



CLIMATE SUMMARY

December 2024



WEATHER PATTERNS

In December, the South Pacific Convergence Zone (SPCZ) had a significant impact on the region. This convergence zone, associated with a trough of low pressure extends from Solomon to Samoa and lies across Tuvalu. As part of the convergence zone, a rain band formed over Tuvalu, resulting in rainfall across all stations except Funafuti, which experienced significantly heavier rainfall compared to Nanumea, Nui, and Niulakita. As a result, Funafuti recorded the highest daily rainfall of 157.4mm and the highest total rainfall of the month. SPCZ is expected to maintain a routine pattern stretched from the Solomon Islands to Tokelau. This indicates a favourable convective cloud to develop over most of Tuvalu in the coming month.

TABLE 1: MONTHLY RAINFALL FROM 2024 OCTOBER TO DECEMBER 2024

Station (include data period)	Oct-2024	Nov-2024	Dec-2024				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2024)	103.8	49.6	121.8	245.9	384.0	331.0	53/83
Nui (1946-2024)	87.0	210.8	206.4	240.1	440.2	319.5	17/79
Funafuti (1933-2024)	285.6	216.7	515.6	309.7	433.5	342.9	55/92
Niulakita (1953-2024)	215.6	389.2	244.7	236.5	350.4	291.1	24/71



TABLE 2: TOTAL RAINFALL FROM OCTOBER TO DECEMBER, 2024

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Total (mm)	Condition				
Nanumea (1941-2024)	275.2	Below normal	525.9	759.0	625.5	16/82
Nui (1946-2024)	504.2	Below normal	701.9	908.1	802.4	11/76
Funafuti (1933-2024)	1017.9	Above normal	806.7	1007.5	893.4	21/92
Niulakita (1953-2024)	849.5	Normal	769.4	944.9	832.7	51/69

MONTHLY RAINFALL / LAST THREE MONTHS OCTOBER TO DECEMBER 2024 STATEMENT

The rainfall for December and Past three months rainfall (October to December) was below normal over Nanumea and Nui. Above normal rainfall was observed in Funafuti, while normal rainfall at Niulakita.

Contact Tuvalu Meteorological Service for further information:

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