



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

“La Nina conditions met but not expected to last long enough for declaration”

Issued: 22/01/2025

- The El Nino-Southern Oscillation ENSO is currently neutral range. But not meeting La Nina thresholds.
- Oceanic as well as rain and cloud patterns in the Pacific have shown La Nina characteristics in December 2024.
- Sea Surface temperature patterns consistent with La Nina developing.
- Bureau’s Model agrees on neutral ENSO till April.
- In the neutral range, Tuvalu expected to be below normal rainfall in the coming months



RAINFALL STATUS:

- ❖ For the month of December 2024, it was *No extreme* over Naumea, Nanumaga, Niutao, Nui, Vaitupu, Nukufetau, and Funafuti. *Seriously dry* most existed over Nukulaelae and Niulakita.
- ❖ For October to December 2024 (3Months), it was *Very dry* at Nanumea, Nanumaga, and Niulakita. *No extreme* most over Nui, Vaitupu, Nukufetau, Funafuti, Nukulaelae and Niulakita.
- ❖ Over the past six months, June to November 2024, most *No Extreme* existed over Tuvalu.
- ❖ December to November 2024 (12months), it was *No Extreme* across the groups of Tuvalu.

Rainfall OUTLOOK:

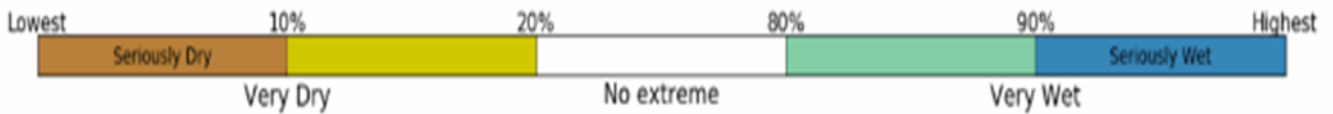
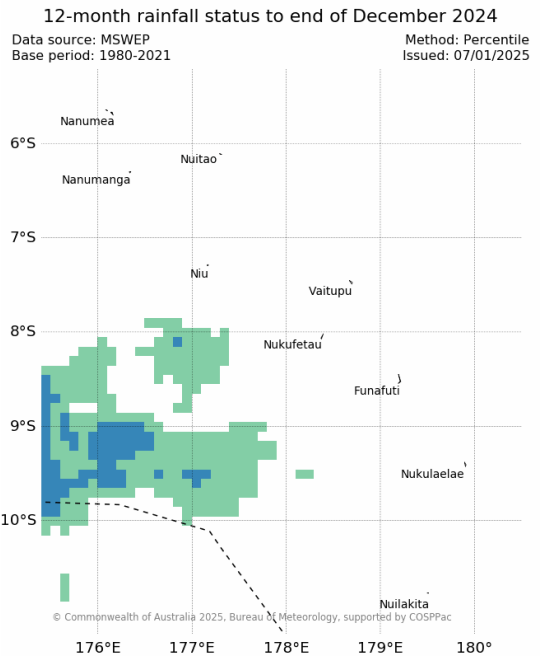
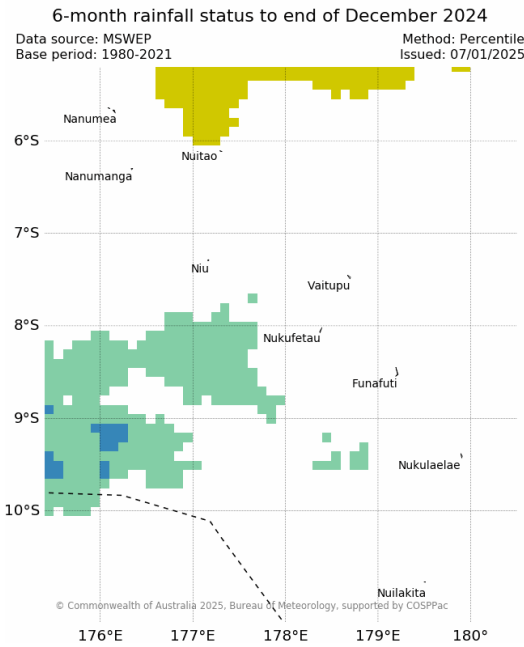
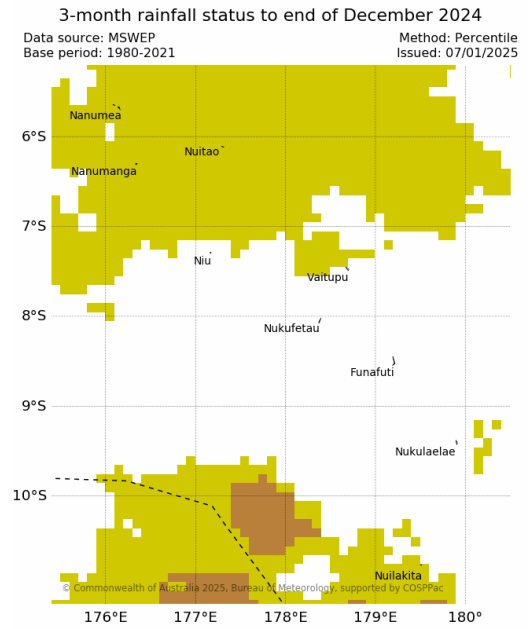
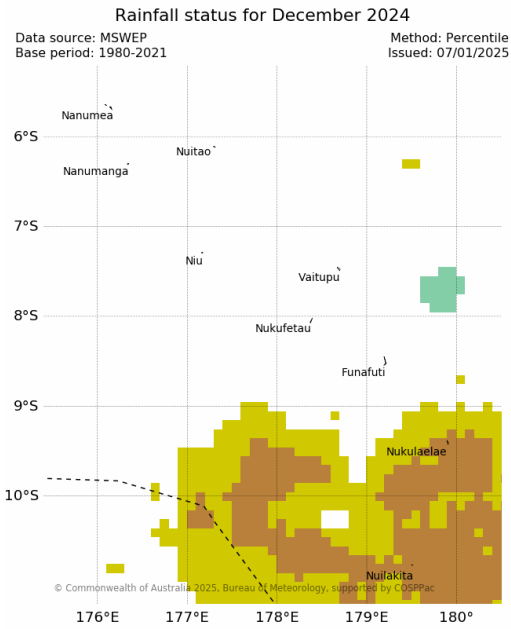
- *Very High Chance of Very Dry* conditions predicted for February 2024 over Nanumea, Nanumaga, and Niutao. *High Chance of Very Dry* expected in Nui, Vaitupu, Nukufetau, and Funafuti while Nukulaelae and Niulakita are predicted to be *Medium Chance of Very Dry*.
