



# CLIMATE SUMMARY

TUVALU METEOROLOGICAL SERVICES  
MINISTRY OF PUBLIC WORKS, INFRASTRUCTURE, ENVIRONMENT, LABOUR, METEOROLOGICAL AND DISASTER .  
DECEMBER 2023



## WEATHER PATTERNS

During the month of December, the South Pacific Convergence Zone (SPCZ) had a significant impact on the region. In the first two weeks of the month, a convergence zone associated with a trough of low-pressure affected most of the area. On December 13th, an active rain band formed over Tuvalu, causing rainfall across all stations, except for Funafuti, which experienced heavy rainfall. As a result, Funafuti recorded the highest daily rainfall of 210.0mm and also recorded the highest total rainfall of the month. Going forward, it is expected that the SPCZ will be weak and mainly stretch from Vanuatu to Samoa in the coming month.

TABLE 1: MONTHLY RAINFALL FROM OCTOBER TO DECEMBER 2023

Station (include data period)	Oct-2023	Nov-2023	Dec-2023				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2024)	394.0	210.1	252.4	205.3	364.0	291.4	34/83
Nui (1946-2024)	296.4	257.5	246.1	269.9	418.7	309.6	18/76
Funafuti (1933-2024)	382.0	279.2	339.4	308.6	435.1	343.0	41/91
Niulakita (1953-2024)	337.6	449.2	177.7	236.4	352.9	291.6	11/69



TABLE 2: TOTAL RAINFALL FROM OCTOBER TO DECEMBER, 2023

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Nanumea (1941-2024)	856.5	Above normal	522.6	755.4	622.0	66/81
Nui (1946-2024)	800.0	Normal	701.9	908.1	803.4	36/76
Funafuti (1933-2024)	1000.6	Normal	808.4	1008.4	887.8	57/91
Niulakita (1953-2024)	964.5	Above normal	764.5	948.8	832.2	47/68

## MONTHLY RAINFALL DECEMBER / LAST THREE MONTHS OCTOBER TO DECEMBER, 2023 STATEMENT

The rainfall for December was normal at Nanumea and Funafuti, while below normal in Nui and Niulakita.

For the past three months, rainfall was above normal over Nanumea and Niulakita, while normal rainfall at Nui and Funafuti.

Contact Tuvalu Meteorological Service for further information:

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