Pacific Islands - Online Climate Outlook Forum (OCOF) No. 143

Country: Tuvalu

TABLE 1: Monthly Rainfall

	May-	Jun-2019			Jul-2019		
Station (include data period)	2019		Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				Naiik
Nanumea (1941-2019)	408.4	176.4	71.5	125.2	224.3	169.7	9 of 78
Nui (1946-2019)	218.2	331.9	161.5	163.0	231.1	197.9	25 of 74
Funafuti (1933-2019)	391.2	225.3	93.0	191.3	275.7	221.6	5 of 87
Niulakita (1953-2019)	634.4	141.8	192.5	165.7	257.0	212.5	32 of 67

TABLE 2: Three-month Rainfall for May to July 2019

Station	Three-n	nonth Total	33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 February-March 2019				Verification: Consistent, Near- consistent,
		Rai	nfall (mm)			B-N N A-N			A-N	LEPS	Inconsistent?
Nanumea (1941-2019)	656.3	Normal	476.7	707.9	607.2	48 of 78	8	35	57	21	Near- consistent
Nui (1946-2019)	711.6	Above normal	504.7	675.9	576.0	52 of 74	6	23	71	30	Consistent
Funafuti (1933-2019)	709.5	Normal	615.2	781.9	699.0	46 of 87	5	24	71	30	Near- consistent
Niulakita (1953-2019)	968.7	Above normal	543.3	757.3	631.2	59 of 67	25	30	45	2	Consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for September to November 2019 Predictor and Period used: NINO3.4 for June to July 2019

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)	LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Nanumea (1941-2019)	14	472.4	86	35	75
Nui (1946-2019)	21	620.0	79	26	70
Funafuti (1933-2019)	30	737.2	70	12	65
Niulakita (1953-2019)	51	720.0	49	2	41

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)	5	334.4	30	577.7	65	34	57
Nui (1946-2019)	13	492.0	32	738.3	55	19	55
Funafuti (1933-2019)	16	626.1	35	834.9	49	12	51
Niulakita (1953-2019)	33	608.2	35	842.7	32	-2	20

TABLE 4: Seasonal Climate Outlooks using POAMA2 for September to November 2019

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Nanumea	49	460.0	18	664.0	33
Nui	40	497.0	30	726.0	30
Funafuti	45	632.0	10	810.0	45
Niulakita	27	595.0	12	811.0	61

Summary Statements

Rainfall for July 2019:

Nanumea, Nui and Funafuti collected below normal rainfall, while Niulakita's total was in the normal range. Funafuti recorded its fifth driest July on record.

Accumulated rainfall for May to July 2019, including outlook verification:

Nanumea and Funafuti collected normal rainfall with near-consistent verification, while Nui and Niulakita collected above normal rainfall with consistent verification.

Outlooks for September to November (SON) 2019:

1. SCOPIC:

The outlook for the season SON for Nanumea and Nui shows above normal rainfall is favoured, with normal the next most likely.

For Funafuti, the outlook shows above normal as the most likely outcome, with normal as the next most likely. Below normal is the least likely.

For Niulakita, the outlook shows little guidance as the chances of below normal, normal and above normal are similar.

Model verification for the season at Nanumea, Nui and Funafuti range from good to very high, while at Niulakita it's very low.

2. POAMA:

The outlook for Niulakita favours above normal rainfall, with below normal the next most likely; normal rainfall is the least likely.

For Nanumea and Nui, the outlook shows below normal is the most likely outcome, with above normal the next most likely. Normal rainfall is the least likely.

At Funafuti, the outlook is mixed as the chances of below normal and above normal are equal. Normal rainfall is the least likely outcome.

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

 $\label{eq:controller} \mbox{Very Low: } \mbox{$X < 0.0$} \qquad \mbox{Low: } \mbox{$0 \le X < 5$} \qquad \mbox{Moderate } \mbox{$5 \le X < 10$} \qquad \mbox{Good: } \mbox{$10 \le X < 15$} \qquad \mbox{High: } \mbox{$15 \le X < 25$} \qquad \mbox{$25 \le X < 15$} \qquad \mbox{$25 \le X < 15$}$

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

Product	Date: July 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		Governments civil servants, including all departments, Tuvalu Red Cross and Media	All civil servants And NGOs		
Monthly Climate Briefing		Governments civil servants, including all departments, Tuvalu Red Cross and Media	All civil servants And NGOs		
Ocean Bulletin		Governments civil servants, including all departments, Tuvalu Red Cross and Media	All civil servants And NGOs		
		Total			