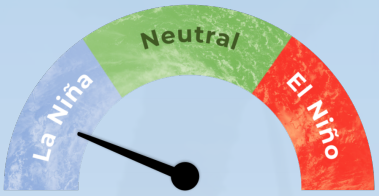
The Island Climate Update

ENSO Watch
March 2022

Recent



Current ENSO

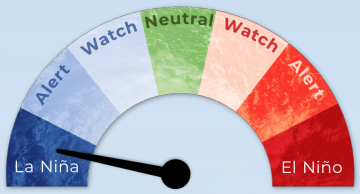
La Niña conditions continued in the equatorial Pacific during February but weakened compared to January.

Sea surface temperatures were near the La Niña threshold in the central equatorial Pacific during February, on -0.60˚C.

The Southern Oscillation Index (SOI) was +0.8 for December-February, near the La Niña threshold.

Forecast

60% chance for **La Niña** conditions during **March – May 2022.**



Chance for **ENSO neutral** conditions during **June - August 2022.** **60%**

La Niña event

ENSO situation summary

The NINO3.4 Index anomaly (in the central Pacific) during February was -0.60˚C, near the La Niña threshold. The monthly Southern Oscillation Index (SOI) was +0.7 and the three-month average SOI was +0.8, the latter near the La Niña threshold.

Upper-oceanic heat content increased in the western and central Pacific for the second consecutive month. For the first time since June 2021, conditions in the upper 300 meters of the equatorial Pacific were generally warmer than average, signalling that the La Niña event is nearing its end.

In the subsurface equatorial Pacific, a warm pool of water continued to push eastward and progressed closer to the surface. This will likely spell the end of oceanic La Niña conditions by May.

La Niña conditions will likely give way to ENSO neutral conditions between April-June (60% chance). Between June-August, ENSO neutral is favoured at a 60% chance. ENSO neutral is also favoured from September-November (45% chance).

Suppressed convection over the western Pacific during the first half of March will reduce the risk for tropical cyclone activity. There may be an increased risk for cyclone development later in the month, particularly in the western part of the basin near New Caledonia and Vanuatu. The cyclone season runs through April. So far, five tropical cyclones have formed.

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The Island Climate Update

Rain Watch
March 2022

Forecast

Rainfall outlook for March – May 2022

Above normal rainfall for Palau, 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 the Pitcairn Islands.

Near normal rainfall for Papua New Guinea.

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

Rainfall outlook table for January – March 2022

ISLAND	PROBABILITY (%)			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
Marshall Islands	10	10	80	ABOVE	Moderate-High
Tonga	10	14	76	ABOVE	Moderate
Vanuatu South	13	16	71	ABOVE	Moderate-High
Guam	12	20	68	ABOVE	Moderate-High
Austral Islands	14	18	68	ABOVE	Moderate
Niue	16	18	66	ABOVE	Moderate
Palau	17	19	64	ABOVE	Moderate-High
Northern Marianas	9	28	63	ABOVE	Moderate
Fiji	17	21	62	ABOVE	Moderate
New Caledonia	20	20	60	ABOVE	Moderate-High
FSM	18	23	59	ABOVE	Moderate-High
Vanuatu North	21	21	58	ABOVE	Moderate-High
Southern Cook Islands	26	26	48	ABOVE	Moderate-High
Pitcairn Islands	30	34	36	AVG-ABOVE	Moderate-High
Papua New Guinea	34	40	26	NEAR NORMAL	High
Solomon Islands	52	27	21	BELOW	Moderate-High
Wallis & Futuna	61	21	18	BELOW	Moderate-High
Kiribati: Line Islands	68	18	14	BELOW	Moderate-High
American Samoa	70	16	14	BELOW	Moderate-High
Samoa	70	17	13	BELOW	Moderate-High
Society Islands	76	14	10	BELOW	Moderate-High
Tuamotu Islands	81	13	6	BELOW	High
Tuvalu	91	5	4	BELOW	High
Nauru	94	4	2	BELOW	High
Tokelau	97	2	1	BELOW	High
Kiribati: Phoenix Islands	98	1	1	BELOW	High
Northern Cook Islands	99	1	0	BELOW	High
Kiribati: Gilbert Islands	99	1	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.

