

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 157

Country: Tuvalu

TABLE 1: Monthly Rainfall

Station (include data period)	Jul-2020	Aug-2020	Sep-2020				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2020)	156.1	199.7	119.7	88.8	171.7	126.1	35/79
Nui (1946-2020)	421.1	268.0	119.9	127.3	199.4	179.6	23/75
Funafuti (1933-2020)	277.8	347.6	217.9	164.1	248.2	203.1	47/88
Niulakita (1953-2020)	367.4	286.0	328.2	177.1	230.7	192.0	62/68

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

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 April-May 2020				Verification: Consistent, Near- consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Nanumea (1941-2020)	475.5	Normal	398.1	623.0	479.4	36/79	20	37	43	19	Near-consistent
Nui (1946-2020)	809.0	Above normal	532.6	688.7	610.5	59/75	17	41	42	20	Consistent
Funafuti (1933-2020)	843.3	Above normal	608.0	780.7	702.1	62/88	22	36	42	20	Consistent
Niulakita (1953-2020)	981.6	Above normal	514.7	712.9	617.6	64/68	29	36	35	1	Near-consistent

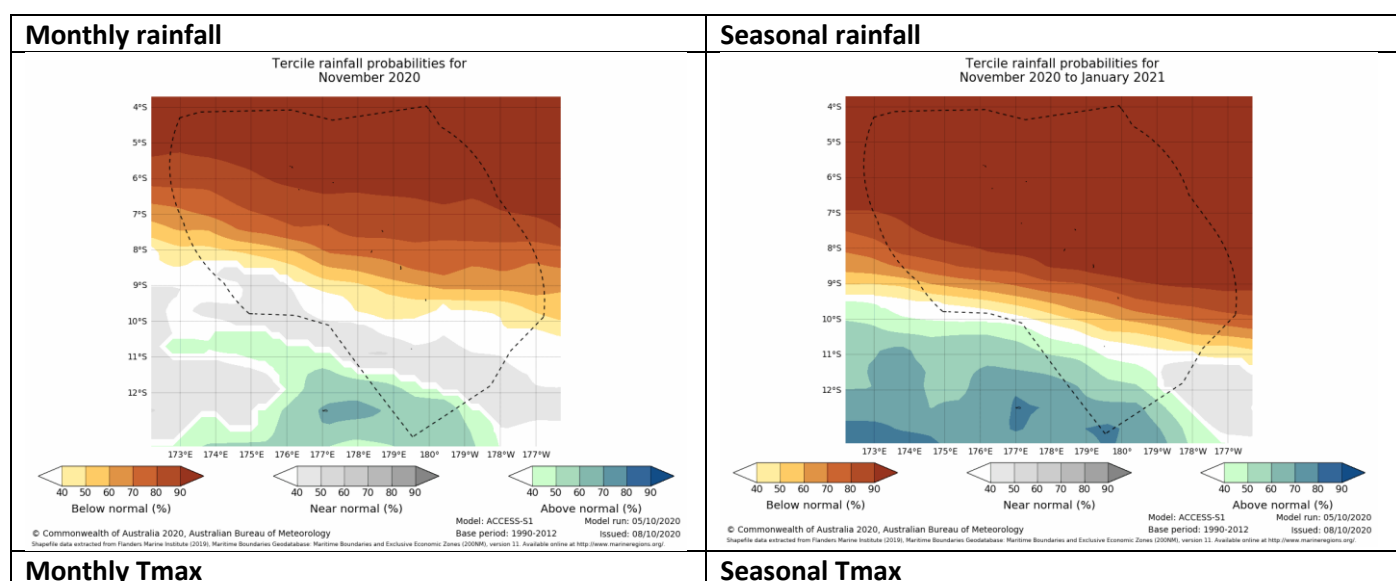
TABLE 3: Seasonal Climate Outlooks using SCOPIC for November 2020 to January 2021
Predictor and Period used: NINO3.4 for August to September 2020

