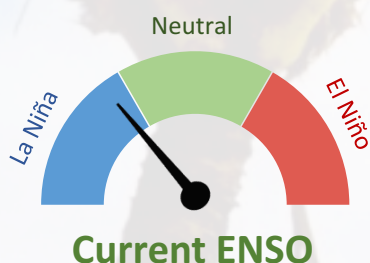


### Recent



Current ENSO

Weak La Niña conditions are present in the tropical Pacific.

Sea Surface Temperatures are below average in the central and eastern equatorial Pacific.

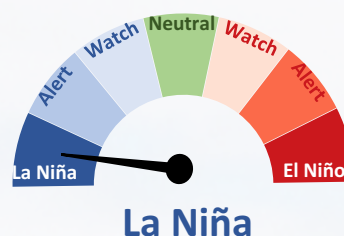
Atmospheric La Niña signals have weakened in December 2017, and the Southern Oscillation Index (SOI) is slightly negative with -0.2 for December 2017.

# 72%

chance for **La Niña** conditions to continue over **January – March 2018**.

Chance for **ENSO-neutral** conditions returning in **April – May 2018**

# 74%



La Niña

### Forecast

## ENSO situation summary

**Weak La Niña conditions** persisted in the tropical Pacific during **December 2017**. Sea surface temperatures (SSTs) in the central and eastern equatorial Pacific Ocean have continued to cool during December 2017.

Below average SSTs are present across the central and eastern equatorial Pacific, with the maximum anomalies found in the far eastern Pacific off the coasts of Ecuador and Peru. The **NINO3.4** index is negative at  $-0.7^{\circ}\text{C}$  (and therefore in the **La Niña category**), the NINO3 index is at  $-0.9^{\circ}\text{C}$  and the NINO4 index is only very weakly negative ( $-0.2^{\circ}\text{C}$  for the month of December 2017 as a whole). The NINO1 index (near the coast of Peru) is currently the most negative with a value below  $-1.0^{\circ}\text{C}$  for December 2017.

While the ocean (surface and subsurface) signals are fully consistent with a weak La Niña state, some atmospheric patterns have become less consistent during December 2017: **The Southern Oscillation Index (SOI)** weakened rapidly during the course of the month and is now in the **neutral range** ( $-0.2$  for December 2017 as a whole). Similarly, the negative zonal wind anomalies that were present in November in the western Pacific Ocean, signalling enhanced trade wind circulation, have weakened significantly.

In summary, **weak La Niña conditions are currently present in the Pacific Ocean**, despite weakened atmospheric signals during the course of last month (December 2017). The international consensus is that **La Niña conditions are likely (72% chance) to persist over the next 3 month period (January – March 2018)**. The models agree however that La Niña is **likely to decay rapidly during the following three month period**, and a **return to ENSO-neutral conditions is most likely (74% chance) over the April – June 2018 period**.

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## Rainfall outlook for January – March 2018

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

**Normal or below normal rainfall** for the Austral Islands, Papua New Guinea, the Society Islands, the northern Cook Islands, Pitcairn Island, the Tuamotu archipelago and Tokelau.

**Near normal rainfall** for southern Vanuatu.

**Normal or above normal rainfall** for the northern Marianas Islands, New Caledonia, American Samoa, the southern Cook Islands, Niue, Palau, the Solomon Islands, northern Vanuatu and Wallis & Futuna.

**Above normal rainfall** for Fiji, Tonga, Samoa, Niue, the Federated States of Micronesia, Guam, the Marshall Islands and Samoa.

