

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 144

Country: Tuvalu

TABLE 1: Monthly Rainfall

Station (include data period)	Jun-2019	Jul-2019	Aug-2019				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2019)	176.4	71.5	253.7	154.1	222.7	189.0	59/78
Nui (1946-2019)	331.9	161.5	410.9	137.0	263.1	188.9	69/74
Funafuti (1933-2019)	225.3	93.0	327.3	183.8	281.9	214.9	67/87
Niulakita (1953-2019)	144.4	192.5	444.3	146.2	243.0	196.6	62/67

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

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 March-April 2019				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Nanumea (1941-2019)	501.6	Normal	440.7	698.0	593.0	33/78	6	29	65	21	Near-consistent
Nui (1946-2019)	904.3	Above normal	506.3	726.0	646.0	66/74	9	26	65	17	Consistent
Funafuti (1933-2019)	645.6	Normal	584.3	835.1	719.4	36/87	6	38	56	19	Near-consistent
Niulakita (1953-2019)	781.2	Above normal	537.9	738.0	608.6	47/67	19	38	43	3	Consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for October to December 2019
Predictor and Period used: NINO3.4 for July to August 2019

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Nanumea (1941-2019)	26	665.9	74		37	75
Nui (1946-2019)	40	840.8	60		8	61
Funafuti (1933-2019)	46	895.0	54		0	54
Niulakita (1953-2019)	53	829.6	47		-1	58

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)	14	541.2	34	755.4	52	34	59
Nui (1946-2019)	22	711.3	39	921.7	39	7	36
Funafuti (1933-2019)	30	811.0	35	1008.2	35	-1	29
Niulakita (1953-2019)	34	731.7	37	960.0	29	0	42

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

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Nanumea	88	627.0	7	836.0	5
Nui	88	528.0	7	869.0	5
Funafuti	70	802.0	18	949.0	12
Niulakita	27	708.0	24	902.0	49

Summary Statements

Rainfall for August 2019:

- All stations collected above normal rainfall, with ranking falls above the 75th percentile of dataset for each station, during August.

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

- Above normal rainfall for Nui and Niulakita, with a consistent verification for the season (June – August)
- Normal rainfall for Nanumea and Funafuti, with a near-consistent for verification for this period (June – August)

Outlooks for October to December 2019:

1. SCOPIC:

The outlook for Nanumea for season OND favours above normal rainfall, with normal the next most likely.

For Nui, the outlook shows a near equal likelihood of normal and above normal rainfall; below normal is the least likely.

As for Niulakita and Funafuti, the outlook offers little guidance as the chances of below normal, normal and above normal rainfall are similar.

Model verification for the season range from very high to very low, where very high at Nanumea, moderate at Nui and very low at Funafuti and Niulakita.

2. POAMA:

The outlook favours below normal rainfall for Nanumea, Nui and Funafuti, with normal the next mostly likely outcome.

At Niulakita, the outlook shows above normal rainfall as the most likely outcome, with near equal likelihood of below normal to 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: August 2019	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin		Governments civil servants, including departments, Tuvalu Red Cross and Media	All civil servants and NGOs		
EAR Watch					
Monthly Climate Briefing		Governments civil servants, including departments, Tuvalu Red Cross and Media	All civil servants and NGOs		
Ocean Bulletin		Governments civil servants, including departments, Tuvalu Red Cross and Media	All civil servants and NGOs		
Total					