



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

“ENSO Outlook remain La Nina Watch.”

Issued: 26/08/2024

- The El Niño–Southern Oscillation (ENSO) is currently neutral.
- Sea Surface Temperatures in the Central Pacific are ENSO Neutral.
- Three of seven Climate models suggests the possibility of SSTs reaching the La Nina thresholds (below $-0.8\text{ }^{\circ}\text{C}$) by October.
- The ENSO Outlook remains at La Niña Watch. La Niña Watch does not guarantee La Niña development, only that there is about an equal chance of ENSO remaining neutral or La Niña developing during the remainder of 2024.



RAINFALL STATUS:

- ❖ For the month of July 2024, it was **No Extreme** over Tuvalu.
- ❖ Over May to July 2024 (3Months), it was **Very Wet** over Nanumaga, Niutao, Nui, and Nukufetau. **Seriously wet** existed at Nukulaelae and Niulakita and **No Extreme** at Nanumea, Vaitupu and Funafuti.
- ❖ Over the past six months, February to July 2024, Very Wet existed at Nanumea and Nanumaga, while **No Extreme** over Niutao, Nui, Vaitupu, Nukufetau, Funafuti, Nukulaelae and Niulakita.
- ❖ August 2023 to July 2024 (12months), it was **No Extreme** most stretching over Tuvalu.

Rainfall OUTLOOK:

- **Medium Chance of Very Dry** conditions predicted for September 2024 at Nanumea, Nanumaga, Niutao, and Vaitupu. there is a **Medium Chance of Very Wet** expected for Nukulaelae and Niulakita, while Nui, and Funafuti are predicted to be **Low Chance of Extreme conditions**.
- September to November 2024, expected to be **Very High Chance of Very Dry to High Chance of Very** over Nanumea, Nanumaga and Niutao, and Nui. **Medium Chance of Very Dry** stretching over, Vaitupu and Nukufetau and Low Chance of Extreme at Nukulaelae and Niulakita.

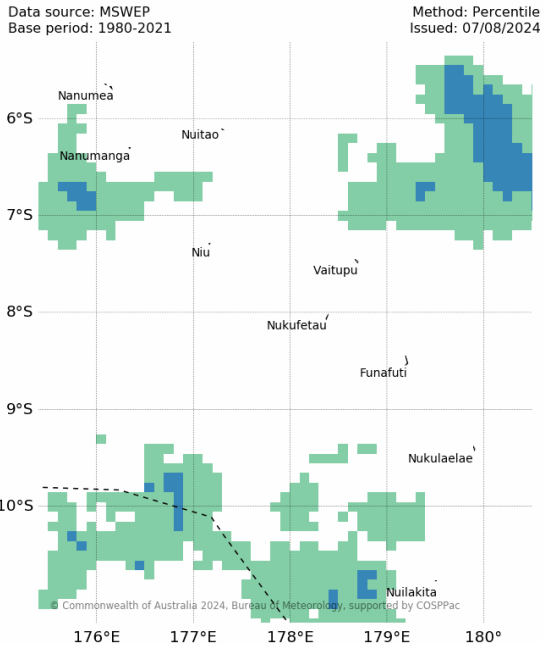
Rainfall observed for the last month, 3-months, 6-months and 12-months

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.