- February to April 2025, expected to be *Very High to High Chance of Very Dry conditions* over Naumea, Nanumaga, Niutao, Nui, Vaitupu, Nukufetau, and Funafuti. *Medium Chance of Very Dry* 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 December 2024	3-months October to December 2024	6-months July to December 2024	12-months January 2024 to December 2024		Tuvalu Islands	February 2025 Chance of extreme	February to April 2025 Chance of extreme
No Extreme	Very Dry	No Extreme	No Extreme		Nanumea	Very High Chance of Very Dry	Very High Chance of Very Dry
No Extreme	Very Dry	No Extreme	No Extreme		Nanumaga	Very High Chance of Very Dry	High Chance of Very Dry
No Extreme	Very Dry	No Extreme	No Extreme		Niutao	Very High Chance of Very Dry	Very High Chance of Very Dry
No Extreme	No Extreme	No Extreme	No Extreme		Nui	High Chance of Very Dry	High Chance of Very Dry
No Extreme	No Extreme	No Extreme	No Extreme		Vaitupu	High Chance of Very Dry	High Chance of Very Dry
No Extreme	No Extreme	No Extreme	No Extreme		Nukufetau	High Chance of Very Dry	High Chance of Very Dry
No Extreme	No Extreme	No Extreme	No Extreme		Funafuti	High Chance of Very Dry	High Chance of Very Dry
Seriously Dry	No Extreme	No Extreme	No Extreme		Nukulaelae	Medium Chance of Very Dry	Medium Chance of Very Dry
Seriously Dry	Very Dry	No Extreme	No Extreme		Niulakita	Medium Chance of Very Dry	Medium Chance of Very Dry

ACCESS-S Rainfall Summary for December, 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.

