



Tuvalu Meteorological Service Early Action Rainfall Watch:



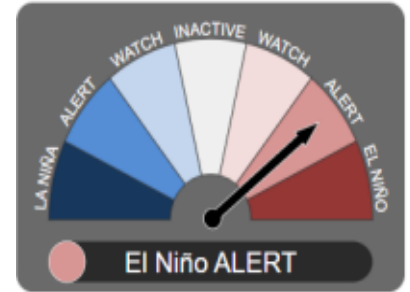
Purpose: The Early Action Rainfall Watch provides a summary of recent rainfall patterns, particularly the status of drought and the rainfall outlook for the coming months. The status and outlook will be revised on a monthly basis. Contact the Tuvalu Meteorological Service (TMS) for further information.

Issued: 26/07/2023

SUMMARY:

“El Niño Alert Continues”

- The ENSO Outlook remains at El Niño Alert. When El Niño Alert criteria have been met in the past, an El Niño event has developed around 70% of the time.
- Central and eastern Pacific sea surface temperatures (SSTs) are exceeding El Niño thresholds. Models indicate further warming is likely, with SSTs remaining above El Niño thresholds until at least the end of the year.
- The chance of an El Niño developing in the coming season has increased.



RAINFALL STATUS: In June 2023 and the last three months, 6 months and 12 months, Very Dry existed in Nanumea, Nanumaga, Niutao, Nui, Vaitupu, Nukufetau, Funafuti, Nukulaelae and Niulakita.

