

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 146

Country: Tuvalu

TABLE 1: Monthly Rainfall

Station (include data period)	Aug-2019	Sep-2019	Oct-2019				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2019)	253.7	144.6	183.7	95.1	188.2	140.4	51/78
Nui (1946-2019)	410.9	273.9	146.5	144.0	221.0	182.9	28/74
Funafuti (1933-2019)	327.3	409.3	142.7	203.3	292.9	258.2	10/87
Niulakita (1953-2019)	444.3	221.4	58.3	211.9	312.4	265.6	3/67

TABLE 2: Three-month Rainfall for August to October 2019

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities* based on NINO3.4 May-June 2019				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Nanumea (1941-2019)	582.0	Normal	334.1	614.8	503.0	52/78	6	23	71	35	Near-consistent
Nui (1946-2019)	831.3	Above normal	485.5	695.9	567.4	61/74	5	41	54	25	Consistent
Funafuti (1933-2019)	879.3	Above normal	604.5	773.7	673.0	67/86	13	22	65	18	Consistent
Niulakita (1953-2019)	724.0	Normal	579.3	831.3	683.6	38/67	27	34	39	-1	Near-consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for December 2019 to February 2020**Predictor and Period used: NINO3.4 for September to October 2019**

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Nanumea (1941-2019)	32	972.5	68		31	68
Nui (1946-2019)	43	1060.8	57		6	62
Funafuti (1933-2019)	48	1135.4	52		0	52
Niulakita (1953-2019)	57	1017.8	43		7	61

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 (1941-2019)	17	766.1	38	1129.8	45	35	59
Nui (1946-2019)	26	842.7	37	1175.0	37	24	26
Funafuti (1933-2019)	30	1000.2	36	1253.1	34	-1	42
Niulakita (1953-2019)	38	886.5	36	1174.2	26	6	42

TABLE 4: Seasonal Climate Outlooks using POAMA2 for December 2019 to February 2020

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Nanumea	61	838.0	21	1130.0	18
Nui	73	695.0	12	1262.0	15
Funafuti	64	930.0	12	1151.0	24
Niulakita	49	789.0	9	1099.0	42

Summary Statements

Rainfall for October 2019:

Normal rainfall collected at Nanumea and Nui station in the north and central group. Below normal rainfall collected at Funafuti and Niulakita station in the southern group. Niulakita recorded the 3 driest October on record.

Accumulated rainfall for August to October 2019, including outlook verification:

Normal rainfall was collected at Nanumea and Niulakita with near consistent with verification

Above normal rainfall at Nui and Funafuti with consistent in verification

Outlooks for December 2019 to February 2020:

1. SCOPIC:

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

At Niulakita the outlook for the season shows a near equal likelihood of below normal and normal rainfall, with above normal rainfall as the least most likely. The outlook for the season at Nui shows equal likelihood of normal and above normal rainfall as the most likely with below normal rainfall as the least likely.

The outlook for the season at Funafuti offers little guidance's as the the chances of above normal, normal and below normal rainfall are similar.

Confidence verification of the model, exceptional for Nanumea, high at Nui, very low at Funafuti and moderate skills at Niulakita.

2. POAMA:

The outlook for the season for all stations favours below normal rainfall.

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: October 2019	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin		All civil servants and NGO's			
EAR Watch					
Monthly Climate Briefing		All civil servants and NGO's			
Ocean Bulletin		All civil servants and NGO's			
Total					