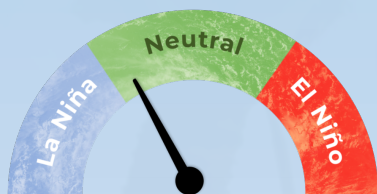


Recent



Current ENSO

The tropical Pacific remained ENSO neutral, although some indicators leaned toward La Niña.

Sea surface temperatures were in the ENSO neutral range but decreased during August compared to July.

The Southern Oscillation Index (SOI) was +0.5 during August (neutral). The three-month average SOI was +0.8 (on the La Niña side of neutral).

50%

chance each for the continuation of ENSO neutral or La Niña conditions during September - November 2021.

Chance for La Niña conditions during December 2021 - February 2022.

60%

La Niña Watch



Forecast

ENSO situation summary

The NINO3.4 Index anomaly (in the central Pacific) during August was -0.17°C . The Southern Oscillation Index was +0.5. While both remained in neutral territory, other indicators trended toward La Niña.

During August, upper-oceanic heat content decreased across the equatorial Pacific for the third consecutive month. Cooler than average equatorial sub-surface waters (-0.5°C to 1.5°C) progressed toward the surface in the central Pacific while a layer of warmer than average water persisted near the surface off the west coast of South America. The distribution of anomalies is currently closest to a central Pacific type of La Niña, similar to conditions that occurred this time last year.

Trade winds continued to be enhanced in the equatorial central Pacific, which is where the cooling of the sea surface was focused. Enhanced trade winds are expected to continue through September, particularly in the central equatorial Pacific, which should result in additional cooling of the sea surface.

In a La Niña-like fashion, patterns of reduced rainfall affected several island groups near and extending southeastward of the equator during August.

La Niña or ENSO "cool" neutral conditions are about equally likely (45-50% chance each) from September-November before the chance for La Niña peaks at around 60% during December-February.

Rainfall outlook for September – November 2021

Above normal rainfall for Palau, Papua New Guinea, Solomon Islands, New Caledonia, Vanuatu, Fiji, Wallis & Futuna, Tonga, Niue, Southern Cook Islands, and Austral Islands.

Above or near normal rainfall for Samoa and American Samoa.

Near normal rainfall for the Society Islands.

Near or below normal rainfall for the Federated States of Micronesia.

Below normal rainfall for the Northern Marianas, Guam, Marshall Islands, Nauru, Kiribati, Tuvalu, Tokelau, Northern Cook Islands, Marquesas, Tuamotu/Gambier Islands, and Pitcairn Islands

Rainfall outlook table for September - November 2021

ISLAND	PROBABILITY (%)			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
Papua New Guinea	1	9	90	ABOVE	High
Vanuatu North	14	17	69	ABOVE	Moderate-High
Fiji	15	16	69	ABOVE	Moderate-High
Southern Cook Islands	16	18	66	ABOVE	High
Tonga	15	21	64	ABOVE	High
Vanuatu South	11	26	63	ABOVE	High
Palau	19	20	61	ABOVE	Moderate-High
Solomon Islands	20	20	60	ABOVE	Moderate-High
New Caledonia	11	30	59	ABOVE	High
Niue	20	28	52	ABOVE	Moderate-High
Austral Islands	21	29	50	ABOVE	High
Wallis & Futuna	26	29	45	ABOVE	Moderate
American Samoa	28	33	39	AVG-ABOVE	Moderate
Samoa	28	38	34	AVG-ABOVE	Moderate
Society Islands	30	37	33	NEAR NORMAL	High
Federated States of Micronesia	36	38	26	AVG-BELOW	High
Marshall Islands	41	31	28	BELOW	High
Pitcairn Islands	49	27	24	BELOW	High
Guam	53	26	21	BELOW	Moderate-High
Northern Marianas	55	26	19	BELOW	High
Tuamotu / Gambier Islands	62	22	16	BELOW	High
Tokelau	86	7	7	BELOW	Moderate-High
Northern Cook Islands	86	8	6	BELOW	High
Marquesas	64	31	5	BELOW	High
Tuvalu	92	4	4	BELOW	High
Kiribati: Line Islands	76	21	3	BELOW	High
Nauru	98	1	1	BELOW	High
Kiribati: Phoenix Islands	98	2	0	BELOW	High
Kiribati: Gilbert Islands	99	1	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/>

