Pacific Islands - Online Climate Outlook Forum (OCOF) No. 153

Country: Tuvalu

TABLE 1: Monthly Rainfall

Station (include data period)	Mar-2020	Apr-2020	May-2020				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2020)	398.3	212.8	205.7	131.1	256.7	203.6	40/80
Nui (1946-2020)	229.0	235.3	107.0	152.0	218.2	185.7	14/75
Funafuti (1933-2020)	130.7	273.9	260.1	198.3	266.4	230.5	60/88
Niulakita (1953-2020)	197.0	144.3	133.4	177.7	249.1	211.0	14/68

Commented [PM1]: I have 193.4. Please confirm if this is the correct amount.

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

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 December 19-January 20				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Nanumea (1941-2020)	816.8	Normal	550.2	880.6	770.3	48/80	15	37	48	22	Near-consistent
Nui (1946-2020)	571.3	Below normal	597.0	846.3	705.0	25/75	24	34	42	9	Inconsistent
Funafuti (1933-2020)	664.7	Below normal	677.9	901.7	792.0	27/88	22	36	42	8	Inconsistent
Niulakita (1953-2020)	474.7	Below normal	701.5	913.1	832.3	**6/68**	24	34	42	4	Inconsistent

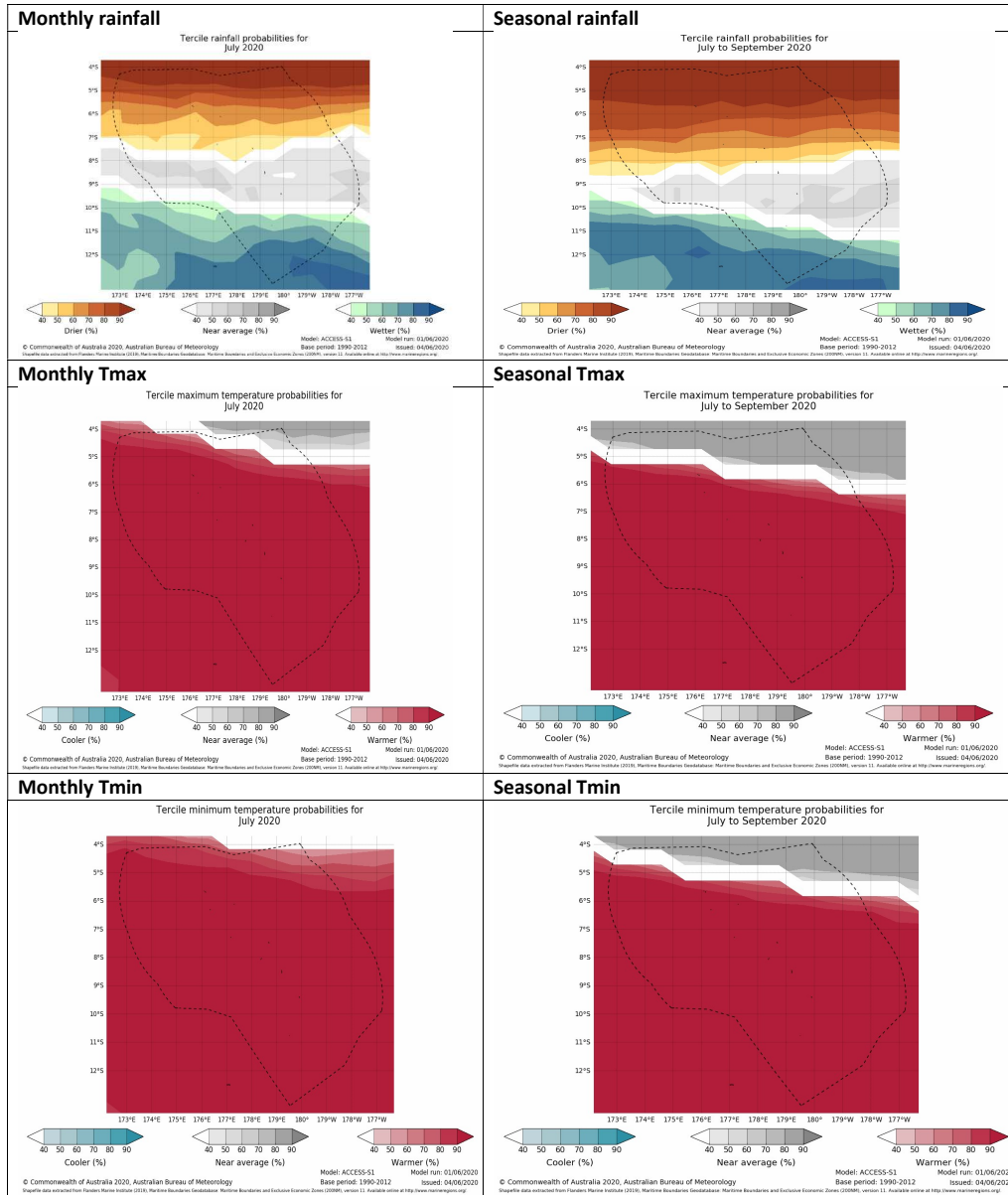**Commented [PM2]:** Check this amount

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

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Nanumea (1941-2020)	36	479.4	64		22	73
Nui (1946-2020)	34	610.5	66		28	70
Funafuti (1933-2020)	37	702.1	63		20	67
Niulakita (1953-2020)	45	617.6	55		2	64

