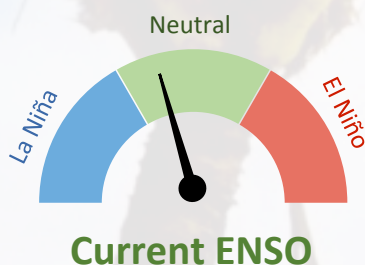


### Recent



El Niño/Southern Oscillation (ENSO) conditions are currently near **neutral**.

Sea Surface Temperatures in the equatorial Pacific close to or slightly below normal in the east and slightly above normal in the west.

The Southern Oscillation Index (SOI) is slightly positive (+0.7 for June 2017).

**57%** chance of La Niña conditions developing **July to September 2016**.

Chance of La Niña occurring increases later in the year reaching **65%** at the **beginning of 2017**

Models indicate La Niña strength likely to be **weak or moderate**.



### Forecast

## ENSO situation summary

Sea Surface Temperatures (SST) in the central Pacific are now close or below normal. The latest monthly SST anomaly in the NINO3.4 region is 0.09°C, with the latest weekly anomaly venturing below normal at -0.15°C. The NINO3 region (eastern Pacific: 90°W – 150°W) monthly anomaly is currently at +0.17°C. The NINO4 index (in the western Pacific) is the warmest, with the last 30 days (to 26<sup>th</sup> of June) anomaly at +0.61°C.

Cooler than normal sub-surface ocean waters have intensified in the central Equatorial Pacific. The latest weekly subsurface temperatures from the TAO data show anomalies exceeding -4°C between 100 and 150m depth just east of the International Dateline. The Southern Oscillation Index (SOI) is currently positive (value for June 2016 is +0.7). Trade winds are slightly stronger than normal in the central and western Pacific (west of about 140°W)

The TRMM ESPI index is currently indicating weak La Niña conditions with a value of -0.92 for the 30 days to the 5th of July. Consistent with the circulation pattern and the recent ESPI index value, the Intertropical Convergence Zone (ITCZ) is displaced north of its climatological position all along the Equator east of the International Dateline.

Large parts of the Maritime Continent (e.g. Indonesia and Papua New Guinea) have registered above normal rainfall in June 2016, in sharp contrast with the previous months. The South Pacific Convergence Zone however appears still displaced north of its climatological position (i.e. towards the Equator), a pattern usually associated with El Niño. Consequently, some Island groups in the southwestern Pacific (i.e. Vanuatu, Fiji) remained drier than normal in June 2016.

International guidance indicates that La Niña conditions are likely to appear (57% chance) over the next three month period (July to September 2016). The likelihood of La Niña conditions becoming established in the Pacific increases slightly later on, and reaches 65% in the first three months of 2017, however model forecasts suggest that if La Niña indeed develops, it is likely to remain in the weak or moderate category.

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## Rainfall outlook for July – September 2016

**Below normal rainfall** for Northern Vanuatu, Eastern and Western Kiribati and the Federated States of Micronesia.

**Normal or below normal rainfall** for Southern Vanuatu, Wallis and Futuna, the Austral Islands, the Southern Cook Islands, Fiji, Niue and Tonga

