

11th September 2018 TONGAN

El Niño and drought watch for Tonga

El Niño-Southern Oscillation (ENSO) status.

ENSO-neutral conditions persisted in the tropical Pacific during August 2018. The Southern Oscillation Index was negative at -0.9 (i.e. on the El Niño side) in August.

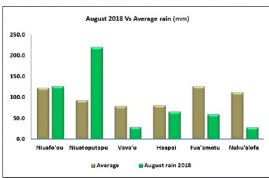
ENSO Prediction

62% chance for El Niño conditions to emerge during September-November 2018, 78% chance for El Niño conditions during March-May 2019.

Recent

August 2018:

Rainfall was above average in Niuaotupulu and Niuafo'u and below average elsewhere in the country. Very dry conditions in Tongatapu and Vavau. (Refer to Graph below). The average temperature was 23.5°C which was 0.1°C warmer than average. Highest maximum temperature was 32.9°C on the 23rd in Niuafo'u and the lowest minimum temperature was 12.8°C in Vavau on the 9th.



| | Jun | Jul | Aug |
|-------------|-------|-------|-------|
| Niuafo'u | 74.2 | 74.2 | 127.5 |
| Niuaotupulu | 60.1 | 31.1 | 220.9 |
| Vava'u | 265.1 | 39.5 | 30.1 |
| Hafuapai | 137.1 | 79.3 | 66.7 |
| Fua'amotu | 68.7 | 244.6 | 60.4 |
| Nuku'alofa | 108.6 | 182.7 | 28.8 |

Normal (blue) Exceeds (red)

Note: Cool Dry season started on the 1st of May until 31st of October 2018. This is when Tonga experience less rainfall and cooler temperatures than normal.

Neutral ENSO status in this issue means that it is either El Niño or La Niña. It means that the status is not biased to either status. During El Niño, rainfall in Tonga is below average especially on the onset of El Niño.

Citizens and public should be watched for water stress conditions which could develop over the next few months.

Forecast

Rainfall outlook for September - November 2018
Rainfall is forecast to be below average in Niuaotupulu and Vavau and average for the rest of the country.

Rainfall outlook for December 2018-February 2019
Below Average rainfall is the forecast for Tonga during this period. Refer to Table 1.

| | Sep - Nov 2018 (% chance) | Dec 2018 - Feb 2019 (% chance) |
|-------------|---------------------------|--------------------------------|
| Niuafo'u | 37 | 36 |
| Niuaotupulu | 40 | 40 |
| Vava'u | 40 | 41 |
| Hafuapai | 35 | 41 |
| Fua'amotu | 36 | 37 |
| Nuku'alofa | 39 | 42 |

Table 1: Rainfall outlook

The next Climate update will be issued about the second week of October 2018

Disclaimer:
This summary is prepared as soon as possible following the end of the month once climate data is received from recording stations around Tonga. Delay in data collection, communication and processing occasionally arise. While every effort is made to verify observational data, the Tonga Meteorological Service makes no statements, representations, or warranties about the accuracy or completeness of, and you should not rely on, any information contained in this report. Despite our best efforts, TMS makes no guarantee that the information in the publication is free of numerical errors. TMS disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages and costs you might incur as a result of the information being inaccurate or incomplete in any way, and for any reason. This information should be used as a guide only. For further information about the forecast should be directed to the Director of the Tonga Meteorological Service, at P.O. Box 1580, Nuku'alofa. Or email at metstaff@met.gov.tg, Tel (676) 35 123/35 355 or our website, <http://www.met.gov.tg> for more information.