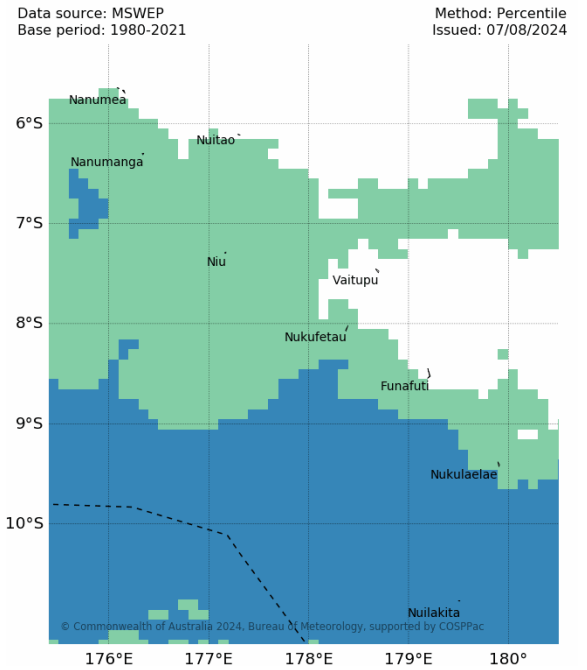
Past Rainfall Status					Very Dry/Wet Rainfall Outlook		
1-month July 2024	3-months May to July 2024	6-months February to July 2024	12-months August 2023 to July 2024		Tuvalu Islands	September 2024 Chance of extreme	September to November 2024 Chance of extreme
No Extreme	No Extreme	Very Wet	No Extreme		Nanumea	Medium Chance of Very Dry	Very High Chance of Very Dry
No Extreme	Very Wet	Very Wet	No Extreme		Nanumaga	Medium Chance of Very Dry	High Chance of Very Dry
No Extreme	Very Wet	Very Wet	No Extreme		Niutao	Medium Chance of Very Dry	High Chance of Very Dry
No Extreme	Very Wet	No Extreme	No Extreme		Nui	Low Chance of Extreme	High Chance of Very Dry
No Extreme	No Extreme	No Extreme	No Extreme		Vaitupu	Medium Chance of Very Dry	Medium Chance of Very Dry
No Extreme	Very Wet	No Extreme	No Extreme		Nukufetau	Low Chance of Extreme	Medium Chance of Very Dry
No Extreme	No Extreme	No Extreme	No Extreme		Funafuti	Low Chance of Extreme	Low Chance of Extreme
No Extreme	Seriously Wet	No Extreme	No Extreme		Nukulaelae	Medium Chance of Very Wet	Low Chance of Extreme
No Extreme	Seriously Wet	No Extreme	No Extreme		Niulakita	Medium Chance of Very Wet	Low Chance of Extreme

ACCESS-S Rainfall Summary for July, 2024.

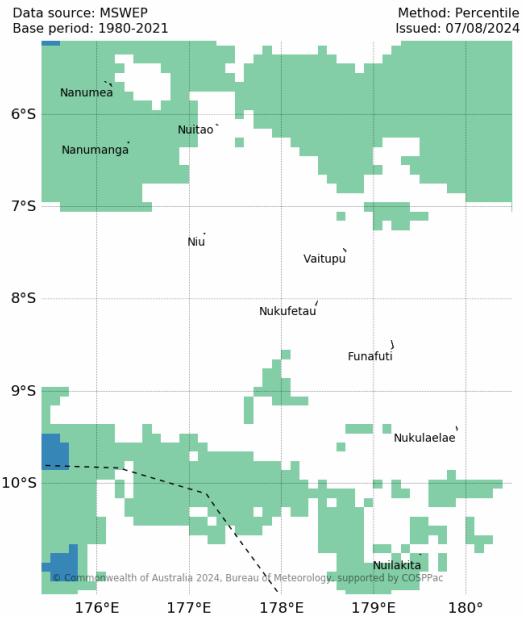
Rainfall status for July 2024



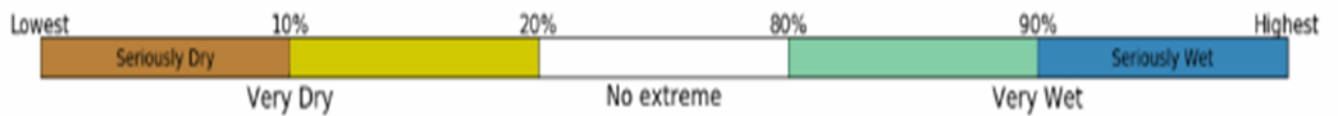
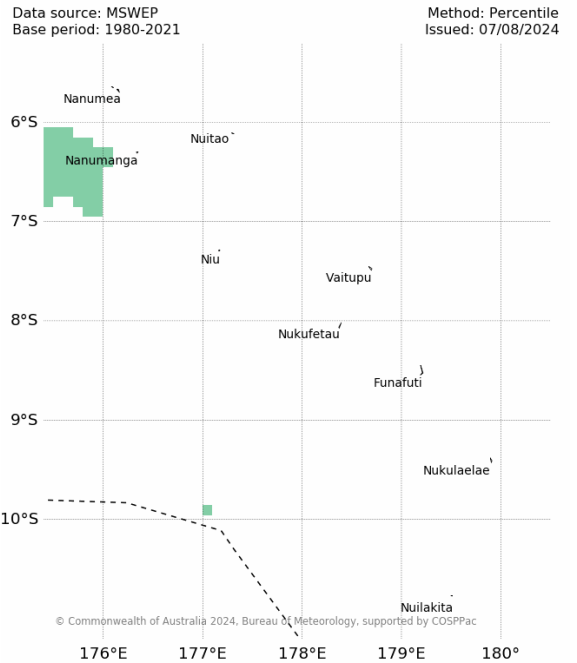
3-month rainfall status to end of July 2024



