



Tuvalu Meteorological Service Early Action Rainfall Watch:

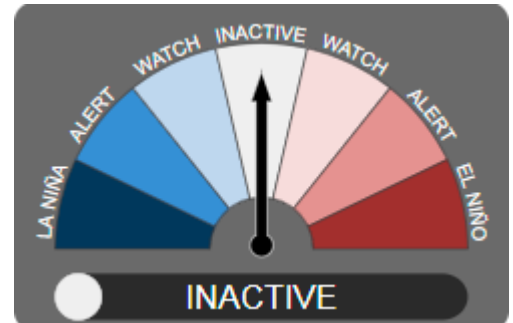


Purpose: The Early Action Rainfall Watch provides a summary of recent rainfall patterns, particularly the status of drought and the rainfall outlook for the coming months. The status and outlook will be revised on a monthly basis. Contact the Tuvalu Meteorological Service (TMS) for further information.

SUMMARY:

- The El Nino South Oscillation(ENSO) remain neutral.
- Atmospheric and oceanic indicators of ENSO including the Southern Oscillation Index (SOI), trade winds, cloudiness near the date line, and sea surface and sub-surface temperatures in the Tropical Pacific Ocean remain consistent with a neutral ENSO state.
- Most of the climate models indicate the Tropical Pacific is currently in neutral phase.

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- During the month of July, Nanumea and Funafuti was at **drought**, Nui and Niulakita was at **drought watch**. During the past two months, Funafuti was at **drought**, Nanumea and Nui was at **drought warning**, Niulakita was at **drought watch**. During the past 3-months period, Nanumea was at **drought**, Nui, Funafuti and Niulakita was at **drought warning**. For the last 6-months period, **drought** was observed at Nanumea, Nui was at **drought warning**, with **normal or wetter than normal** rainfall observed at Funafuti and Niulakita. (See table below for more information).
- **OUTLOOK:** For September 2021 to November 2021, Nanumea, Nui, Funafuti and Niulakita predicts to be near-normal likelihood for **normal** rainfall. (See the last table for more information).

Rainfall observed to July 2021

The table below provides information on rainfall received over specific periods in the last 6 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.

Status	1-month period July 2021	2-months period June 2021 to July 2021	3-months period May 2021 to July 2021	6-months period February 2021 to July 2021
Very Wet				
Normal or Wetter than normal				Funafuti and Niulakita
Drought Watch	Nui and Niulakita	Niulakita		
Drought Warning		Nanumea and Nui	Nui, Funafuti and Niulakita	Nui
Drought	Nanumea and Funafuti	Funafuti	Nanumea	Nanumea
Data not available				

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

Allow for uncertainty associated with island size, soil, types and geology.

Rainfall Outlook: September 2021 to November 2021

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.



	Alert Level	3 – months September 2021 to November 2021	3 – months December 2021 to February 2022
Stations with above normal rainfall favoured			
No Alert*		Nanumea, Nui, Funafuti and <u>Niulakita.</u>	Nanumea, Nui, Funafuti and <u>Niulakita.</u>
Stations with below normal rainfall favoured			

*No alert: Normal rainfall is favoured in the next three months or there are equal chances of below normal, normal and above normal rainfall.

The rainfall status been calculated using the percentile (decile) index and the rainfall outlook using SCOPIC, a statistical prediction tool.

Contact Tuvalu Meteorological Service for further information:

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