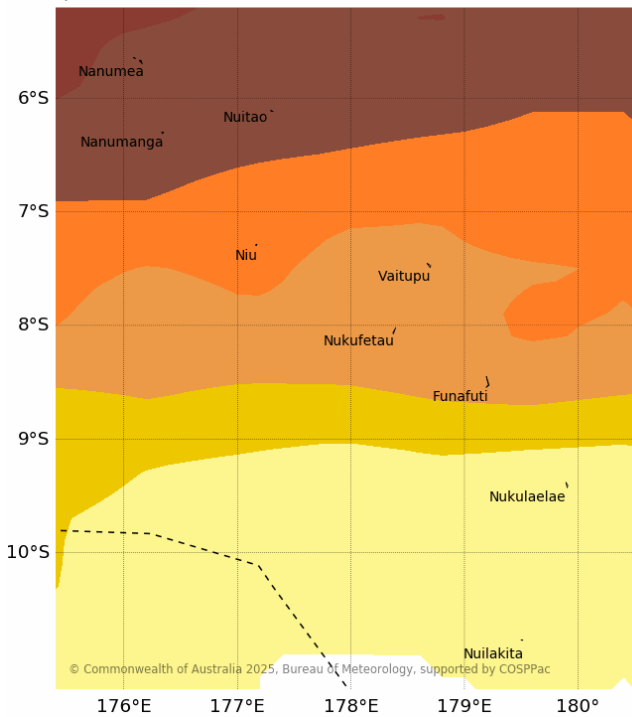
6 – months period is most relevant for large trees (e.g. breadfruits, pulaka, taro). The following secondary social-economic and health impacts have been associated with drought at the 6-months periods. Meteorological balloon flights stop, interislands shipping delays, entry of visitors to Tuvalu restricted.

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

Very Dry/Wet Rainfall Outlooks for February, and February to April 2025

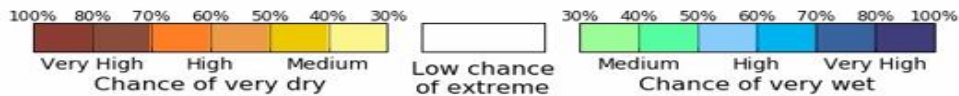
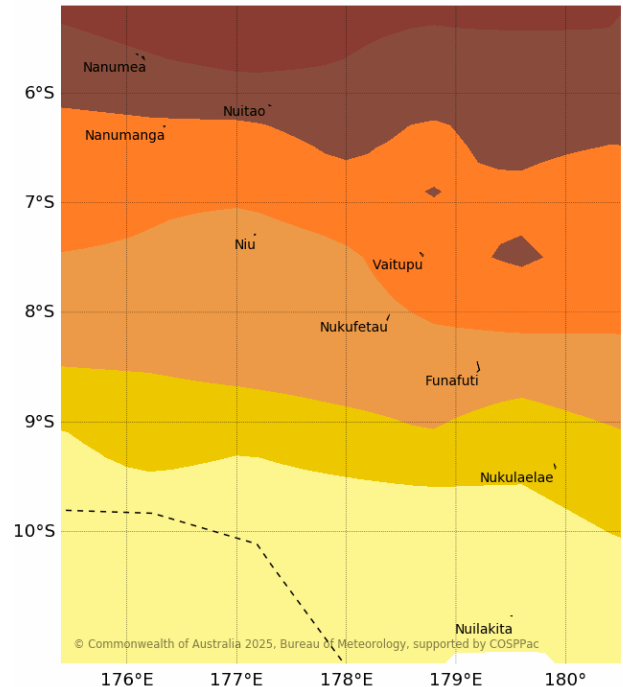
Chance of extreme rainfall for February 2025

Data source: ACCESS-S2
Base period: 1981-2018
Model Run: 11/01/2025
Issued: 13/01/2025



Chance of extreme rainfall for February to April 2025

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Base period: 1981-2018
Model Run: 11/01/2025
Issued: 13/01/2025



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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