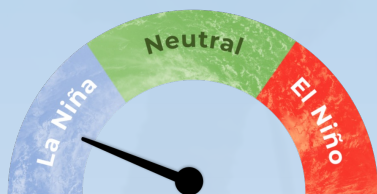


## Recent



### Current ENSO

La Niña conditions continued in the equatorial Pacific during June.

Sea surface temperatures were in the “cool-neutral” range in the central equatorial Pacific during June, on  $-0.40^{\circ}\text{C}$ .

The Southern Oscillation Index (SOI) was  $+2.0$  for April-June, well above the La Niña threshold.

# 60%

chance for **La Niña** conditions during July – September 2022.



Chance for **ENSO neutral** conditions during July – September 2022

# 35%

**La Niña event**

## Forecast

## ENSO situation summary

The NINO3.4 Index anomaly (in the central equatorial Pacific) over the last month was  $-0.40^{\circ}\text{C}$ , in the “cool-neutral range”. The three-monthly NINO3.4 Index remained near the La Niña threshold. The June monthly SOI was  $+2.1$ , which continues to strongly signal La Niña.

In the subsurface equatorial Pacific, warmer than average water ( $+1^{\circ}\text{C}$  to  $+3^{\circ}\text{C}$ ) was nearing the surface in the east at the end of June. Upper oceanic heat content increased in the central Pacific but remained below average in the east. Overall, this indicated a weakening of La Niña.

Trade winds across the equatorial Pacific were weaker than normal in the North Pacific and slightly stronger than normal in the South Pacific. This was associated with warming SSTs near and north of the equator. A surge in trade winds establishing during the first half of July may halt or reverse the recent warming trend and could result in a cooling of the equatorial Pacific sub-surface and surface over the next three months.

La Niña conditions are most likely to continue during July-September (60% chance). During October-December, there is a 60% chance for La Niña and a 35% chance for ENSO neutral. During January-March, there is around a 40% chance for La Niña and a 50% chance for ENSO neutral.

A pulse of tropical convection looks to move over the region in early in July and then into the western Pacific by mid-July, bringing rainfall to areas including Vanuatu, New Caledonia, Fiji and Tonga.



## Rainfall outlook for July –September 2022

**Above normal rainfall** for Papua New Guinea, Vanuatu North and South, New Caledonia, Fiji, Tonga, and Niue.

**Near normal rainfall** for Marshall Islands.

**Near normal to below normal rainfall** for Southern Cook Islands and Austral Islands.

**Below normal rainfall** for Palau, Northern Marianas, Guam, Federated States of Micronesia, Solomon Islands, Nauru, Kiribati (Gilbert, Phoenix and Line Islands), Wallis and Futuna, Tokelau, Samoa, American Samoa, Northern Cook Islands, Society Islands, Tuamotu/Gambier Islands, Marquesas and Pitcairn Islands.

Forecast

## Rainfall outlook table for July –September 2022


ISLAND	PROBABILITY (%)			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
Vanuatu North	10	15	75	ABOVE	Moderate-High
New Caledonia	9	21	70	ABOVE	High
Vanuatu South	14	22	64	ABOVE	Moderate-High
Fiji	16	21	63	ABOVE	High
Papua New Guinea	21	21	58	ABOVE	Moderate
Tonga	23	23	54	ABOVE	High
Niue	21	31	48	ABOVE	Moderate-High
Marshall Islands	28	41	31	NEAR NORMAL	High
Southern Cook Islands	35	34	31	AVG-BELOW	High
Austral Islands	37	34	29	AVG-BELOW	High
Solomon Islands	41	30	29	BELOW	Moderate
Wallis & Futuna	57	22	21	BELOW	Moderate-High
Society Islands	56	27	17	BELOW	High
Palau	69	16	15	BELOW	Moderate
American Samoa	68	18	14	BELOW	Moderate-High
Pitcairn Islands	70	16	14	BELOW	High
Samoa	72	15	13	BELOW	Moderate-High
Kiribati: Line Islands	59	29	12	BELOW	High
Northern Marianas	79	13	8	BELOW	High
Tuamotu Islands	74	21	5	BELOW	High
FSM	82	13	5	BELOW	High
Guam	90	5	5	BELOW	High
Tuvalu	97	2	1	BELOW	High
Kiribati: Phoenix Islands	98	1	1	BELOW	High
Marquesas	66	34	0	BELOW	High
Tokelau	98	2	0	BELOW	High
Northern Cook Islands	100	0	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.