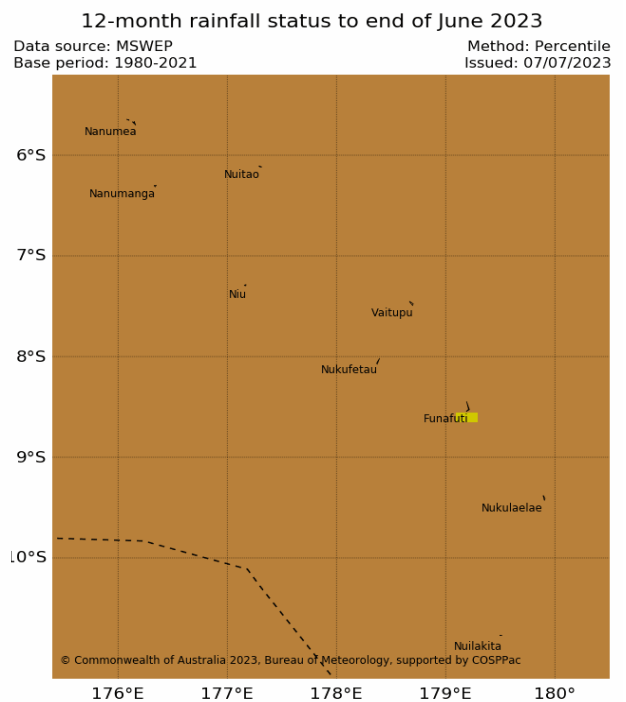
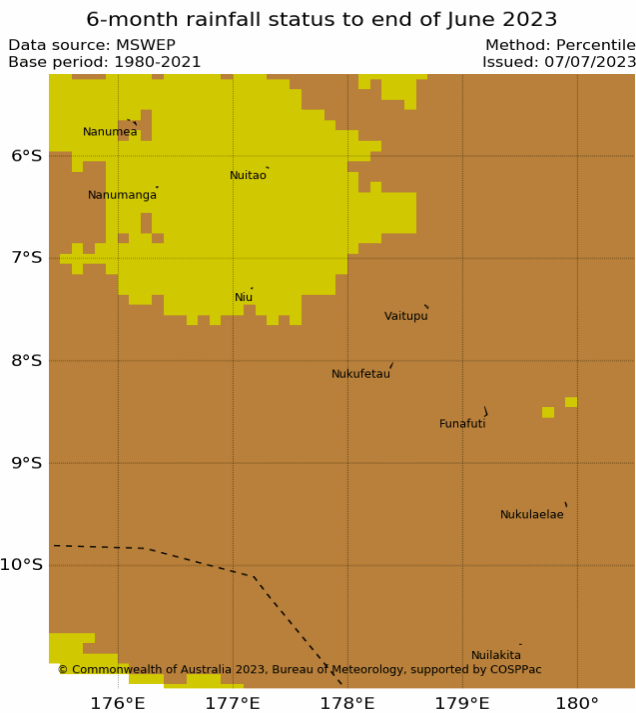
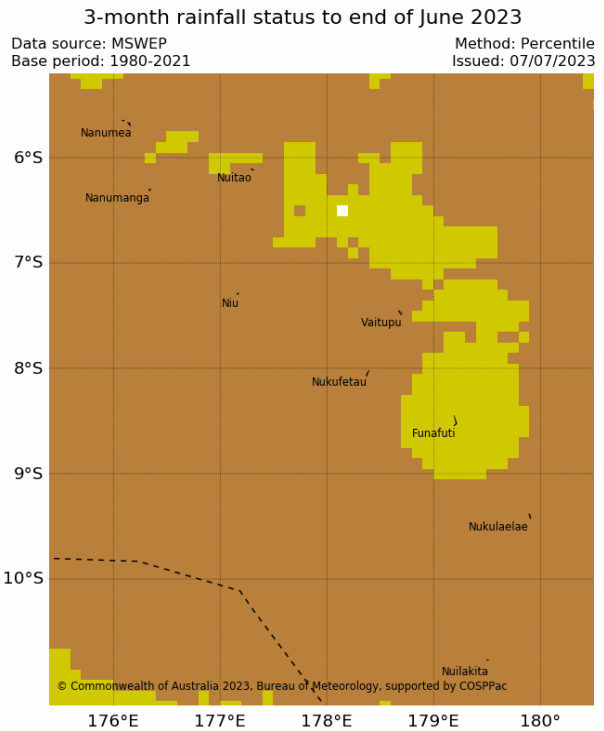
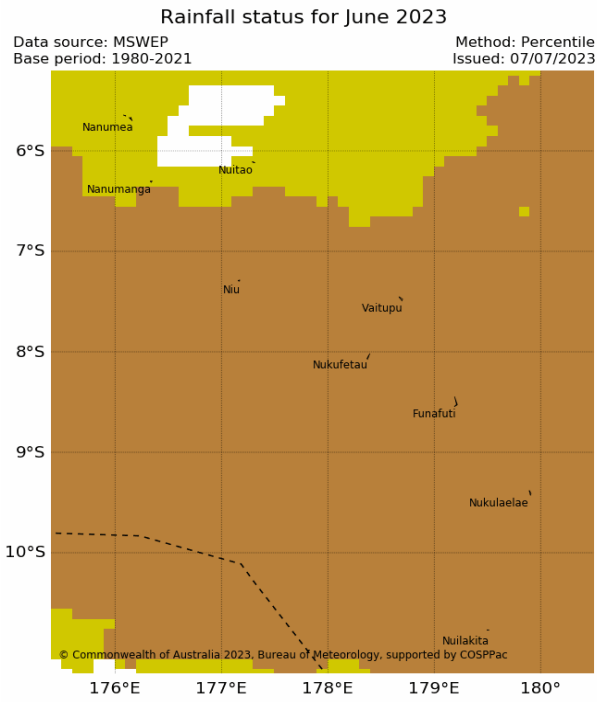
Rainfall OUTLOOK: There is a low chance of extreme rainfall in August 2023 at Niutao, Nui, Vaitupu, Nukufetau, Funafuti, Nukulaelae and Niulakita except Nanumea is medium chance of very wet. August to October, there is a medium chance of very wet in Nanumaga, Niutao, Nui, Vaitupu, Nukufetau, Funafuti, Nukulaelae and Niulakita, except Nanumea is high chance of very wet.

Rainfall observed for the last month, 3-months, 6-months and 12-months

The table below provides information on rainfall received over specific periods in the last 12 months, whether a station is in drought or a very wet period (opposite of drought). If a station is in drought warning, this indicates an increased chances of drought in the coming months, especially when approaching the dry season. The time periods are associated with different drought impacts presented below the tables.

