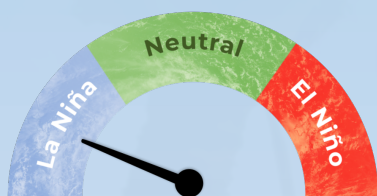


Recent



Current ENSO

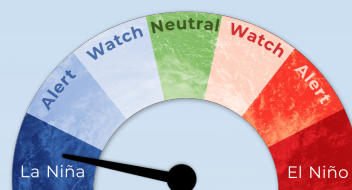
La Niña conditions continued in the equatorial Pacific during January.

Sea surface temperatures were in the La Niña range in the central equatorial Pacific during January, on -0.70°C .

The Southern Oscillation Index (SOI) was $+0.9$ for November-January, near the La Niña threshold.

75%

chance for **La Niña** conditions during February – April 2022.



Chance for ENSO neutral conditions during May - July 2022.

65%

La Niña event

Forecast

ENSO situation summary

The NINO3.4 Index anomaly (in the central Pacific) during January was -0.70°C , in the La Niña range. The monthly SOI was $+0.3$ and the three-month average SOI was $+0.9$, the latter near the La Niña threshold.

Upper-oceanic heat content increased in the western and central Pacific during January, signalling the decay of La Niña. Meanwhile, conditions remained cooler than average in the eastern Pacific.

In the subsurface equatorial Pacific, a substantial warm pool ($+2^{\circ}\text{C}$ to $+3^{\circ}\text{C}$) at around 150 m depth continued to progressed eastward from western Pacific, which indicated an ongoing, gradual easing of La Niña conditions.

La Niña conditions are forecast to continue during February-April (75% chance). From May-July, there is a 65% chance for the re-emergence of ENSO neutral conditions. Between August-October, ENSO neutral is favoured at a 50% chance.

A pulse of convective activity associated with La Niña and the Madden-Julian Oscillation will be over the western Pacific during early February, contributing to an increased risk for tropical cyclone activity. Island groups in the western part of the basin, New Caledonia and Vanuatu in particular, should remain up-to-date with the weather forecast.

Rainfall outlook for February – April 2022

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

Near or above normal rainfall for the Northern Marianas.

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

Forecast

Rainfall outlook table for February – April 2022

ISLAND	PROBABILITY (%)			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
Marshall Islands	9	11	80	ABOVE	Moderate-High
Tonga	12	14	74	ABOVE	Moderate
New Caledonia	13	13	74	ABOVE	Moderate-High
Federated States of Micronesia	13	14	73	ABOVE	Moderate-High
Niue	14	17	69	ABOVE	Moderate
Vanuatu South	13	21	66	ABOVE	Moderate
Fiji	17	17	66	ABOVE	Moderate-High
Palau	17	17	66	ABOVE	Moderate
Vanuatu North	19	19	62	ABOVE	Moderate
Austral Islands	18	22	60	ABOVE	Moderate-High
Guam	22	32	46	ABOVE	Moderate-High
Southern Cook Islands	25	31	44	ABOVE	Moderate-High
Northern Marianas	16	40	44	AVG - ABOVE	High
Pitcairn Islands	43	32	25	BELOW	Moderate-High
Solomon Islands	59	22	19	BELOW	Moderate-High
Wallis & Futuna	62	19	19	BELOW	Moderate
Papua New Guinea	57	25	18	BELOW	High
American Samoa	61	21	18	BELOW	Moderate
Samoa	64	18	18	BELOW	Moderate
Society Islands	78	11	11	BELOW	Moderate-High
Kiribati: Line Islands	79	12	9	BELOW	High
Tuamotu / Gambier Islands	82	10	8	BELOW	High
Tokelau	95	3	2	BELOW	High
Tuvalu	96	2	2	BELOW	High
Northern Cook Islands	97	2	1	BELOW	High
Marquesas	99	1	0	BELOW	High
Nauru	99	1	0	BELOW	High
Kiribati: Phoenix Islands	100	0	0	BELOW	High
Kiribati: Gilbert Islands	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.

The contents of this advisory and the Island Climate Update may be freely disseminated provided the source is acknowledged.

