



Climate Update

May to July 2023 Rainfall outlook



Issued: 20 April 2023

El Niño-Southern Oscillation is currently neutral (neither La Niña nor El Niño).

Recent

March 2023

Above average rainfall received across the entire country (see graph & Table 2 below). The mean air temperature was 27.2°C which was 0.1°C above average. Highest maximum temperature was 33.3°C recorded on the 1st at Matatua and the lowest minimum temperature was 19.0°C recorded at Fua'amotu on the 10th.

March rainfall 2023 Vs Average (1981-2010)

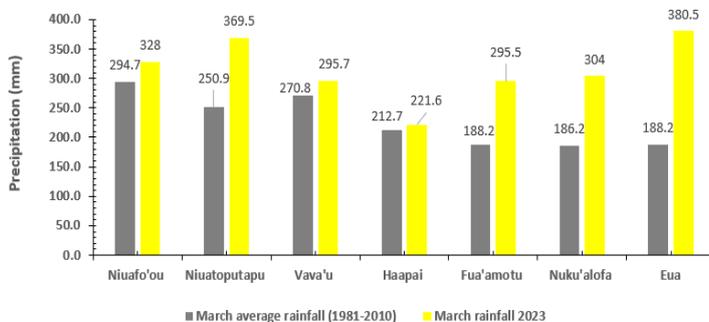


Table 2. Last 6 months rainfall

Rainfall totals for October 2022 – March 2023 (mm)						
	Oct	Nov	Dec	Jan	Feb	Mar
Niufo'ou	88.0	85.5	71.2	243.4	156.0	328.0
Niuatoputapu	224.0	205.4	128.5	219.3	219.5	369.5
Vava'u	164.3	194.2	389.2	207.2	299.3	295.7
Ha'apai	406.0	175.0	282.0	245.7	419.5	221.6
Fua'amotu	194.0	224.3	279.4	215.7	498.1	295.5
Nuku'alofa	281.8	135.5	386.5	282.6	421.0	304.0
'Eua	138.7	158.7	399.0	306.6	695.4	380.5

Traditional knowledge indicators for the summer season.

- If you see bees building their nests indoors and lower near the ground in shelters or empty containers and coconuts, then it is an indication that there will be a cyclone in the season.
- If you see fruit bearing trees are heavy fruiting, for example mangoes or breadfruit, then it is an indication that there will be a cyclone in the season.
- When you see flowers starting to bloom especially the traditional flowers and also bananas starting to bear fruits then you know summer is coming.
- If you see plenty cockroaches in the house than usual and that they also fly, it indicates that rain is near within a few hours.
- If rain has just started and you see roosters/hens not hiding or finding shelter and Rooster continue to crow then it is an indication that the rain will not last long.

ENSO situation summary

The Pacific is currently ENSO-neutral, that is, neither El Niño nor La Niña. Model guidance is for ENSO-neutral to persist until at least June. While the Pacific Ocean is currently ENSO-neutral, there are some signs El Niño may form later in the year. Therefore the ENSO Outlook is at El Niño WATCH.



Forecast

Table 1: Forecast for May up to October 2023

	May – July 2023 (% chance)	Aug – Oct 2023 (% chance)
Niufo'ou	34	36
Niuatoputapu	35	35
Vava'u	38	35
Ha'apai	37	37
'Eua	43	35
Tongatapu	40	34
Below average	Average (usual)	Above average

Rainfall Outlook for May – July:
Average rainfall across the country.

August – October:
Mostly average rainfall across Tonga.

Note:

The 2022-2023 Cyclone season will end at the end of April.

According to the current ENSO status above, previous 3 months rainfall and rainfall outlook (Refer Table 1 & 2), it is advised to collect water when it rains and use it wisely especially to people of Niufo'ou and Niuatoputapu. Public are advised to ensure that you stay alert at all times and get the latest weather forecast and warnings from the Met service. It is also advisable to seek advice from relevant authorities of sensitive sectors, e.g. Agriculture, Water, Health and the National Emergency Management Office (NEMO) on the best practices to save lives and property and minimize the effects of natural disaster.

The next Climate update will be issued second week of May 2023 or earlier

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. Delays 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 warranties that the information in this 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 guidance only. For further information about this forecast should be directed to the Director of the Tonga Meteorological Service, at P.O. Box 1380, Nuku'alofa. Or email at metstaff@met.gov.to Tel: (676) 0800638/ 7400062 or our website; <http://www.met.gov.to> for more information.