Past Rainfall Status					Very Dry/Wet Rainfall Outlook	
1-month June 2023	3-months April 2023 to June	6-months January to June 2023	12-months July 2022 to June 2023	Tuvalu Islands	August 2023 Chance of extreme	August 2023 to October 2023 Chance of extreme
Very Dry	Very Dry	Very Dry	Very Dry	Nanumea	Medium (Chance of very wet)	High (Chance of very wet)
Very Dry	Very Dry	Very Dry	Very Dry	Nanumaga	Low chance of extreme	Medium (Chance of very wet)
Very Dry	Very Dry	Very Dry	Very Dry	Niutao	Low chance of extreme	Medium (Chance of very wet)
Very Dry	Very Dry	Very Dry	Very Dry	Nui	Low chance of extreme	Medium (Chance of very wet)
Very Dry	Very Dry	Very Dry	Very Dry	Vaitupu	Low chance of extreme	Medium (Chance of very wet)
Very Dry	Very Dry	Very Dry	Very Dry	Nukufetau	Low chance of extreme	Medium (Chance of very wet)
Very Dry	Very Dry	Very Dry	Very Dry	Funafuti	Low chance of extreme	Medium (Chance of very wet)
Very Dry	Very Dry	Very Dry	Very Dry	Nukulaelae	Low chance of extreme	Medium (Chance of very wet)
Very Dry	Very Dry	Very Dry	Very Dry	Niulakita	Low chance of extreme	Medium (Chance of very wet)

ACCESS-S Rainfall Summary for June 2023.



EAR Watch Category

Time periods and impacts:

1 – month period is most relevant for shallow rooted crops (e.g. eggplant, cabbage, tomatoes, spring onions, watermelons, cucumber), small water tanks (e.g. 1000galloons) and household water cisterns. The following secondary health and social-economic have been associated with drought at the 1-month period. Diarrhoea, skin rash, cough and fever, red eye, desalination plant (increased power demand and higher water costs for households), health of babies and elderly people declines, schools close and construction stops.

2 – months period is most relevant for bottle gourd,pawpaw, banana, chicken, pigs and community cisterns. The following secondary social-economic and health impacts have been associated with drought at the 2-months period. Community gatherings stop, increased in community disputes over water and limited or no employment.

3 – months period is most relevant for pumpkin, groundwater and ponds. The following secondary social-economic and health impacts have been associated with drought at the 3-months period. Crimes increase e.g. water stealing, government offices close and national events postponed.

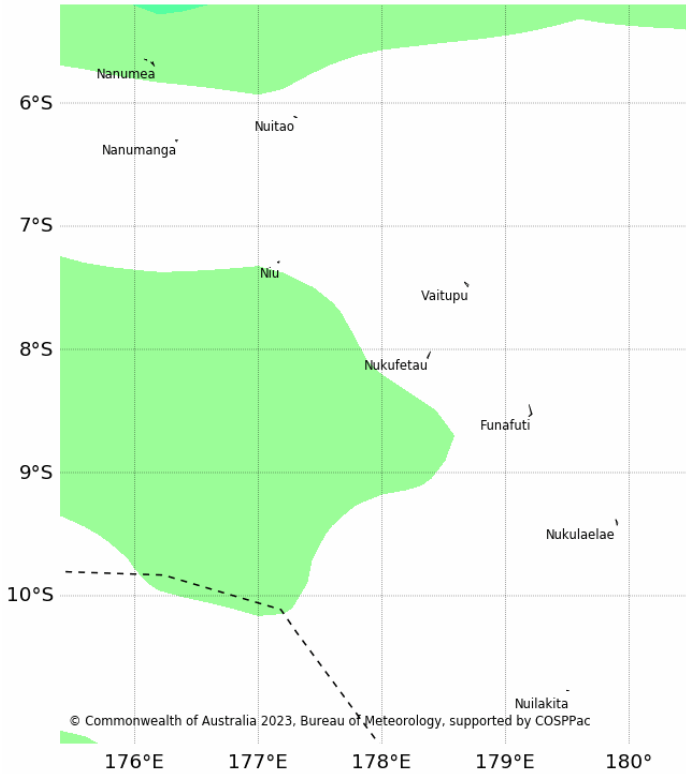
6 – months period is most relevant for large trees (e.g. breadfruits, pulaka, taro). The following secondary social-economic and health impacts have been associated with drought at the 6-months periods. Meteorological balloon flights stop, interislands shipping delays, entry of visitors to Tuvalu restricted.

