Pacific Islands - Online Climate Outlook Forum (OCOF) No. 150

Country: Tuvalu

TABLE 1: Monthly Rainfall

Station (include data period)	Dec-2019	Jan-2020	Feb-2020				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2020)	431.0	432.7	788.3	164.6	328.4	263.0	**80/80**
Nui (1946-2020)	523.4	394.0	565.0	223.0	352.8	281.2	**68/74**
Funafuti (1933-2020)	426.1	553.3	644.5	257.9	426.0	330.0	**81/87**
Niulakita (1953-2020)	428.0	546.6	662.7	265.7	383.5	325.1	**62/65**

TABLE 2: Three-month Rainfall for December 2019 to February 2020

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 September-October 2019				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Nanumea (1941-2020)	1652.0	Above normal	766.1	1129.8	972.5	**76/78**	17	38	45	35	Consistent
Nui (1946-2020)	1482.4	Above normal	842.7	1175.0	1060.8	**68/74**	26	37	37	24	Near-consistent
Funafuti (1933-2020)	1623.9	Above normal	1000.2	1253.1	1135.4	**81/87**	30	36	34	-1	Near-consistent
Niulakita (1953-2020)	1637.3	Above normal	886.5	1174.2	1017.8	**62/65**	38	36	26	6	Inconsistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for April to June 2020
Predictor and Period used: NINO3.4 for January to February 2020

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Nanumea (1941-2020)	31	624.1	69		27	71
Nui (1946-2020)	35	583.6	65		21	71
Funafuti (1933-2020)	34	707.7	66		20	74
Niulakita (1953-2020)	45	653.0	55		3	57

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)	22	524.3	30	769.1	48	23	59
Nui (1946-2020)	28	497.9	31	739.6	41	6	53
Funafuti (1933-2020)	15	628.2	38	811.5	47	26	59
Niulakita (1953-2020)	25	573.6	35	757.0	40	7	40

TABLE 4: Seasonal Climate Outlooks using POAMA2 for April to June 2020

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Nanumea	42	626.0	30	891.0	28
Nui	46	559.0	30	809.0	24
Funafuti	64	638.0	9	829.0	27
Niulakita	55	565.0	24	648.0	21

Summary Statements

Rainfall for February 2020:

Above normal rainfall was collected at all stations in Tuvalu. Nanumea recorded it wettest February on record while other stations also recorded rainfall above the ninetieth percentile.

Accumulated rainfall for December 2019 to February 2020, including outlook verification:

The past three months were very wet across Tuvalu: the December to February period was the third wettest on record at Nanumea, the fourth wettest at Niulakita and the seventh wettest at both Nui and Funafuti. The outlook issued in November verified as Consistent at Nanumea, Near-consistent at Nui and Funafuti, and Inconsistent at Niulakita.

Outlooks for April to June 2020:

1. SCOPIC:
The outlook for the season for all station 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 is high at Nanumea, moderate at Nui and Niulakita, and very high at Funafuti.

2. POAMA:
The POAMA model gives a contrary result: the outlook for Funafuti and Niulakita favours below normal rainfall, and at Nanumea and Niu it shows below normal rainfall as the most likely outcome, with normal rainfall as the next most likely. Above normal rainfall is the least likely outcome.

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

Very Low: X < 0.0   Low: 0 ≤ X < 5   Moderate 5 ≤ X < 10   Good: 10 ≤ X < 15   High: 15≤ X < 25

Very High: 25 ≤X < 35 Exceptional: X ≥ 35

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

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