## Rainfall outlook table for January – March 2018

ISLAND	PROBABILITY (%)			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
Fiji	10	30	60	ABOVE	High
Tonga	10	35	55	ABOVE	High
FSM	20	30	50	ABOVE	High
Guam	20	35	45	ABOVE	Moderate-High
Marshall Islands	20	35	45	ABOVE	Moderate-High
Samoa	20	35	45	ABOVE	Moderate-High
N. Marianas	15	40	45	AVG - ABOVE	Moderate-High
New Caledonia	15	40	45	AVG - ABOVE	Moderate-High
American Samoa	25	35	40	AVG - ABOVE	Moderate
Cook Islands (Southern)	25	35	40	AVG - ABOVE	Moderate
Niue	25	35	40	AVG - ABOVE	Moderate
Palau	25	35	40	AVG - ABOVE	Moderate-High
Solomon Islands	25	35	40	AVG - ABOVE	Moderate
Vanuatu (North)	25	35	40	AVG - ABOVE	Moderate
Wallis & Futuna	25	40	35	AVG - ABOVE	Moderate
Vanuatu (South)	30	40	30	NEAR NORMAL	Moderate
Austral Islands	35	40	25	AVG - BELOW	Moderate
Papua New Guinea	35	40	25	AVG - BELOW	Moderate
Society Islands	35	40	25	AVG - BELOW	Moderate
Cook Islands (Northern)	40	35	25	AVG - BELOW	Moderate-High
Pitcairn Island	40	35	25	AVG - BELOW	Moderate
Tuamotu Islands	40	35	25	AVG - BELOW	Moderate
Tokelau	45	40	15	AVG - BELOW	Moderate-High
Tuvalu	45	35	20	BELOW	Moderate-High
Kiribati (Eastern)	50	35	15	BELOW	High
Marquesas	50	35	15	BELOW	Moderate-High
Nauru	50	35	15	BELOW	High
Kiribati (Western)	55	35	10	BELOW	High
Central Kiribati (Phoenix)	60	30	10	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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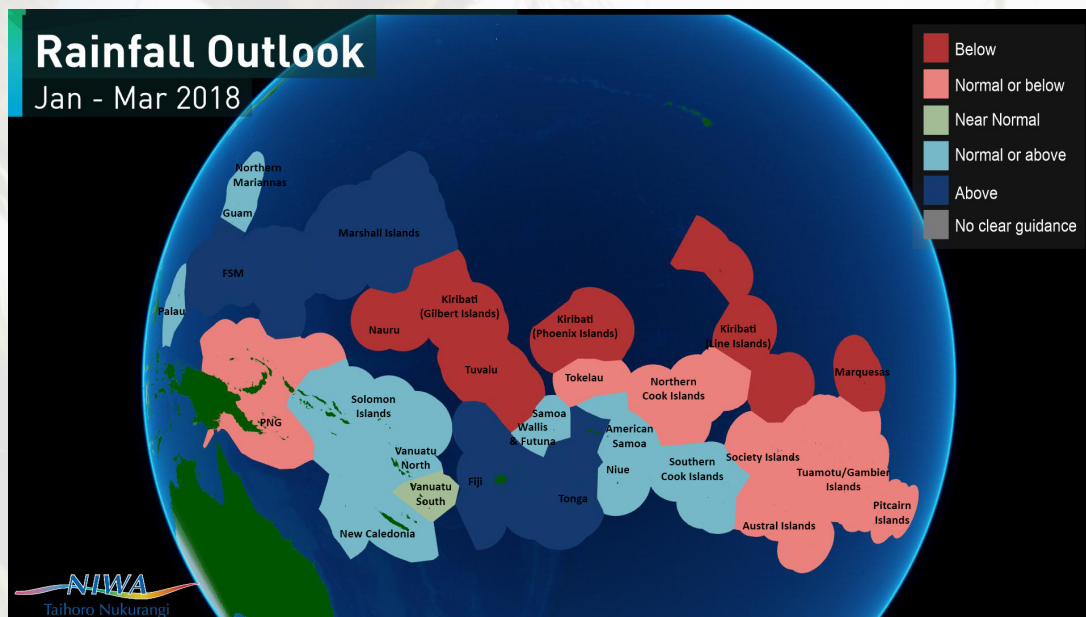
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# The Island Climate Update

Drought Watch  
January 2018

## January to March 2018 rainfall forecast

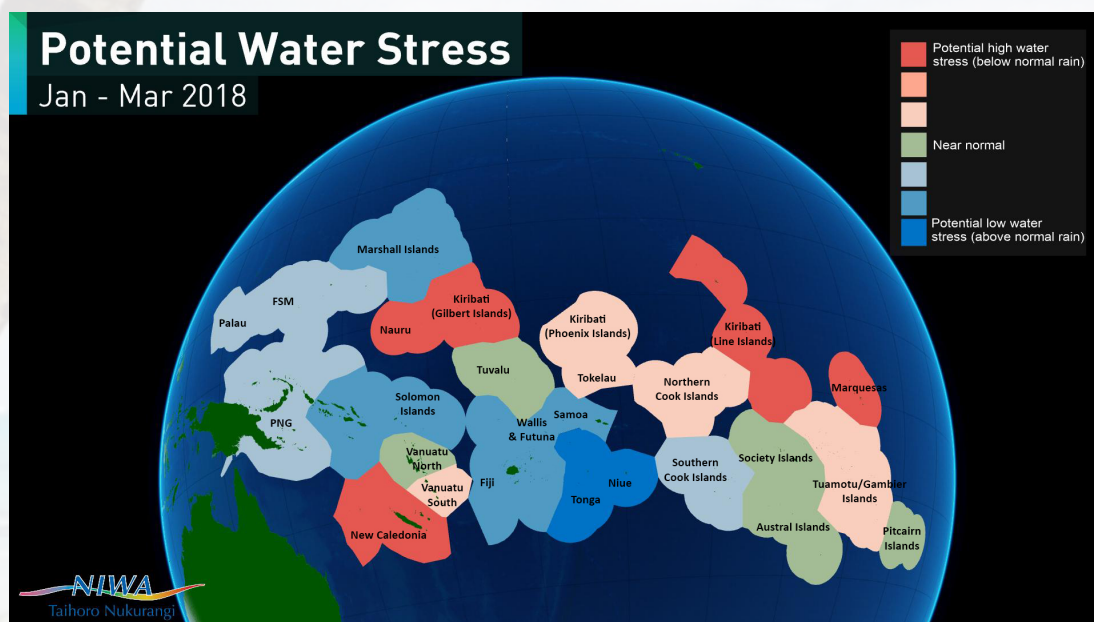


## Regional drought potential advisory

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 and below normal rainfall is forecast over the next 3 months.

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



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