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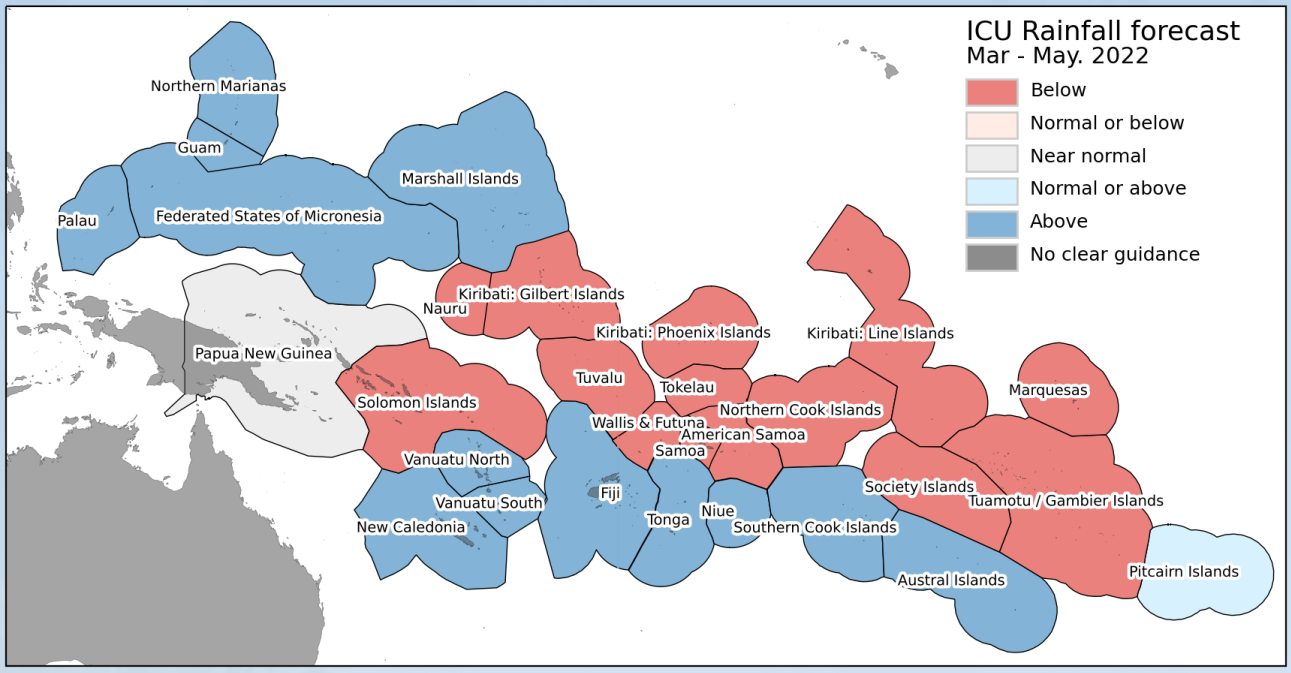
Drought Watch
March 2022

March – May 2022 rainfall forecast

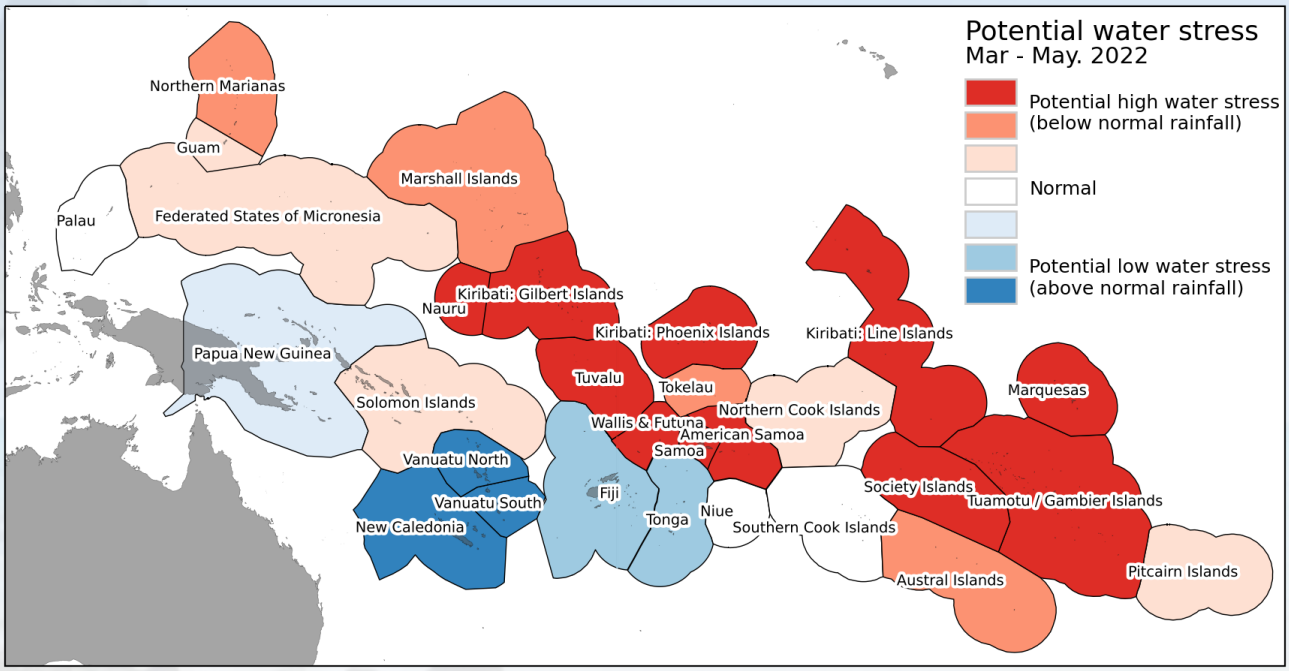


Regional drought potential advisory

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

In addition, the **Northern Marianas, Marshall Islands, Tokelau, and the Austral 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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