



CLIMATE SUMMARY

TUVALU METEOROLOGICAL SERVICES
MINISTRY OF PUBLIC WORKS, INFRASTRUCTURE, DISASTER AND WATER.
February 2024



WEATHER PATTERNS

The South Pacific Convergence Zone (SPCZ) is in position from Solomon Island through Tuvalu to Samoa. Additionally, the Madden-Julian Oscillation (MJO) is also active in the Pacific during February. In the first three weeks of February, a strong wind warning was in force over Tuvalu waters as well as land areas for the central and southern groups. Due to a tropical disturbance (TD08F) that formed further to the east of Niulakita. As time passed, the disturbance grew stronger and eventually developed into a tropical cyclone named Osai, and it was located to the north of Samoa. As a result, active rain bands associated with strong westerly winds caused heavy rainfall and coastal flooding impacted the entire group. Therefore, all stations observed more rainfall and gusty winds but highlighted that Nanumea recorded the highest daily rainfall of 137.8mm and Funafuti recorded the maximum wind gust of 42.2 knots. The SPCZ is expected to stretch from the Coral Sea across Vanuatu to Fiji in the upcoming month.

TABLE 1: MONTHLY RAINFALL FROM DECEMBER TO FEBRUARY 2024

Station (include data period)	Dec-2023	Jan-2024	Feb-2024				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2024)	252.4	376.1	532.6	164.6	328.4	263.4	74/83
Nui (1946-2024)	246.1	210.2	594.4	218.1	351.2	281.2	73/79
Funafuti (1933-2024)	339.4	440.3	337.0	258.4	426.1	332.6	45/92
Niulakita (1953-2024)	177.7	286.3	372.5	252.3	382.0	318.2	45/72



TABLE 2: TOTAL RAINFALL FROM DECEMBER TO FEBRUARY, 2024

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Nanumea (1941-2024)	1161.1	Above normal	704.8	1131.0	969.6	58/82
Nui (1946-2024)	1050.7	Normal	832.5	1196.9	1065.5	38/76
Funafuti (1933-2024)	1116.7	Normal	993.3	1258.7	1111.0	44/91
Niulakita (1953-2024)	836.5	Below normal	886.5	1174.2	1012.0	20/68

MONTHLY RAINFALL JANUARY/ LAST THREE MONTHS NOVEMBER TO JANUARY 2024 STATEMENT

The rainfall for February was above normal over Nanumea and Nui, while normal rainfall at Funafuti and Niulakita. Nui recorded its seventh wettest February record.

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

Contact Tuvalu Meteorological Service for further information:

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