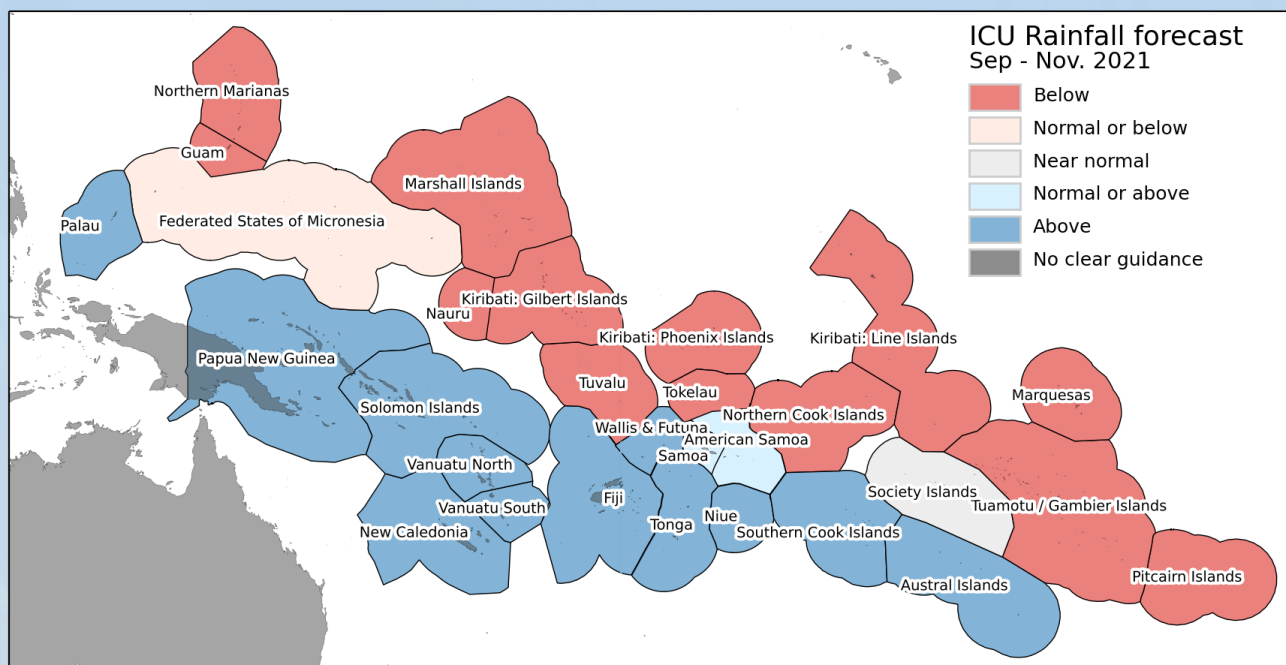


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The Island Climate Update

September - November 2021 rainfall forecast

Drought Watch
September 2021

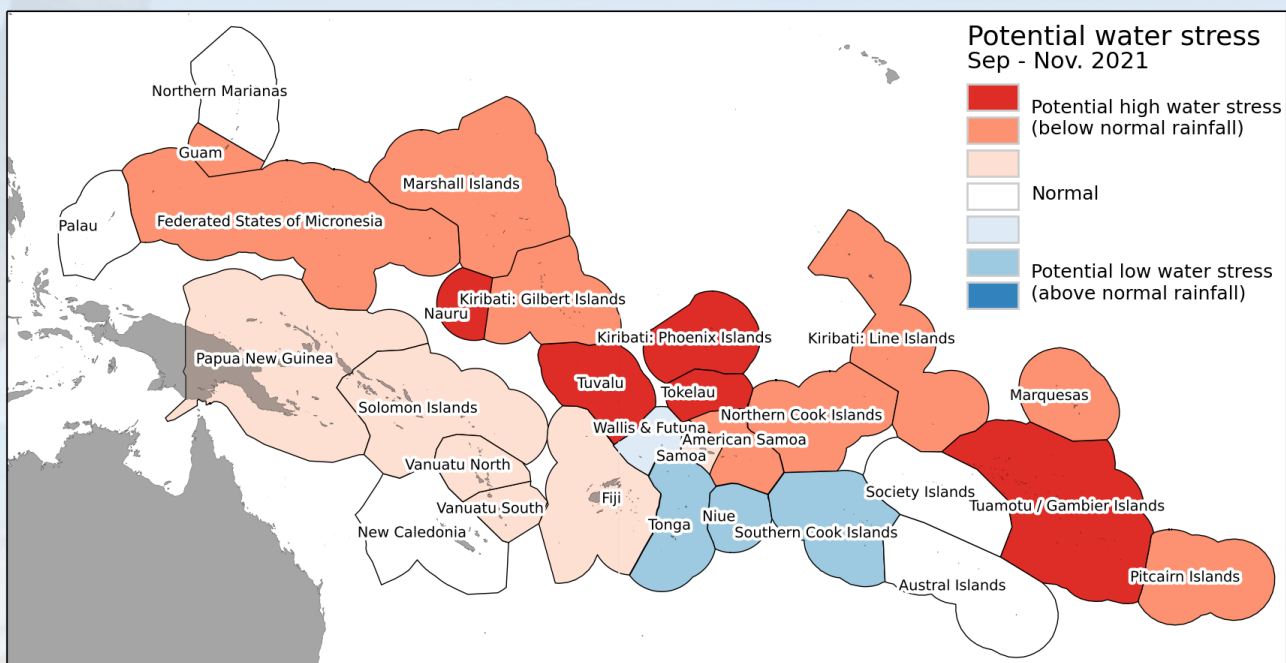


Regional drought potential advisory

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, Tuvalu, Tokelau, Kiribati (Phoenix Islands), and Tuamotu/Gambier Islands.**

In addition, **Guam, Federated States of Micronesia, Marshall Islands, Kiribati (Gilbert and Line Islands), American Samoa, Northern Cook 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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