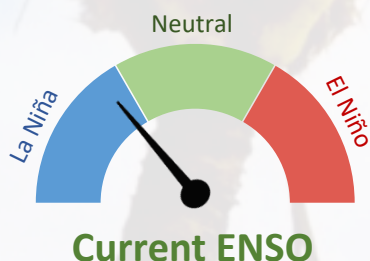


Recent



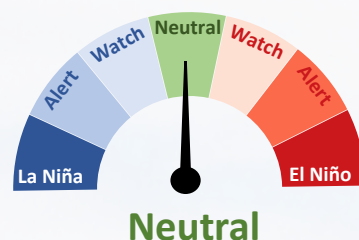
Weak La Niña conditions continued in the tropical Pacific during February 2018.

Sea surface temperatures remain below average in the central and eastern equatorial Pacific, but warmed compared to January 2018.

The breakdown of some atmospheric patterns signal that La Niña has entered its decay phase.

69% chance for **neutral** conditions to return during **March – May 2018**.

Chance for **ENSO-neutral** conditions persisting during **June – August 2018** **56%**



Forecast

ENSO situation summary

Weak La Niña conditions continued in the tropical Pacific during February 2018, but the current state of the Ocean-Atmosphere system in the Equatorial Pacific indicates that it is **now reaching its decay phase**. Below average sea surface temperatures (SSTs) remained present in the central and eastern equatorial Pacific Ocean but weakened compared to January 2018. The NINO3.4 index is negative at -0.58°C (was -0.68°C last month), and the **far eastern Pacific** (NINO indices 1 and 2) **experienced rapid warming** over the course of February.

The enhanced trade winds that were present in the western Pacific during January 2018 have vanished, and strong positive zonal wind anomalies (weakened trade winds) replaced them during February. February 2018 has also seen the breakdown of the rainfall and convection anomalies in the tropical Pacific which were previously consistent with La Niña conditions. **The Southern Oscillation Index (SOI)** has shown considerable variability since the beginning of the year, and is **currently on the El Niño side of neutral**, with a preliminary value of -0.85 for February 2018.

In summary, **while weak La Niña conditions remain present in the Pacific Ocean, the breakdown of the atmospheric signals, along with expansion and intensification of warmer than normal subsurface ocean waters towards the central Pacific, signal that La Niña has reached its decay phase**. This tendency is expected to continue over the next few months: the international consensus is for a rapid transition to an **ENSO-neutral** state over the next three month period (**69% chance over March – May 2018**). ENSO-neutral remains the most likely outcome over the winter season (June – August 2018), but the models indicate that a transition towards El Niño becomes increasingly likely thereafter (45% chance for El Niño conditions to emerge over the September – November 2018 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: <http://www.niwa.co.nz/climate/icu> <https://www.facebook.com/IslandClimateUpdate/>

Rainfall outlook for March – May 2018

Below normal rainfall for Tuvalu, all Kiribati islands groups, Nauru and the Marquesas.

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

Near normal rainfall for the Austral Islands.

Normal or above normal rainfall for American Samoa, New Caledonia, the Marshall Islands, the southern Cook Islands, Vanuatu and the Solomon Islands.

Above normal rainfall for Fiji, Tonga, the Federated States of Micronesia, Palau Guam, Samoa, Niue, Wallis & Futuna and the northern Marianas Islands.

Rainfall outlook table for March – May 2018

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

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.

