



Tuvalu Meteorological Service Early Action Rainfall Watch:



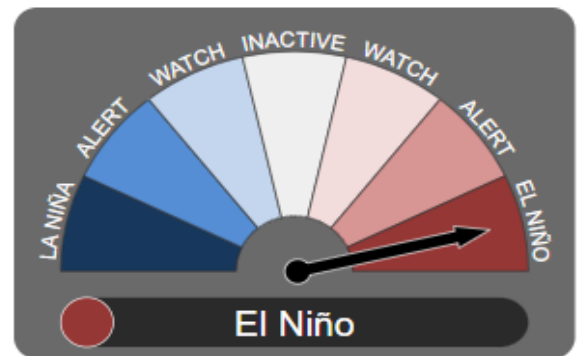
Purpose: The Early Action Rainfall Watch provides a summary of recent rainfall patterns, particularly the status of drought and the rainfall outlook for the coming months. The status and outlook will be revised on a monthly basis. Contact the Tuvalu Meteorological Service (TMS) for further information.

SUMMARY

Issued: 26/02/2024

“Moderate El Niño continues in the tropical Pacific “

- ❖ El Niño event continues in the tropical pacific oceans and it will be expected to returns to neutral level during the coming months.
- ❖ Sea surface temperatures is remaining El Niño thresholds into 2024 southern hemisphere. As have a chance to declining for next three months.



RAINFALL STATUS:

For the month of January 2024, it was **No Extreme** over Nanumea, Nanumaga, Niutao, Nui, Vaitupu, Nukufetau, Funafuti and Nukulaelae. **Very Dry** existed at Niulakita.

Over November 2023 to January 2024 (3Months), **No Extreme** at Nanumea, Nanumaga, Niutao, Nui, Vaitupu, Nukufetau, Funafuti and Nukulaelae. **Seriously Dry** stretching over Niulakita.

Over the past six months, August 2023 to January 2024, **No Extreme** most existed over Tuvalu.

February 2023 to January 2024 (12months), it was **No Extreme** existed Nanumea, Nanumaga, Niutao, and Funafuti. **Very Dry** at Nui, Vaitupu, Nukufetau and Nukulaelae. While **Seriously Dry** over Niulakita.

Rainfall OUTLOOK:

Medium chance of very wet conditions predicted for March 2024 at Nanumea, Nanumaga, and Funafuti. But there is **No Extreme** over Niutao, Nui, Vaitupu, Nukufetau, Nukulaelae and Niulakita.

March to May 2024, expected to be **Medium Chance of very wet** over Nanumea, Nanumaga, Niutao, Nui, Nukufetau, Funafuti and Nukulaelae. **No Extreme** at Nui and Niulakita.

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

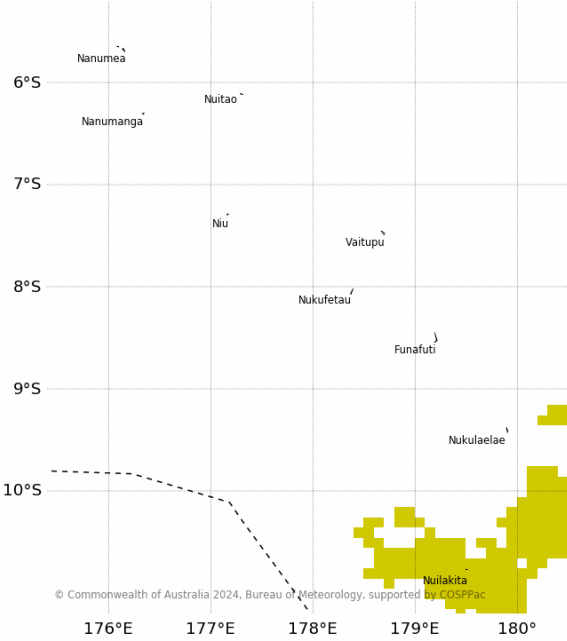
The table below provides information on rainfall received over specific periods in the last 12 months, whether a station is in drought or a very wet period (opposite of drought). If a station is in drought warning, this indicates an increased chances of drought in the coming months, especially when approaching 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 January 2024	3-months November 2023 to January 2024	6-months August to January 2023	12-months February 2023 to January 2024		Tuvalu Islands	March 2024 Chance of extreme	March to May 2024 Chance of extreme
No Extreme	No Extreme	No Extreme	No Extreme		Nanumea	Medium Chance of very wet	Medium Chance of very wet
No Extreme	No Extreme	No Extreme	No Extreme		Nanumaga	Medium Chance of very wet	Medium Chance of very wet
No Extreme	No Extreme	No Extreme	No Extreme		Niutao	No Extreme	Medium Chance of very wet
No Extreme	No Extreme	No Extreme	Very Dry		Nui	No Extreme	Medium Chance of very wet
No Extreme	No Extreme	No Extreme	Very Dry		Vaitupu	No Extreme	No Extreme
No Extreme	No Extreme	No Extreme	Very Dry		Nukufetau	No Extreme	Medium Chance of very wet
No Extreme	No Extreme	No Extreme	No Extreme		Funafuti	Medium Chance of very wet	Medium Chance of very wet
No Extreme	No Extreme	No Extreme	Very Dry		Nukulaelae	No Extreme	Medium Chance of very wet
Very Dry	Seriously Dry	No Extreme	Seriously Dry		Niulakita	No Extreme	No Extreme

ACCESS-S Rainfall Summary for January, 2024.

