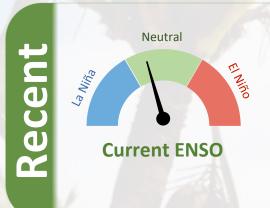
# The Island Climate Update

#### ENSO Watch November 2016



El Niño/Southern Oscillation (ENSO) conditions are currently near **neutral**, but leaning towards a **weak La Niña** state.

Sea Surface Temperatures are near to below average across the eastern Equatorial Pacific.

The Southern Oscillation Index (SOI) is slightly negative (-0.4 for October 2016).

53% chance of La Niña conditions developing November 2016 to January 2017.

Chance of neutral conditions occurring between February 2017 and April 2017



#### **ENSO situation summary**

The tropical Pacific exhibits **mixed ENSO** (El Niño-Southern Oscillation) **signals**, with some indicating **La Niña status** and others indicating **neutral conditions**. Sea surface temperatures (SSTs) in the central equatorial Pacific Ocean are below average, close to the threshold used to define La Niña events. Anomalously cold sub-surface waters are still present, but are now more confined to the central Pacific (near 140°W) than in previous months.

**The atmospheric conditions are also mixed**: stronger **easterly trade winds** in the west and enhanced convection over the Maritime Continent (islands of Indonesia and Papua New Guinea) are **consistent with a weak La Niña**. However, the **Southern Oscillation Index (SOI)** has dropped to weakly negative values (-0.4 for the month of October 2016 as a whole) which are indicative of **ENSO-neutral conditions**.

The **Intertropical Convergence Zone** (ITCZ) was displaced north of its climatological position along the Equator in the central Pacific, and convection and rainfall were well above normal for the Maritime Continent (Indonesia, Papua New Guinea). The South Pacific Convergence Zone (SPCZ) did not show any clear displacement north or south of its climatological position.

International guidance still slightly favours La Niña conditions (53% chance versus 46% for neutral) over the next three month period (November 2016 - January 2017). However, neutral conditions are now much more likely than La Niña by February – April 2017: 74% chance for neutral, and only 22% for La Niña. In summary, La Niña conditions are only slightly more likely than not over the next 3-month period, and become less likely as we progress into 2017.

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## **The Island Climate Update**

#### Rain Watch November 2016

#### Rainfall outlook for November 2016 – January 2017

Below normal rainfall for eastern Kiribati, western Kiribati and Tuvalu.

Normal or below normal rainfall for the Tokelau and Pitcairn Island.

**Normal or above normal rainfall** for the Austral Islands, the southern Cook Islands, Niue, Samoa, the Society Islands, Tonga, New Caledonia and Vanuatu.

**Near normal rainfall** for the northern Cook Islands, Fiji, the Marquesas, Papua New Guinea and the Tuamotu archipelago.

**No clear guidance (climatological forecast)** for the Solomon Islands and Wallis & Futuna.



#### Rainfall outlook table for November 2016 – January 2017

ISLAND	PROBABILITY (%)			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
FSM	20	35	45	ABOVE	Moderate-High
Austral Islands	25	35	40	AVG - ABOVE	High
Cook Islands	25	35	40	AVG - ABOVE	Moderate-High
(Southern)					
Niue	25	35	40	AVG - ABOVE	High
Samoa	25	35	40	AVG - ABOVE	Moderate-High
Society Islands	25	35	40	AVG - ABOVE	Moderate-High
Tonga	25	35	40	AVG - ABOVE	Moderate-High
New Caledonia	25	40	35	AVG - ABOVE	High
Vanuatu (North)	25	40	35	AVG - ABOVE	
Vanuatu (South)	25	40	35	AVG - ABOVE	High
Cook Islands (Northern)	30	40	30	NEAR NORMAL	Moderate-High
Fiji	30	40	30	NEAR NORMAL	Moderate-High
Marquesas	30	40	30	NEAR NORMAL	Moderate-High
Papua New Guinea	30	40	30	NEAR NORMAL	Moderate-High
Tuamotu Islands	30	40	30	NEAR NORMAL	Moderate-High
Wallis & Futuna	30	35	35	CLIMATOLOGY	Moderate-High
Solomon Islands	33	33	33	CLIMATOLOGY	Moderate-High
Pitcairn Island	40	35	25	AVG - BELOW	Moderate
Tokelau	40	35	25	AVG - BELOW	Moderate-High
Tuvalu	45	35	20	BELOW	High
Kiribati (Eastern)	50	30	20	BELOW	High
Kiribati (Western)	50	30	20	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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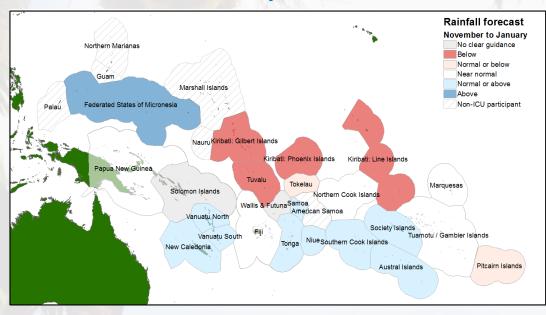
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### **The Island Climate Update**

#### Drought Watch November 2016

#### November 2016 to January 2017 rainfall forecast

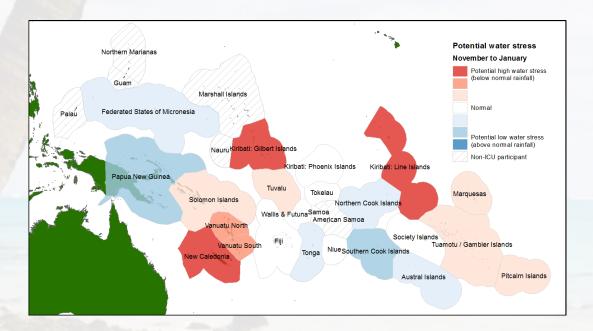


#### **Regional drought potential advisory**

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

**Kiribati, Gilbert and Line Islands:** Below or well below normal rainfall experienced over 5 of the past 6 months in the Gilbert Islands and 4 of the past 6 months in the Line Island. Below normal rainfall is forecast over the next 3 months.

**New Caledonia, Northern and Southern Vanuatu**: Below or well below normal rainfall experienced over 5 of the past 6 months. Normal or above normal rainfall is forecast over the next 3 months.



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