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



NIWA

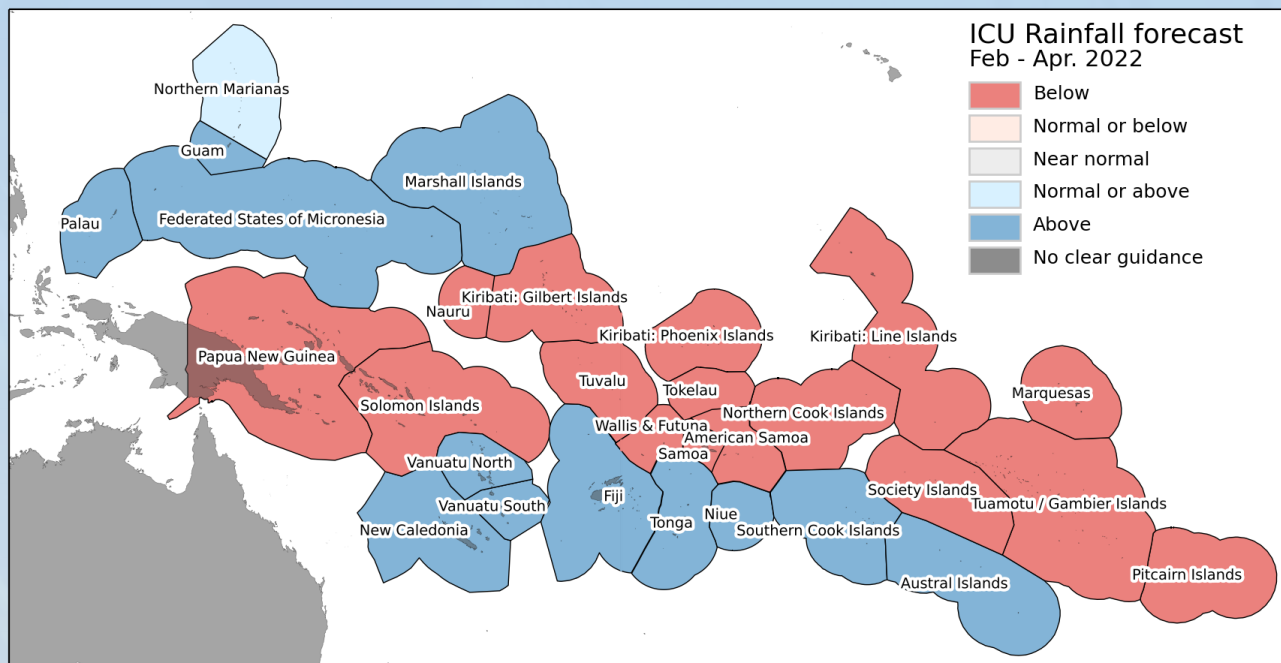
Taihoru Nukurangi

The Island Climate Update

Drought Watch

February 2022

February – April 2022 rainfall forecast

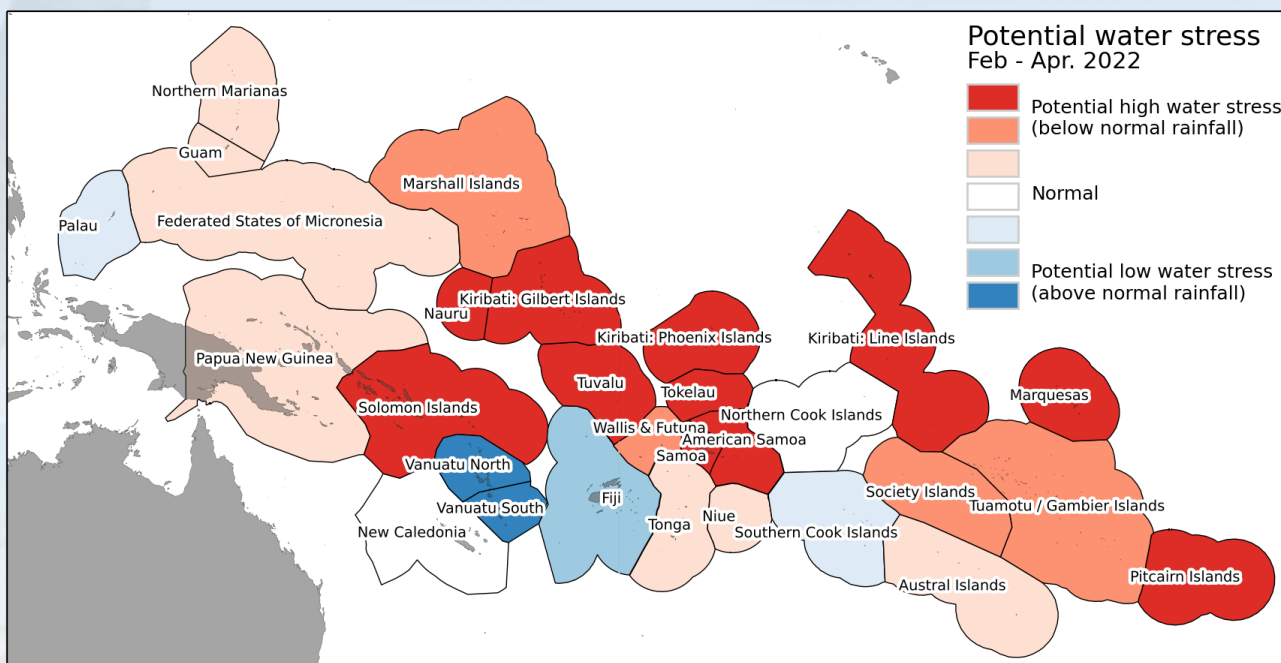


Regional drought potential advisory

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 **Marshall Islands, Wallis & Futuna, Society Islands, and the Tuamotu Archipelago.**

In addition, **Solomon Islands, Nauru, Kiribati, Tuvalu, Tokelau, Samoa, American Samoa, Marquesas, 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.



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.

The contents of this advisory and the Island Climate Update may be freely disseminated provided the source is acknowledged.

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



NIWA

Taihoru Nukurangi