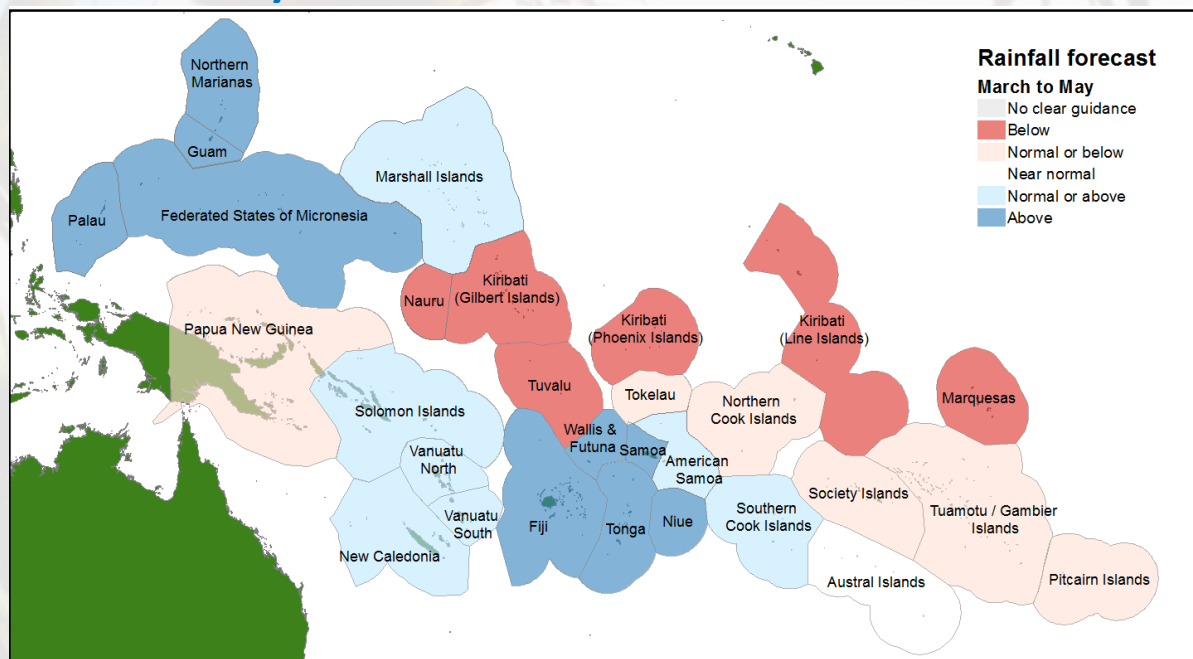
For more information see: <http://www.niwa.co.nz/climate/icu> <https://www.facebook.com/IslandClimateUpdate/>

The Island Climate Update

Drought Watch

March 2018

March to May 2018 rainfall forecast



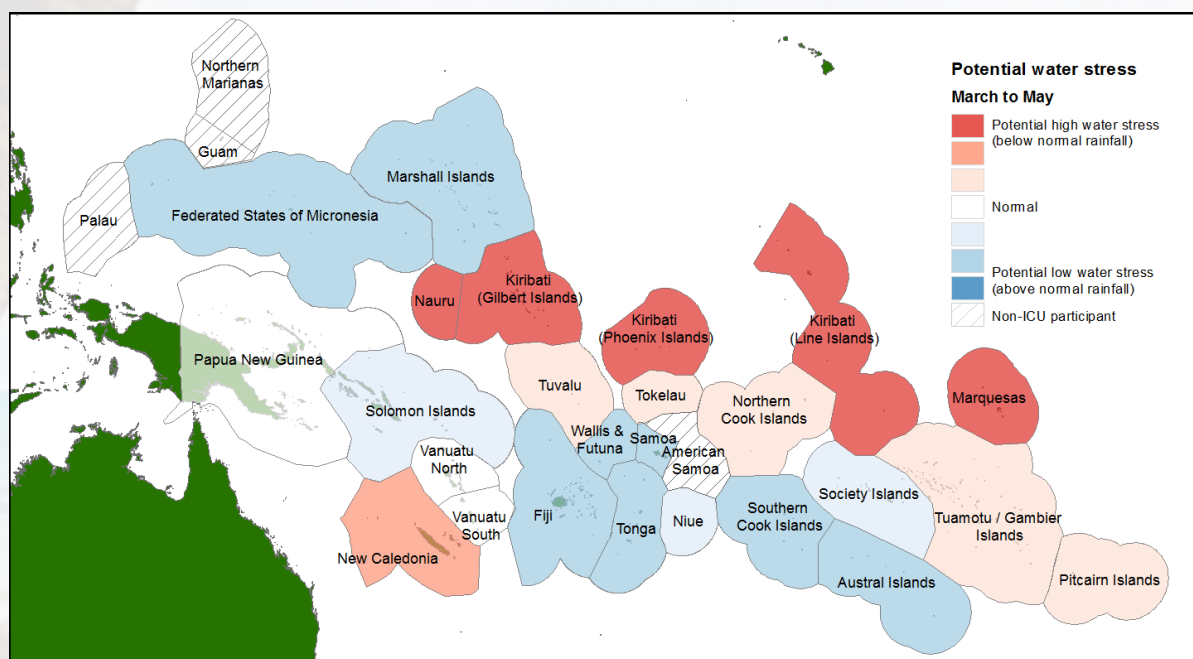
Regional drought potential advisory

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

Nauru, Kiribati (Gilbert, Phoenix, Line Islands), Marquesas: Below to well below normal rainfall experienced over the last several months. Below normal rainfall is forecast for these island groups over the next three months.

New Caledonia: Below or well below normal rainfall experienced over the last several months. Above normal rainfall is forecast over the next three months.

Northern Cook Islands, Tuvalu, Pitcairn, Tokelau, Tuamotu: Normal or below normal rainfall experienced over the last several months. Normal or below normal rainfall is forecast over the next three months.



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: <http://www.niwa.co.nz/climate/icu> <https://www.facebook.com/IslandClimateUpdate/>