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)	20	398.1	37	623.0	43	19	44
Nui (1946-2020)	17	532.6	41	688.7	42	20	46
Funafuti (1933-2020)	22	608.0	36	780.7	42	20	50
Niulakita (1953-2020)	29	514.7	36	712.9	35	1	46

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

Monthly rainfall

Tercile rainfall probabilities for
July 2020

Drier (%) | Near average (%) | Wetter (%)

© Commonwealth of Australia 2020, Australian Bureau of Meteorology
Model: ACCESS-S1   Model run: 01/06/2020
Base period: 1990-2012   Issued: 04/06/2020
Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marineregions.org/

Seasonal rainfall

Tercile rainfall probabilities for
July to September 2020

Drier (%) | Near average (%) | Wetter (%)

© Commonwealth of Australia 2020, Australian Bureau of Meteorology
Model: ACCESS-S1   Model run: 01/06/2020
Base period: 1990-2012   Issued: 04/06/2020
Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marineregions.org/

Monthly Tmax

Tercile maximum temperature probabilities for
July 2020

Cooler (%) | Near average (%) | Warmer (%)

© Commonwealth of Australia 2020, Australian Bureau of Meteorology
Model: ACCESS-S1   Model run: 01/06/2020
Base period: 1990-2012   Issued: 04/06/2020
Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marineregions.org/

Seasonal Tmax

Tercile maximum temperature probabilities for
July to September 2020

Cooler (%) | Near average (%) | Warmer (%)

© Commonwealth of Australia 2020, Australian Bureau of Meteorology
Model: ACCESS-S1   Model run: 01/06/2020
Base period: 1990-2012   Issued: 04/06/2020
Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marineregions.org/

Monthly Tmin

Tercile minimum temperature probabilities for
July 2020

Cooler (%) | Near average (%) | Warmer (%)

© Commonwealth of Australia 2020, Australian Bureau of Meteorology
Model: ACCESS-S1   Model run: 01/06/2020
Base period: 1990-2012   Issued: 04/06/2020
Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marineregions.org/

Seasonal Tmin

Tercile minimum temperature probabilities for
July to September 2020

Cooler (%) | Near average (%) | Warmer (%)

© Commonwealth of Australia 2020, Australian Bureau of Meteorology
Model: ACCESS-S1   Model run: 01/06/2020
Base period: 1990-2012   Issued: 04/06/2020
Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marineregions.org/

Summary Statements

Rainfall for May 2020:

Nanumea and Funafuti collected normal rainfall, while Nui and Niulakita collected below normal rainfall.

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

Normal rainfall occurred at Nanumea, with the outlook issued in February being verified as near-consistent. Below normal rainfall was registered at Nui, Funafuti and Niulakita, with an outlook verification of inconsistent for these three stations.

Outlooks for July to September 2020:

1. **SCOPIC:**
   The outlook for the season at Nanumea and Funafuti shows above normal rainfall as the most likely outcome, with normal rainfall the next most likely. Below normal rainfall is the least likely.
   The outlook for the season at Nui shows a near equal likelihood of above normal and normal rainfall. Below normal rainfall is the least likely.
   The outlook for Niulakita offers little guidance as the chance of above normal, normal and below normal are similar.
   The confidence in the outlook is high at Nanumea, Nui and Funafuti, very low confidence at Niulakita.

2. **ACCESS-S:**

   Monthly rainfall:

   The outlook at Nanumea and Nui favours drier than average or below normal rainfall. Near average or normal rainfall is favoured at Funafuti, with wetter than average or above normal rainfall favoured at Niulakita.

   Monthly maximum/minimum temperatures:

   The outlook favours a warmer than average July.

   Seasonal rainfall:

   The outlook favours below normal at Nanumea and Nui, with near-normal the most likely outcome at Funafuti and Niulakita.

   Seasonal maximum/minimum temperature:

   July to September is favoured to be warmer than average**.**

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: May 2020	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin		Met staffs All civil servants and kaupule members		5	1
EAR Watch		All civil servants kaupule members			
Monthly Climate Briefing		Met staff All civil servants kaupule members		5	1
Ocean Bulletin		Met staff All civil servants kaupule members		5	1
		Total		15	3

Commented [PM3]: Please provide the number of people distributed to