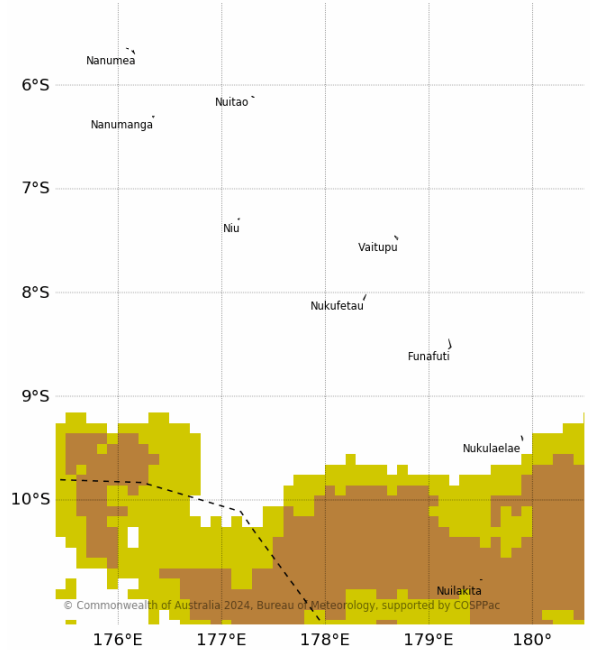
Rainfall status for January 2024

Data source: MSWEP
Base period: 1980-2021
Method: Percentile
Issued: 07/02/2024



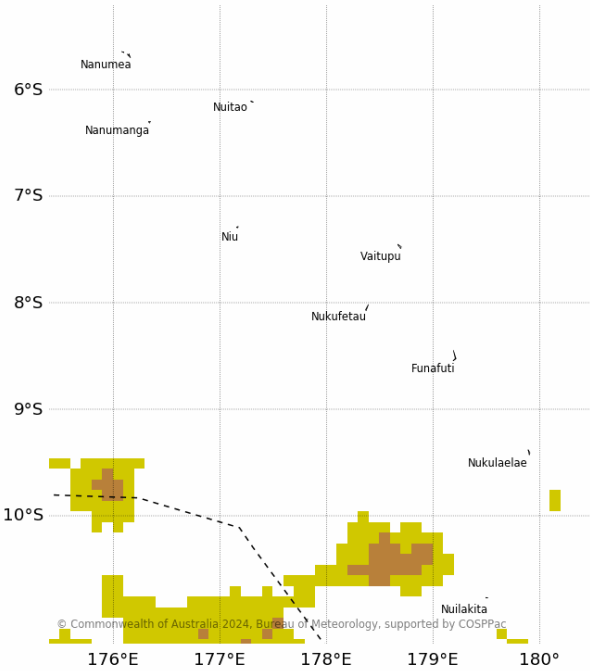
3-month rainfall status to end of January 2024

Data source: MSWEP
Base period: 1980-2021
Method: Percentile
Issued: 07/02/2024



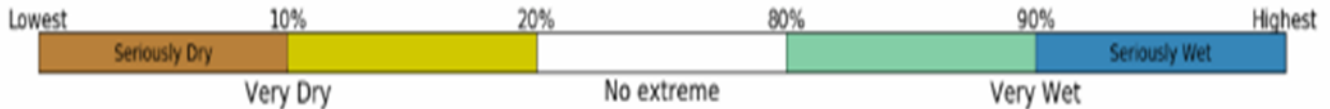
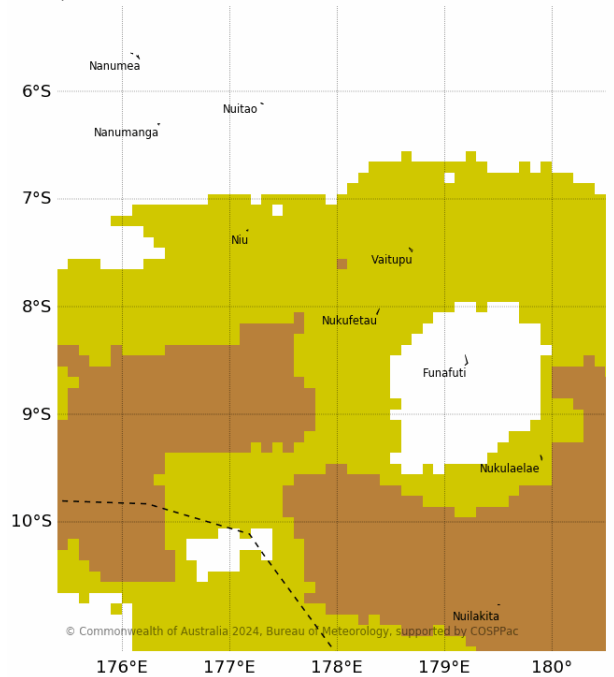
6-month rainfall status to end of January 2024