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/>



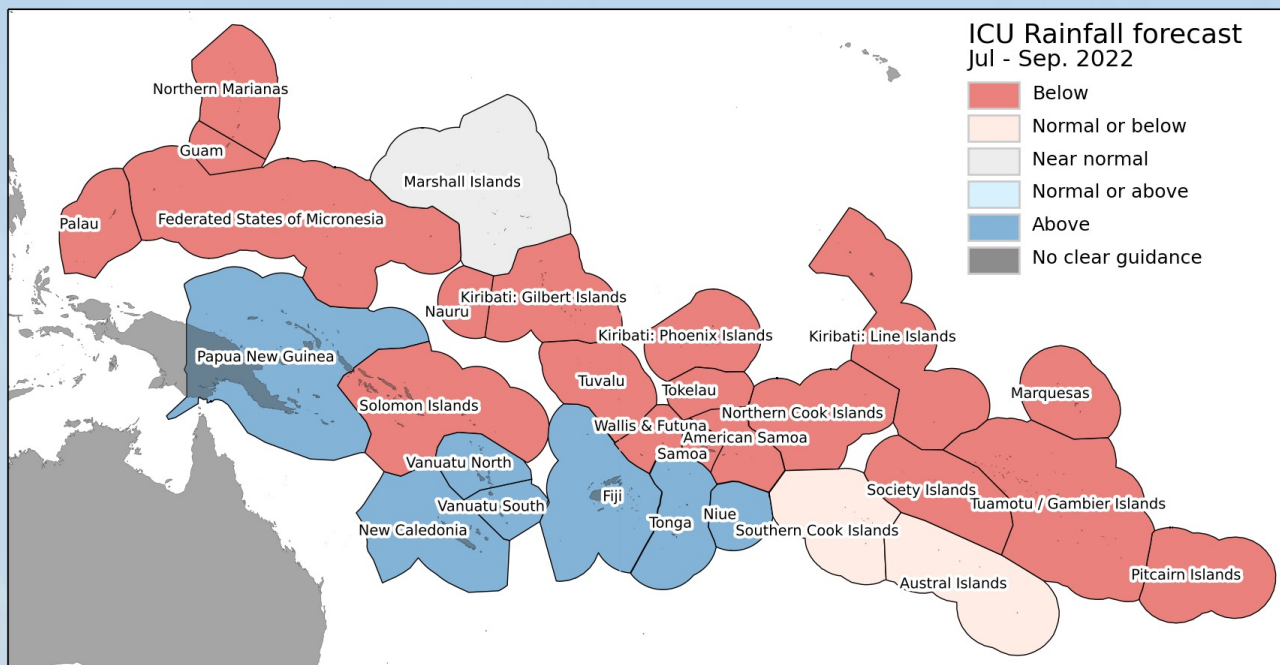
**NIWA**  
Taihoro Nukurangi

# The Island Climate Update

Drought Watch

July 2022

## July –September 2022 rainfall forecast

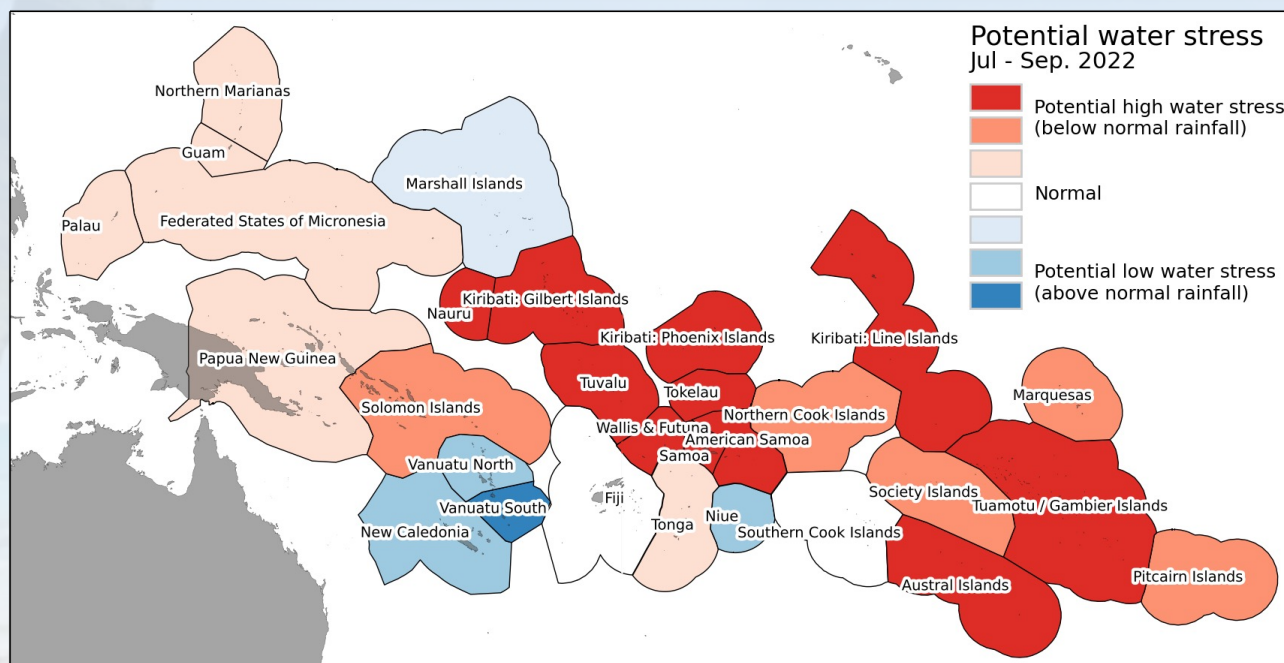


## Regional drought potential advisory

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 (Gilbert, Phoenix and Line Islands), Tuvalu, Tokelau, Wallis & Futuna, American Samoa, Samoa, Tuamotu/Gambier Islands and Austral Islands.**

In addition, **Solomon Islands, Northern Cook Islands, Society Islands, 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.



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