

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 149

Country: Tuvalu

TABLE 1: Monthly Rainfall

Station (include data period)	Nov-2019	Dec-2019	Jan-2020				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2020)	43.1	431.0	432.7	251.6	399.3	334.5	59 of 80
Nui (1946-2020)	133.5	521.8	394.0	255.6	453.2	356.9	43 of 75
Funafuti (1933-2020)	330.1	426.1	553.3	310.6	470.7	408.9	73 of 88
Niulakita (1953-2020)	313.6	428.0	546.6	299.0	437.5	364.8	56 of 67

TABLE 2: Three-month Rainfall for November 2019 to January 2020

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 August-September 2019				Verification: Consistent, Near- consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Nanumea (1941-2020)	906.8	Normal	631.2	997.3	892.2	40 of 78	25	40	35	28	Consistent
Nui (1946-2020)	1049.3	Normal	831.3	1104.0	961.6	43 of 75	29	35	36	5	Near-consistent
Funafuti (1933-2020)	1309.5	Above normal	931.2	1139.0	1026.9	72 of 88	32	35	33	0	Near-consistent
Niulakita (1953-2020)	1288.2	Above normal	829.5	1135.6	1020.0	56 of 67	36	37	27	12	Near-consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for March to May 2020**Predictor and Period used: NINO3.4 for December 2019 to January 2020**

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Nanumea (1941-2020)	33	770.3	67		26	68
Nui (1946-2020)	35	705.0	65		17	75
Funafuti (1933-2020)	40	792.0	60		8	57
Niulakita (1953-2020)	50	832.3	50		-2	31

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)	LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Nanumea (1941-2020)	15	550.2	37	880.6	48	22	57
Nui (1946-2020)	24	597.0	34	846.3	42	9	54
Funafuti (1933-2020)	22	677.9	36	901.7	42	8	45
Niulakita (1953-2020)	24	701.5	34	913.1	42	4	36

TABLE 4: Seasonal Climate Outlooks using POAMA2 for March to May 2020

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Nanumea	15	756.0	39	997.0	46
Nui	28	707.0	33	940.0	39
Funafuti	39	788.0	15	1034.0	46
Niulakita	33	724.0	18	940.0	49

Summary Statements

Rainfall for January 2020:

Three stations (Nanumea, Funafuti and Niulakita) collected above normal rainfall during January, while Nui collected normal rainfall.

Accumulated rainfall for November 2019 to January 2020, including outlook verification:

Nanumea & Nui in Northern Tuvalu recorded normal rainfall, while the other two stations, Funafuti & Niulakita in Southern Tuvalu, collected above normal rainfall.

The forecasts issued in October were consistent at Nanumea, and near-consistent at Nui, Funafuti and Niulakita.

Outlooks for March to May 2020:

1. SCOPIC:

The outlook for the season at all stations shows above normal rainfall as the most likely outcome, with normal rainfall as the next most likely. Below normal rainfall is the least likely. The skills of the model were high at Nanumea and moderate at other stations.

2. POAMA:

The outlook at Nanumea shows above normal rainfall as the most likely outcome, with normal rainfall the next most likely. Below normal is the least likely.

The outlook for the season at Funafuti and Niulakita shows above normal rainfall as the most likely outcome, with below normal rainfall as the next most likely. Normal rainfall is the least likely.

The outlook for Nui show offers little guidance as the chances of above normal, normal and below normal are similar.

NB: The X LEPS % score has been categorised as follows:

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

Moderate $5 \leq X < 10$

Good: $10 \leq X < 15$

High: $15 \leq X < 25$

Very High: $25 \leq X < 35$ Exceptional: $X \geq 35$

Table: 5 Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders

Product	Date: January 2020	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin					
EAR Watch					
Monthly Climate Briefing					
Ocean Bulletin					
Total					