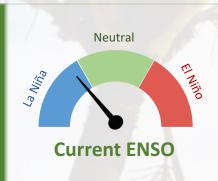
The Island Climate Update

ENSO Watch
December 2017

Recent



La Niña conditions are present in the tropical Pacific.

Sea Surface Temperatures are below average in the eastern Equatorial Pacific.

The Southern Oscillation Index (SOI) is positive (+0.9 for November 2017).

75%

chance for La Niña conditions to continue over December 2017 – February 2018.

Chance for ENSO-neutral conditions returning in March – May 2018



Forecast

ENSO situation summary

La Niña conditions are currently present in the tropical Pacific, as several conventional thresholds have been reached or are being approached. As of earlier this month, NOAA declared that weak La Niña conditions have emerged, while the Australian Bureau of Meteorology escalated their ENSO tracker to the "La Niña Alert" category.

Sea surface temperatures (SSTs) in the central and eastern equatorial Pacific Ocean have continued to cool during the month of November. Pockets of SST anomalies of more than -2.0°C are present east of about 100°W. **The latest monthly SST anomalies (as of 19 November) reach -0.5°C in the NINO3.4 index region** (with the latest weekly anomalies also at -0.5°C). The NINO3 region is also negative at -0.6°C, and the NINO4 index (in the western Pacific) is close to zero.

The Southern Oscillation Index (SOI) for the month of November 2017 (value estimated using data to the 29th of November) is **positive at +0.9** i.e. just short of the La Niña threshold utilized by NIWA (+1 standard deviation).

In summary, the tropical Pacific Ocean is currently in a La Niña state, which is most likely to continue for the southern hemisphere summer season, with 75% chance for La Niña conditions to persist over the next three month period (December 2017 – February 2018). International agencies have either declared La Niña thresholds have been met (NOAA/CPC) or have elevated their ENSO status to indicate La Niña is imminent. This event is not expected to persist beyond the first quarter of 2018 and a return to ENSO neutral conditions is most likely in the second quarter of 2018 (72% chance for neutral conditions over the March-May 2018 period).

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N-IWA
Taihoro Nukurangi

The Island Climate Update

Rainfall outlook for December 2017 – February 2018

Below normal rainfall for Tuvalu, eastern Kiribati, the Marquesas, central Kiribati (Phoenix Islands), western Kiribati and Nauru.

Normal or below normal rainfall for the Society Islands, Pitcairn Island, Tokelau, the Tuamotu archipelago and the northern Cook Islands.

Near normal rainfall for Papua New Guinea, the Austral Islands and southern Vanuatu.

Normal or above normal rainfall for American Samoa, Palau, Guam, Wallis & Futuna, the northern Marianas Islands, New Caledonia, the Marshall Islands and the southern Cook Islands.

Above normal rainfall for Fiji, Tonga, Samoa, Niue, nothern Vanuatu and the Federated States of Micronesia.

Rainfall outlook table for December 2017 – February 2018

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ISLAND	PROBABILITY			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
Fiji	15	35	55	ABOVE	High
Tonga	15	30	55	ABOVE	High
Samoa	20	30	50	ABOVE	Moderate-High
Niue	20	35	45	ABOVE	Moderate
Vanuatu (North)	20	35	45	ABOVE	Moderate-High
FSM	20	35	45	ABOVE	Moderate
American Samoa	25	35	40	AVG - ABOVE	Moderate-High
Palau	25	35	40	AVG - ABOVE	Moderate-High
Guam	25	35	40	AVG - ABOVE	Moderate-High
Wallis & Futuna	25	35	40	AVG - ABOVE	Moderate-High
N. Marianas	25	35	40	AVG - ABOVE	Moderate-High
New Caledonia	25	35	40	AVG - ABOVE	Moderate-High
Marshall Islands	25	35	40	AVG - ABOVE	Moderate-High
Cook Islands (Southern)	25	40	35	AVG - ABOVE	Moderate
Papua New Guinea	30	40	30	NEAR NORMAL	Moderate
Austral Islands	30	40	30	NEAR NORMAL	Moderate
Vanuatu (South)	30	40	30	NEAR NORMAL	Moderate
Solomon Islands	35	35	30	CLIMATOLOGY	Moderate
Society Islands	35	40	25	AVG - BELOW	Moderate
Pitcairn Island	40	35	25	AVG - BELOW	Moderate
Tokelau	40	35	25	AVG - BELOW	Moderate-High
Tuamotu Islands	40	35	25	AVG - BELOW	Moderate
Cook Islands (Northern)	40	35	25	AVG - BELOW	Moderate-High
Tuvalu	45	35	20	BELOW	Moderate
Kiribati (Eastern)	45	35	20	BELOW	Moderate-High
Marquesas	55	30	15	BELOW	Moderate-High
Central Kiribati (Phoenix)	55	30	15	BELOW	High
Kiribati (Western)	55	30	15	BELOW	High
Nauru	55	30	15	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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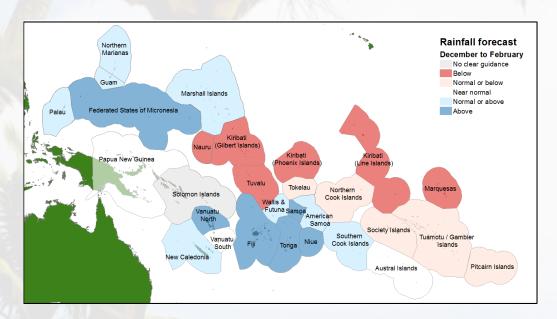
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The Island Climate Update

Drought Watch December 2017

December 2017 to February 2018 rainfall forecast

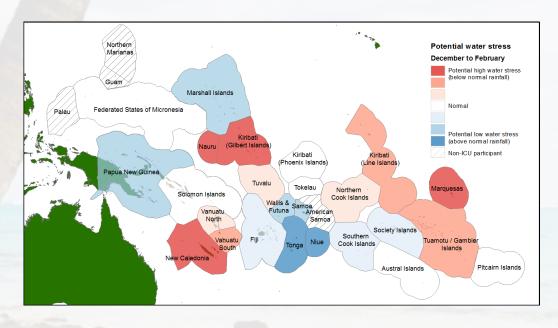


Regional drought potential advisory

Based on rainfall anomaly classification over the past six months and forecast rainfall anomaly classification over the next 3 months

Nauru, Kiribati Gilbert Islands, Marquesas, New Caledonia: Below to well below normal rainfall experienced over the last several months. Normal or above normal rainfall is forecast for New Caledonia while below normal rainfall is forecast for the other island groups over the next 3 months.

Kiribati Line Islands: Below normal rainfall observed over the past two months, with below normal rainfall forecast for the next 3 months.



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