Pacific Islands - Online Climate Outlook Forum (OCOF) No. 165

Country: Fiji

TABLE 1: Monthly Rainfall

Station (include data period)	Mar-2021	Apr-2021	May-2021				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Western Division							
Penang Mill (1910-2021)	392.3	217.6	400.9	61.6	164.5	106.9	**109/112**
Lautoka Mill (1900-2021)	308.3	228.5	162.0	38.4	99.6	63.6	100/122
Nadi Airport (1942-2021)	308.9	63.4	122.3	42.6	105.6	71.8	57/79
Central Division							
Laucala Bay (Suva) (1942-2021)	545.8	136.6	508.9	173.6	260.0	196.8	**76/80**
Nausori Airport (1957-2021)	466.9	352.0	624.4	160.8	248.9	196.6	**65/65**
Tokotoko (Navua) (1945-2021)	322.6	133.1	717.2	183.9	317.3	253.0	**76/77**
Eastern Division							
Lakeba (1950-2021)	245.2	57.2	402.1	82.4	164.8	107.5	**71/71**
Vunisea (Kadavu) (1931-2021)	135.6	274.7	394.1	111.0	207.6	144.2	**84/85**
Ono-i-Lau (1943-2021)	273.3	62.2	149.3	65.6	153.0	103.6	50/74
Northern Division							
Labasa Airport (1946-2021)	259.5	159.6	293.6	54.0	119.4	84.9	**64/66**
Savusavu Airfield (1956-2021)	M	M	M	118.8	200.8	155.1	
Udu Point (1946-2021)	344.7	240.9	326.2	104.1	176.6	144.4	**70/73**
Rotuma (1912-2021)	157.0	552.3	400.9	216.8	338.9	271.8	86/108

TABLE 2: Three-month Rainfall for March to May 2021

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 Dec 2020-Jan 2021				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Western Division											
Penang Mill (1910-2021)	1010.8	Above normal	648.6	872.5	774.0	89/111	19	37	**44**	7	Consistent
Lautoka Mill (1900-2021)	698.8	Normal	524.0	717.3	601.5	83/121	19	37	**44**	9	Near-consistent
Nadi Airport (1942-2021)	494.6	Below normal	508.9	657.2	585.2	23/78	20	36	**44**	9	Inconsistent
Central Division											
Laucala Bay (Suva) (1942-2021)	1191.3	Above normal	819.1	1075.4	912.7	61/80	28	33	**39**	1	Consistent
Nausori Airport (1957-2021)	1443.3	Above normal	803.6	1035.5	916.4	**61/65**	29	**36**	35	-1	Near-consistent
Tokotoko (Navua) (1945-2021)	1172.9	Normal	929.0	1225.4	1029.7	52/77	30	**38**	32	-2	Consistent
Eastern Division											
Lakeba (1950-2021)	704.5	Normal	545.9	721.6	649.5	43/69	20	39	**41**	5	Near-consistent
Vunisea (Kadavu) (1931-2021)	804.4	Above normal	637.0	762.6	718.9	61/84	19	40	**41**	7	Consistent
Ono-i-Lau (1943-2021)	484.8	Normal	462.1	649.9	527.0	29/72	24	33	**43**	4	Near-consistent
Northern Division											
Labasa Airport (1947-2021)	712.7	Normal	561.3	843.7	674.4	34/65	27	33	**40**	1	Near-consistent
Savusavu Airfield (1957-2021)			571.6	722.4	664.1		20	36	**44**	7	
Udu Point (1946-2021)	911.8	Above normal	619.3	837.0	723.0	51/72	28	32	**40**	1	Consistent
Rotuma (1912-2021)	1110.2	Above normal	811.0	1000.2	945.8	78/107	**36**	33	31	-1	Inconsistent