6-month rainfall status to end of July 2024



12-month rainfall status to end of July 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. 1000gallons) 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.

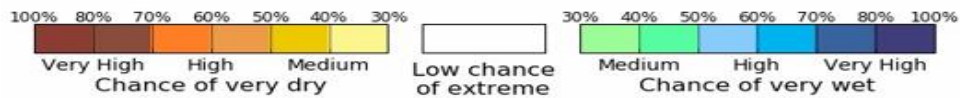
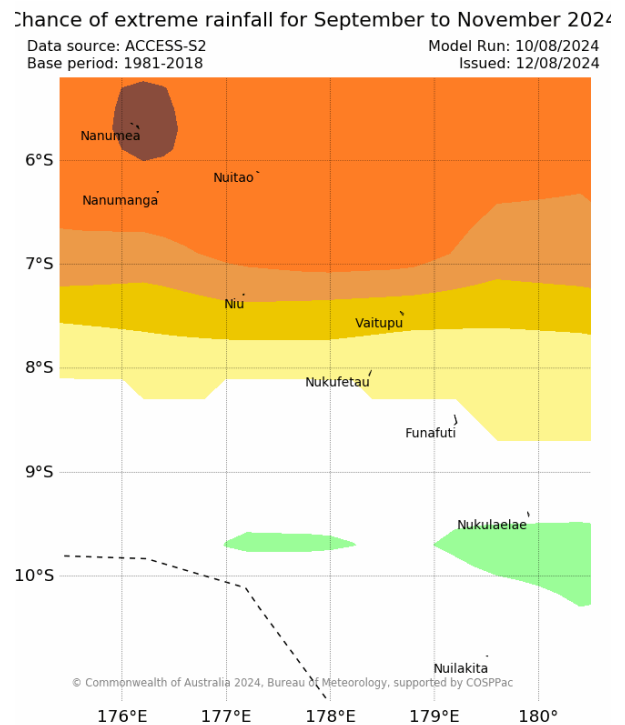
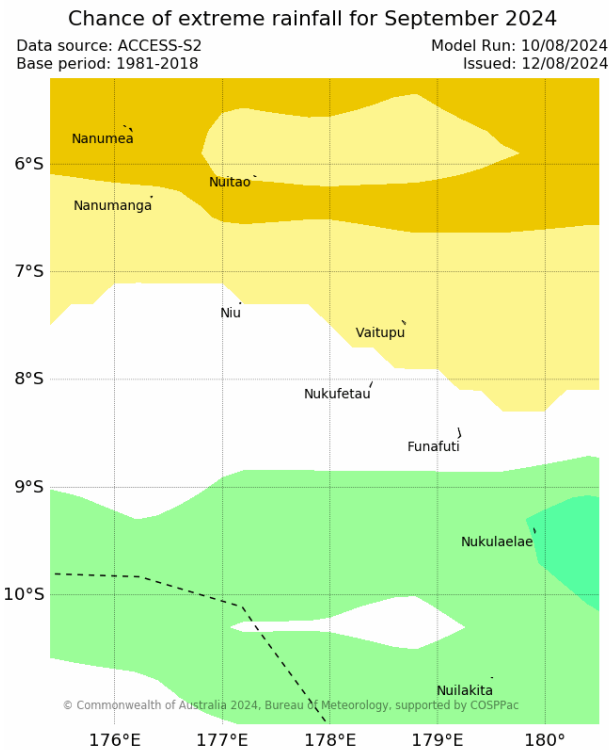
2 – months period is most relevant for bottle gourd,pawpaw, banana, chicken, pigs and community cisterns. The following secondary social-economic and health impacts have been associated with drought at the 2-months period. Community gatherings stop, increased in community disputes over water and limited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

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