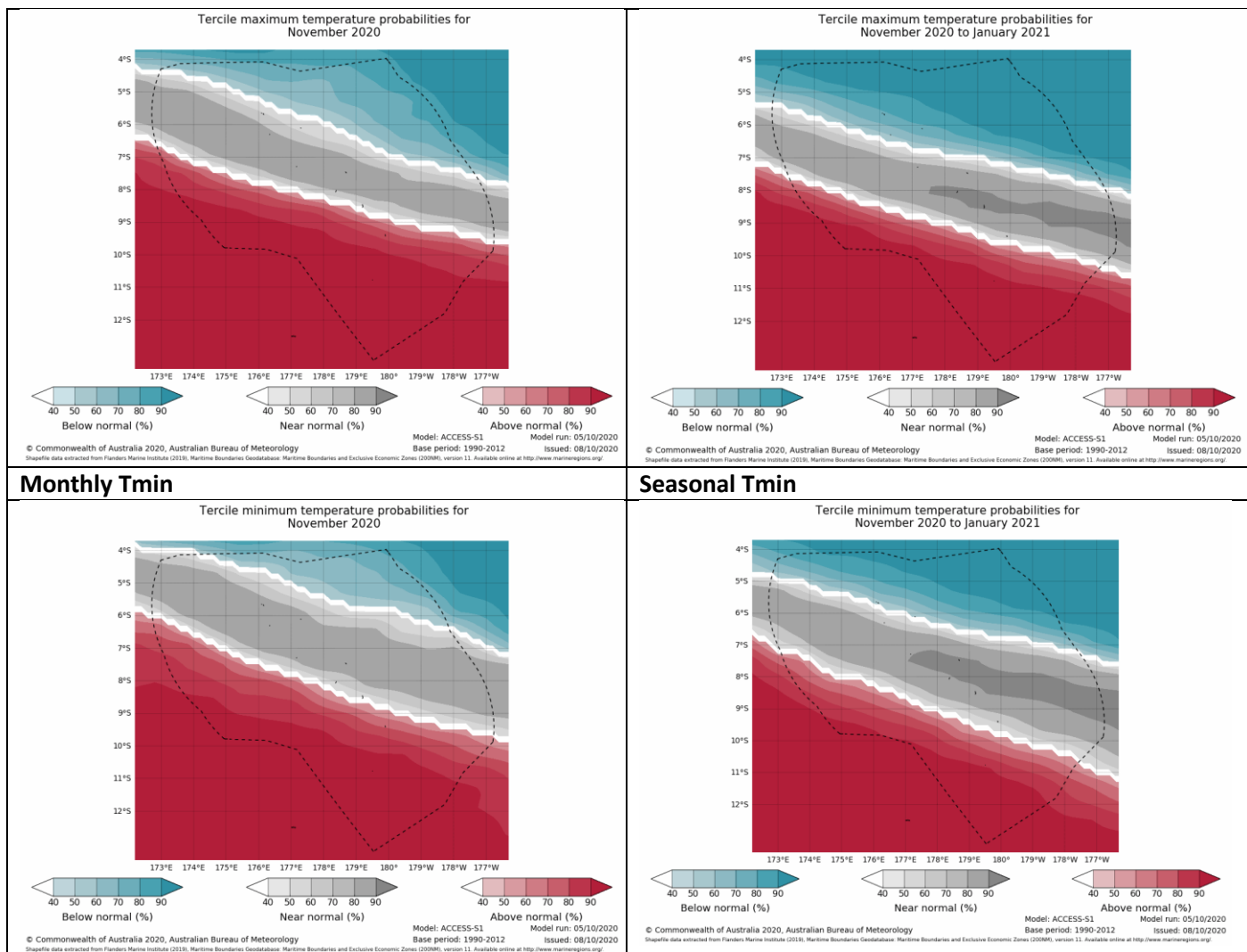
TABLE 3: Seasonal Climate Outlooks using SCOPIC for Nov 2020 to Jan 2021
Predictor and Period used: NINO3.4 for August to September 2020

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Nanumea (1941-2020)	67	882.8	33		29	76
Nui (1946-2020)	55	949.8	45		2	61
Funafuti (1933-2020)	51	1018.6	49		-1	44
Niulakita (1953-2020)	41	1024.4	59		10	63

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)	45	624.3	40	997.0	15	29	51
Nui (1946-2020)	40	821.8	27	1093.2	33	3	43
Funafuti (1933-2020)	39	938.0	24	1136.9	37	1	43
Niulakita (1953-2020)	24	836.7	35	1140.7	41	12	53

TABLE 4: Monthly and Seasonal Climate Outlooks using ACCESS-S for November 2020 to January 2021





Summary Statements

Rainfall for September 2020:

Nanumea and Funafuti observed normal rainfall, Nui recorded below normal rainfall, while Niulakita had above normal rainfall. It was the 7th highest September rainfall on record at Niulakita.

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

Normal rainfall was observed at Nanumea, with an outlook verification of near-consistent. Above normal rainfall was observed at Nui, Funafuti and Niulakita. The outlook issued in June was verified as consistent at Nui and Funafuti, and near-consistent at Niulakita which had its 5th wettest July-September on record.

Outlooks for November 2020 to January 2021:

1. SCOPIC:

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

The outlook for the season at Nui shows below normal rainfall is the most likely outcome, with above normal rainfall as the next most likely. Normal rainfall is the least likely outcome.

The outlook for the season at Funafuti is mixed as it shows a near-equal likelihood of below normal and above normal rainfall. Normal rainfall is the least likely.

Above normal rainfall at Niulakita is the most likely outcome for the season, with normal rainfall as the next most likely. Below normal as the least likely.

The confidence in the outlook is very high at Nanumea, good at Niulakita, and low at Nui and Funafuti.

2. ACCESS-S:

Monthly rainfall:

Below normal rainfall is favoured for Nanumea, Nui and Funafuti.

The outlook for Niulakita offers little guidance as the chances of wetter, near average and below normal rainfall are similar.

Monthly maximum and minimum temperature:

The outlook for maximum and minimum temperatures offers little guidance for Nanumea and Niu while above normal temperatures for Funafuti and Niulakita..

Seasonal rainfall:

The outlook for the season favours drier than normal rainfall for Nanumea, Nui and Funafuti.

The outlook for the season for Niulakita favours above normal rainfall.

Seasonal maximum and Minimum temperature:

The outlook for the season for Nanumea favours below normal maximum and minimum temperatures. Near normal temperatures are favoured for Niu while above normal temperatures are favoured for both Funafuti and Niulakita.

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: September 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 5	1 4
EAR Watch		Met staffs Disaster Members All civil servants and kaupule members	6 9	5 5	1 4
Monthly Climate Briefing		Met staffs Disaster Members All civil servants and kaupule members	6 9	5 5	1 4
Ocean Bulletin		Met staffs Disaster Members All civil servants and kaupule members	6 9	5 5	1 4
Total			60	40	20