Data source: MSWEP
Base period: 1980-2021
Method: Percentile
Issued: 07/02/2024



12-month rainfall status to end of January 2024

Data source: MSWEP
Base period: 1980-2021
Method: Percentile
Issued: 07/02/2024



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.

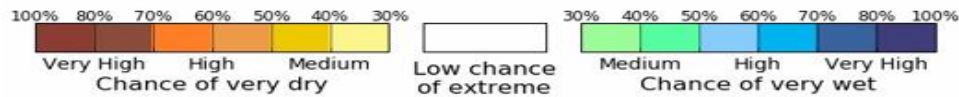
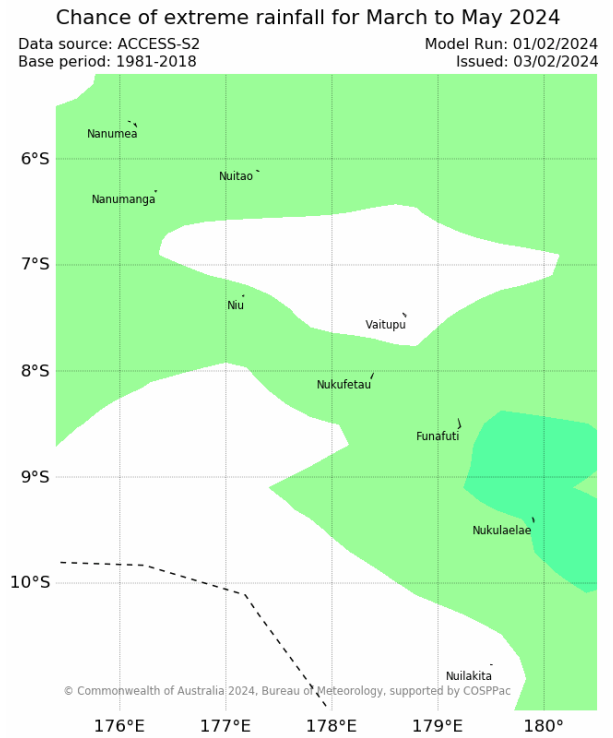
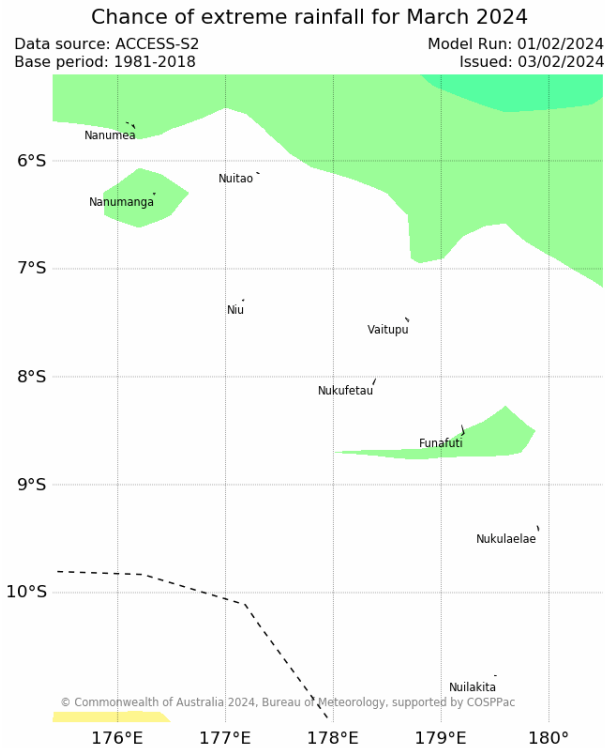
2 – months period is most relevant for bottle gourd,pawpaw, banana, chicken, pigs and community cisterns. The following secondary social-economic and health impacts have been associated with drought at the 2-months period. Community gatherings stop, increased in community disputes over water and limited 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 March, and March to May 2024



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 is 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:

Chief Meteorological Officer, Ministry of Public Works, Infrastructure, Environment, Labour, Meteorology and Disaster, Vaiaku, Funafuti, Tuvalu. Email: tauala.k@gmail.com, tuvalumet@gmail.com, tuvalumet@gov.tv
website: tuvmet.tv, Facebook:<Tuvalu Meteorological Service>