Pacific Islands - Online Climate Outlook Forum (OCOF) No. 155

Country: Tuvalu

TABLE 1: Monthly Rainfall

Station (include data period)	May-2020	Jun-2020	Jul-2020					
	·		Total (mm)	33%tile	67%tile	Median	Rank	
	Total (mm)	Total (mm)	Rainfall (mm)					
Nanumea (1941-2020)	205.7	113.1	156.1	137.1	214.9	184.7	38/79	
Nui (1946-2020)	107.0	191.0	421.1	137.0	263.9	190.8	70/75	
Funafuti (1933-2020)	260.1	171.7	277.8	189.9	292.7	221.2	60/88	
Niulakita (1953-2020)	133.4	407.9	367.4	146.8	256.5	199.3	62/68	

TABLE 2: Three-month Rainfall for May to July 2020

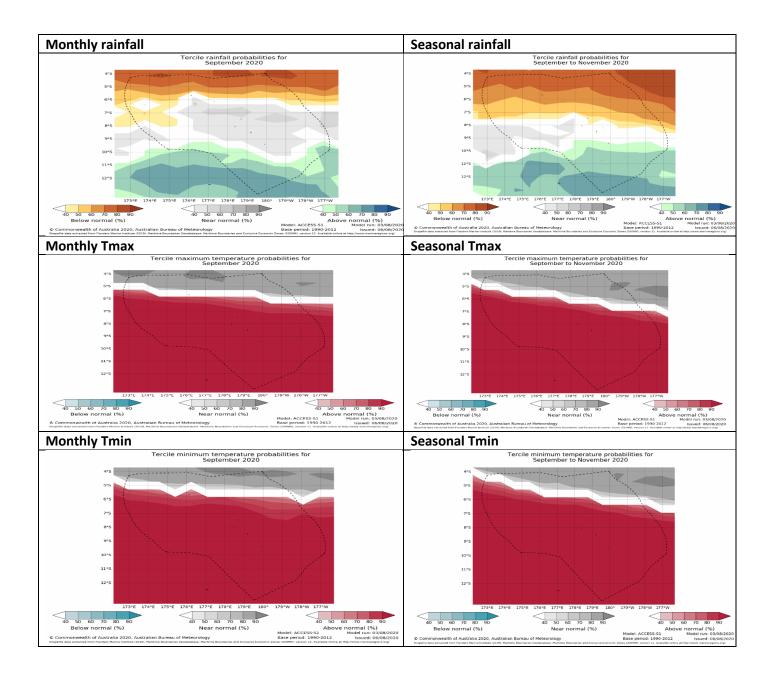
Three-month Total Station		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 February-March 2020				Verification: Consistent, Near- consistent,	
	Rainfall (mm)						B-N	N	A-N	LEPS	Inconsistent?
Nanumea (1941-2020)	474.9	Normal	444.2	713.5	570.8	27/ 79	15	38	47	20	Near-consistent
Nui (1946-2020)	719.1	Above normal	519.4	706.1	578.6	53/75	13	36	51	32	Consistent
Funafuti (1933-2020)	709.6 Normal 622.0 751.1 696.6			47/88	14	36	50	29	Near-consistent		
Niulakita (1953-2020)	908.4	Above normal	546.0	775.9	645.2	58/68	29	31	40	3	Consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for September to November 2020 Predictor and Period used: NINO3.4 for June to July 2020

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)	LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Nanumea (1941-2020)	55	470.7	45	30	74
Nui (1946-2020)	54	597.5	46	22	70
Funafuti (1933-2020)	53	739.2	47	12	67
Niulakita (1953-2020)	50	708.0	50	-2	30

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)	33	325.0	42	634.3	25	30	56
Nui (1946-2020)	33	486.3	38	726.0	29	17	51
Funafuti (1933-2020)	33	636.2	36	843.2	31	13	51
Niulakita (1953-2020)	34	612.1	33	833.8	33	-2	41

Monthly and Seasonal Climate Outlooks using ACCESS-S for September to November 2020



Summary Statements

Rainfall for July 2020:

Nanumea and Funafuti recorded normal rainfall, and above normal rainfall fell at Nui and Niulakita. Niu recorded its sixth wettest and and Niulakita its seventh wettest July on record.

Accumulated rainfall for May to July 2020, including outlook verification:

Nanumea and Funafuti recorded normal rainfall, with the forecast issued in April being verified as near-consistent.

Nui and Niulakita collected above normal rainfall, with consistent outlook verification.

Outlooks for September to November 2020:

1. SCOPIC:

The outlook for the season for Nanumea shows normal rainfall as the most likely outcome, with below normal rainfall as the next most likely. Above normal is the least likely.

The outlook for the season for other stations shows little guidance as the chances of below normal, normal and above normal rainfall are similar.

Confidence in the outlook for Nanumea is very high, high for Nui, good for Funafuti and very low for Niulakita.

2. ACCESS-S:

Monthly rainfall for September:

The outlook chances vary strongly across Tuvalu from a high chance of above normal in the south, to a high chance of below normal in the north, with a zone of normal or little guidance through the centre of the country. At Nui, Funafuti and Niulakita, normal is the most likely outcome, but at Nanumea the outlook offers little guidance as the chances of below normal, normal or above normal rainfall are similar.

Monthly maximum temperature for September

The outlook favours above normal nearly the whole country, with the far north an exception where near-normal temperatures are favoured. Nanumea is in a narrow zone between the two where the outlook offers little guidance. Above normal is favoured for Nui, Funafuti and Niulakita.

Monthly minimum temperature for September:

The outlook favours above normal nearly the whole country, with the far north an exception where near-normal temperatures are favoured. The outlook favours above normal minimum temperatures for all stations.

Seasonal rainfall:

The outlook chances vary strongly across Tuvalu from a high chance of above normal in the south, to a high chance of below normal in the north, with a zone of normal or little guidance through the centre of the country. Below normal rainfall is the favoured or most likely outcome at Nanumea and Nui, above normal is favoured at Niulakita, but for Funafuti the outlook offers little guidance as the chances of below normal, near normal or above normal rainfall are similar.

Seasonal maximum and minimum temperature:

The outlook favours above normal nearly the whole country, with the far north an exception where near-normal temperatures are favoured. Nanumea is in a narrow zone between the two where the outlook offers little guidance; above normal is favoured for the other sites.

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

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

Very High: $25 \le X < 35$ Exceptional: $X \ge 35$

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

Product	Date: July 2020	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin		Met staffs Disaster Members All civil servants and kaupule members	6 9	5	1 4
EAR Watch		All civil servants and kaupule members			
Monthly Climate Briefing		Met Staffs Disaster members All civil servants kaupule members	6 9	5 5	1 4
Ocean Bulletin		Met staff Total	30	20	10