12- months period is most relevant for felo, dragon fruits, pandanus, coconuts and ofega.

Very dry/Wet Rainfall Outlooks for July, and July to September 2023

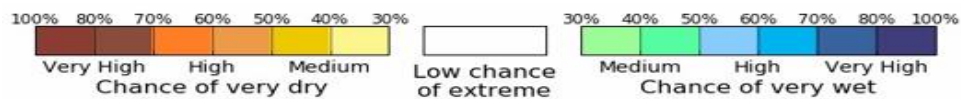
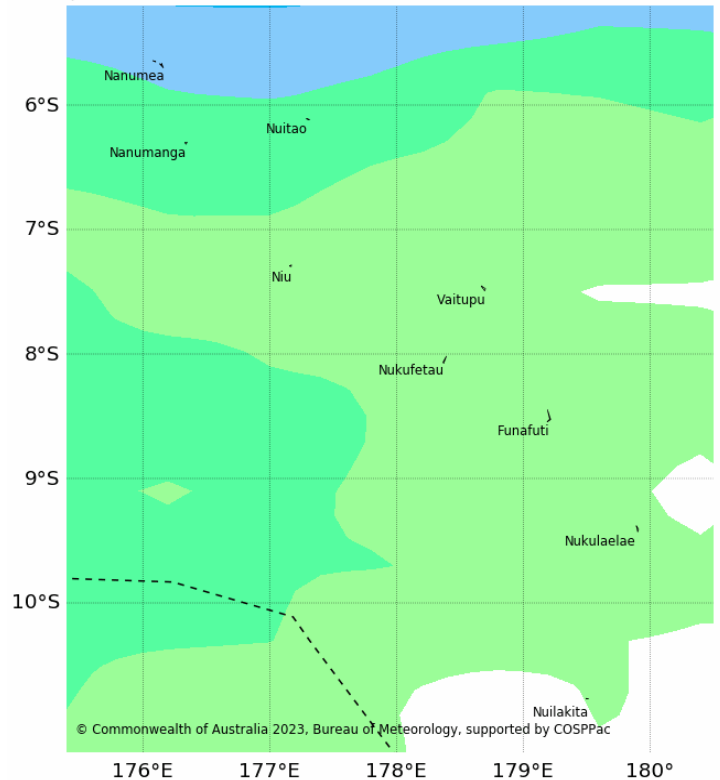
Chance of extreme rainfall for August 2023

Data source: ACCESS-S2
Base period: 1981-2018
Model Run: 01/07/2023
Issued: 06/07/2023



Chance of extreme rainfall for August to October 2023

Data source: ACCESS-S2
Base period: 1981-2018
Model Run: 01/07/2023
Issued: 06/07/2023



Outlook Status

The outlook provides the likelihood of receiving above normal to normal rainfall over the next three months and the following three months. The outlook does not indicate the amount of rainfall that may be received, how intense the rain may be in any one event, nor how it may vary from month to month.

Rainfall Status

- Estimates of moisture/water stress are based on recent rainfall compared with historical observations using the Percentile (Decile) Index.
- *Definitions:* "Very Dry" = rainfall in the lowest 20% of the historical record for that location and season, "Very Wet" = rainfall in the highest 20% for that location and season, "Seriously Dry" = rainfall in the lowest 10% of the historical record for that location and season, "Seriously Wet" = rainfall in the highest 10% for that location and season.

Contact Tuvalu Meteorological Service for further information:

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