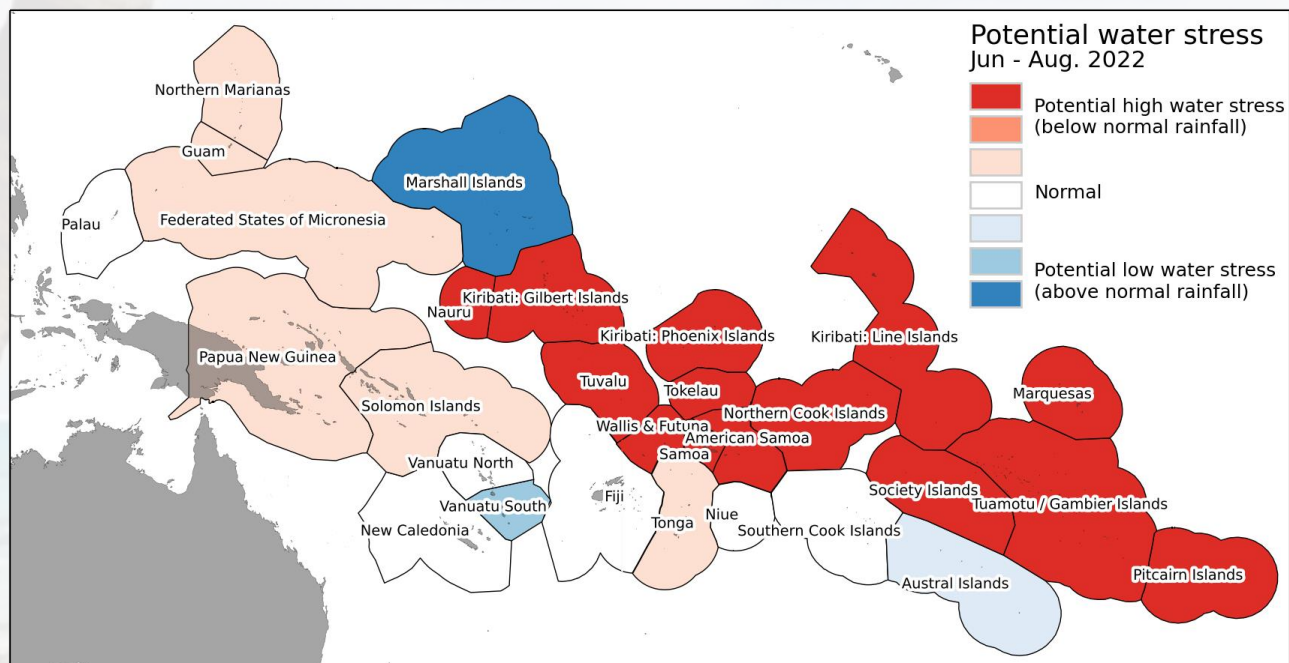
June – August 2022 rainfall forecast



Regional drought potential advisory

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

Parts of several island groups may experience high water stress over the next three months, including **Nauru, Kiribati, Tuvalu, Wallis & Futuna, Tokelau, Samoa, American Samoa, Northern Cook Islands, Marquesas, Society Islands, the Tuamotu Archipelago, and Pitcairn Islands.**



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