**Normal or above normal rainfall** for the Marquesas, Samoa and the Tuamotu archipelago

**Above normal rainfall** for the northern Cook Islands, Tokelau and Tuvalu

## Rainfall outlook table for July – September 2016

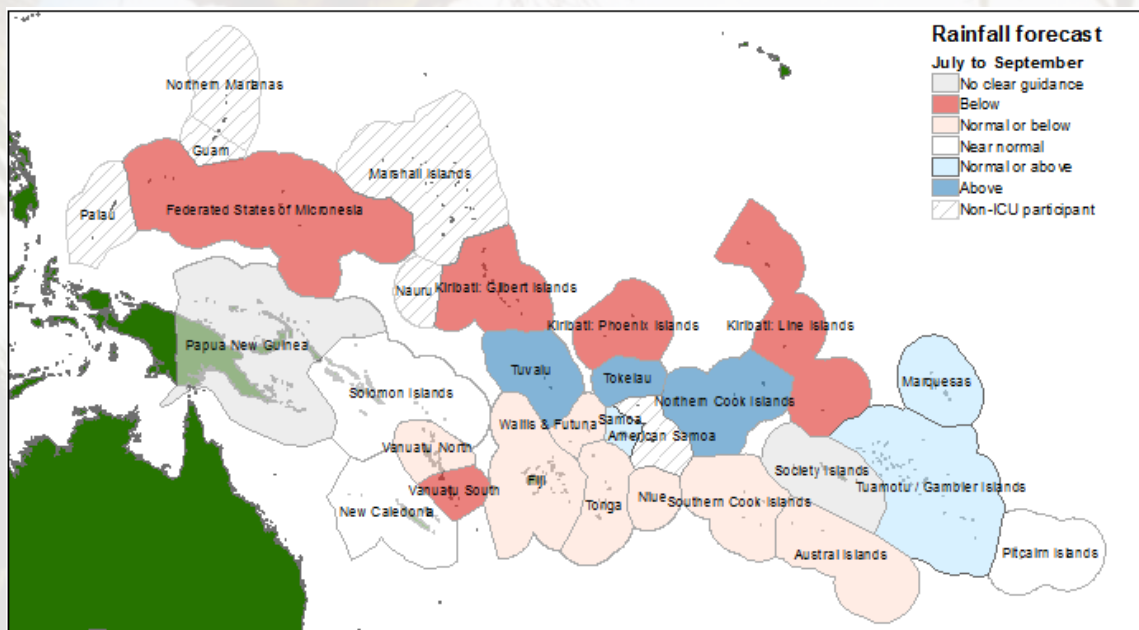
ISLAND	PROBABILITY (%)			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
<b>Cook Islands (Northern)</b>	10	30	60	ABOVE	High
<b>Tokelau</b>	20	30	50	ABOVE	High
<b>Tuvalu</b>	20	35	45	ABOVE	High
<b>Marquesas</b>	25	35	40	AVG - ABOVE	High
<b>Samoa</b>	25	35	40	AVG - ABOVE	Moderate-High
<b>Tuamotu Islands</b>	25	35	40	AVG - ABOVE	Moderate-High
<b>New Caledonia</b>	30	40	30	NEAR NORMAL	High
<b>Pitcairn Island</b>	30	40	30	NEAR NORMAL	Moderate
<b>Solomon Islands</b>	30	40	30	NEAR NORMAL	Moderate-High
<b>Society Islands</b>	30	35	35	CLIMATOLOGY	High
<b>Papua New Guinea</b>	35	35	30	CLIMATOLOGY	Moderate-High
<b>Vanuatu (South)</b>	35	40	25	AVG - BELOW	Moderate-High
<b>Wallis &amp; Futuna</b>	35	40	25	AVG - BELOW	Moderate-High
<b>Austral Islands</b>	40	35	25	AVG - BELOW	Moderate-High
<b>Cook Islands (Southern)</b>	40	35	25	AVG - BELOW	Moderate-High
<b>Fiji</b>	40	35	25	AVG - BELOW	Moderate-High
<b>Niue</b>	40	35	25	AVG - BELOW	Moderate-High
<b>Tonga</b>	40	35	25	AVG - BELOW	Moderate-High
<b>Vanuatu (North)</b>	45	35	20	BELOW	Moderate-High
<b>Kiribati (Eastern)</b>	50	30	20	BELOW	High
<b>Kiribati (Western)</b>	50	30	20	BELOW	Moderate-High
<b>FSM</b>	60	30	10	BELOW	Moderate-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 or sea surface temperatures 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

Drought Watch  
July 2016

## July to September 2016 rainfall forecast



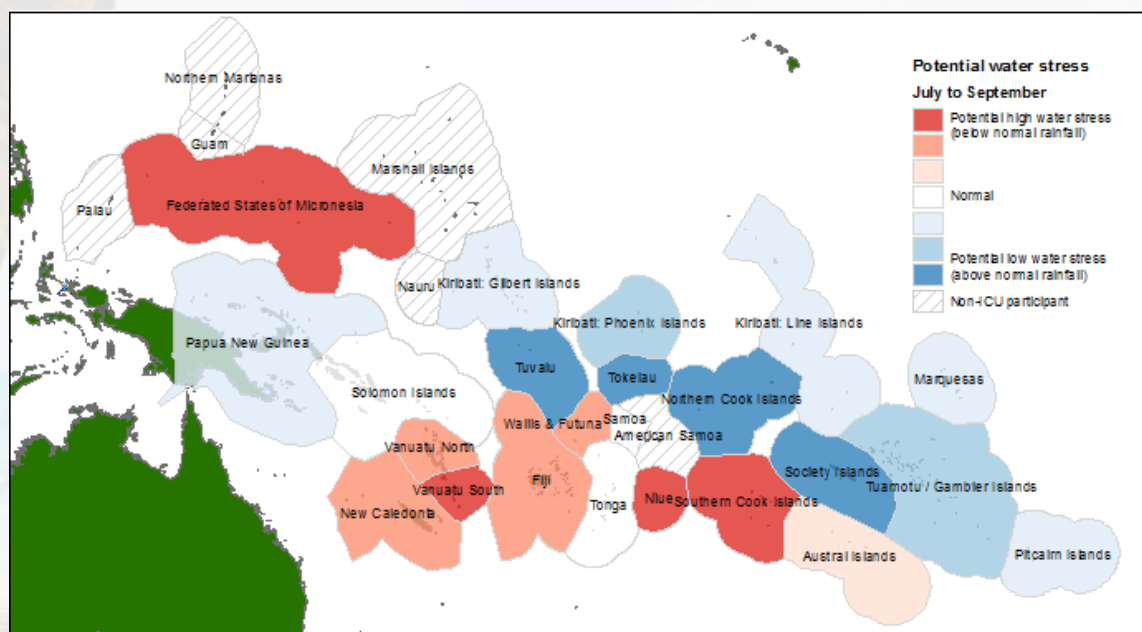
## Regional drought potential advisory

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

**Niue, Southern Cook Islands:** Below or well below normal rainfall experienced over 5 of the past 6 months. Normal or below normal rainfall is forecast over the next 3 months.

**Federated States of Micronesia, Vanuatu North:** Below or well below normal rainfall experienced over 4 of the past 6 months. Below normal rainfall is forecast over the next 3 months.

**Fiji, Vanuatu South, New Caledonia:** Below or well below normal rainfall experienced over 4 of the past 6 months. Normal or below normal rainfall is forecast over the next 3 months for Fiji and Vanuatu South. Near normal rainfall is forecast for New Caledonia.



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