The Island Climate Update

ENSO Watch April 2022



Current ENSO

La Niña conditions strengthened slightly in the equatorial Pacific during March.

Sea surface temperatures (SSTs) were near the La Niña threshold in the central equatorial Pacific during March, on -0.79°C.

The Southern Oscillation Index (SOI) was +1.4 during March, in the La Niña range.

65% chance for La Niña conditions during April – June 2022.



Chance for ENSO neutral conditions during

July - September 2022.

50%

La Niña event

ENSO situation summary

The NINO3.4 Index anomaly over the last month (to 3 April) was -0.79°C, near the La Niña threshold. The March monthly Southern Oscillation Index (SOI) was +1.4, in the La Niña range.

Upper-oceanic heat content decreased in the western and central Pacific during March, temporarily halting the transition toward ENSO neutral. The eastern Pacific had slightly above normal oceanic heat content. The overall signature was reflective of a central Pacific La Niña.

In the subsurface equatorial Pacific, the warm pool that was present during February surfaced in the east during March. Cooler subsurface waters redeveloped in central and western areas, which will allow a La Niña-like SST pattern to persist for at least part of the upcoming three months.

La Niña conditions are forecast to continue during April-June (65% chance). Between July-September, there is a 50% chance for ENSO neutral conditions. During October-December, ENSO neutral and La Niña are about equally likely.

Tropical Cyclone Fili, the 7th tropical cyclone of the Southwest Pacific tropical cyclone season, will pass west of New Caledonia on Thursday. There is some risk for additional cyclone development during the month, particularly in the western part of the basin near Vanuatu, New Caledonia, and between the Coral Sea and Queensland.

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The Island Climate Update

Rainfall outlook for April – June 2022

Above normal rainfall for FSM, Northern Marianas, Guam, Marshall Islands, Vanuatu (North & South), New Caledonia, Fiji, Tonga, Niue, Southern Cook Islands, and Austral Islands.

Near or above normal rainfall for Palau.

Near or below normal rainfall for Papua New Guinea.

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

Rainfall outlook table for April – June 2022

ISLAND	PROBABILITY (%)			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
Marshall Islands	7	10	83	ABOVE	High
Vanuatu South	8	12	80	ABOVE	Moderate-High
Northern Marianas	6	16	78	ABOVE	Moderate-High
New Caledonia	9	18	73	ABOVE	High
Guam	9	18	73	ABOVE	Moderate-High
Tonga	13	15	72	ABOVE	Moderate-High
Vanuatu North	14	16	70	ABOVE	Moderate-High
Fiji	13	19	68	ABOVE	Moderate-High
Niue	15	19	66	ABOVE	Moderate
Austral Islands	18	18	64	ABOVE	Moderate-High
Southern Cook Islands	26	29	45	ABOVE	Moderate-High
FSM	28	31	41	ABOVE	High
Palau	30	38	32	AVG-ABOVE	Moderate-High
Papua New Guinea	35	34	31	AVG-BELOW	High
Pitcairn Islands	42	31	27	BELOW	Moderate-High
Solomon Islands	51	29	20	BELOW	High
Society Islands	67	18	15	BELOW	High
Wallis & Futuna	76	13	11	BELOW	Moderate-High
American Samoa	78	12	10	BELOW	Moderate-High
Samoa	77	14	9	BELOW	Moderate-High
Tuamotu Islands	80	13	7	BELOW	High
Kiribati: Line Islands	88	8	4	BELOW	High
Tuvalu	97	2	1	BELOW	High
Tokelau	97	2	1	BELOW	High
Kiribati: Phoenix Islands	98	1	1	BELOW	High
Nauru	98	1	1	BELOW	High
Northern Cook Islands	99	1	0	BELOW	High
Kiribati: Gilbert Islands	100	0	0	BELOW	High
Marquesas	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 religitly of the analysis and forecast information presented, and accepts no liability for any losses incurred through the use of this advisory and its contents.

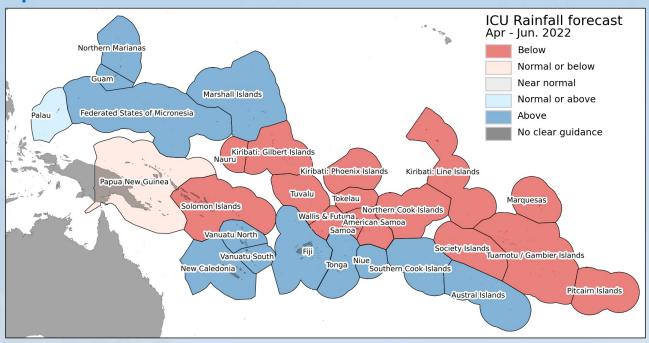
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The Island Climate Update

Drought Watch April 2022

April – June 2022 rainfall forecast

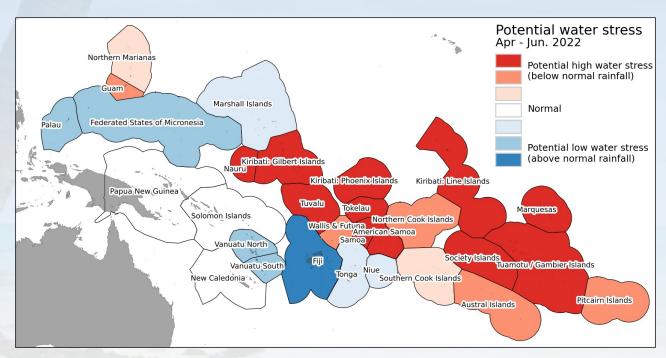


Regional drought potential advisory

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, Tokelau, Samoa, American Samoa, Marquesas, Society Islands, and the Tuamotu Archipelago.

In addition, Guam, Wallis & Futuna, Northern Cook Islands, Austral Islands, and Pitcairn Islands may also experience water stress. These countries have received low rainfall over part of the past six months and dry conditions are possible over the next three-month period.



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