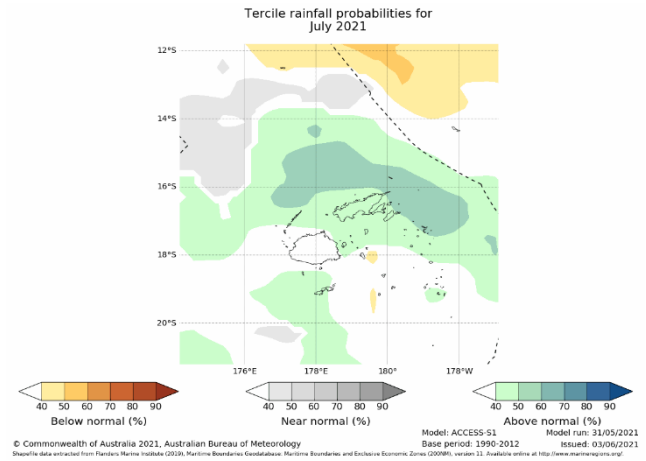
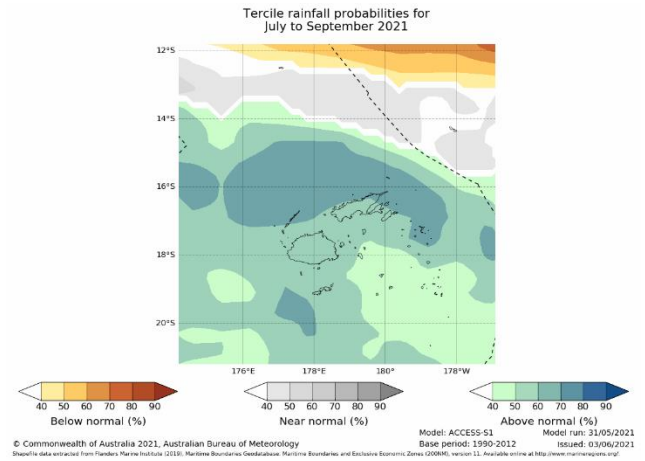
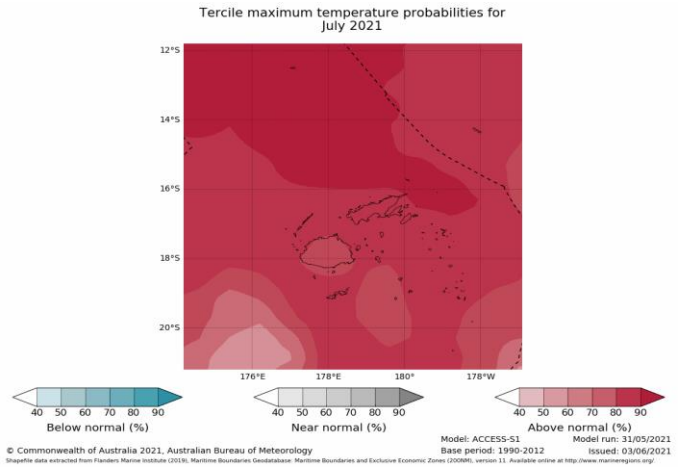
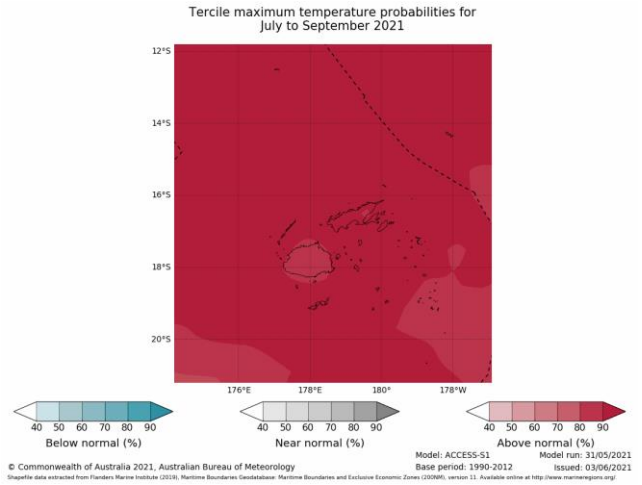
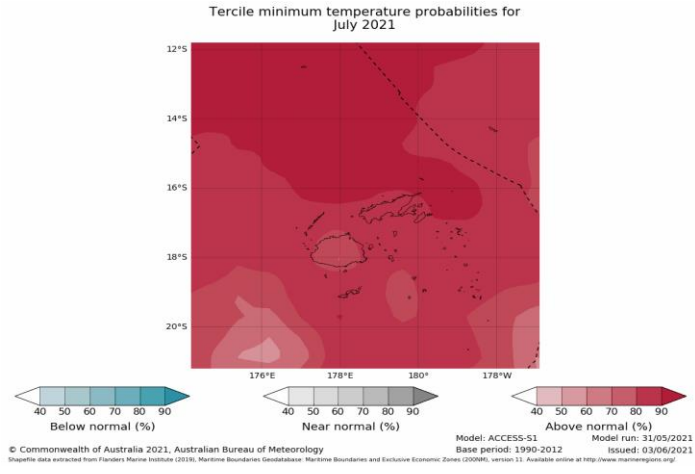
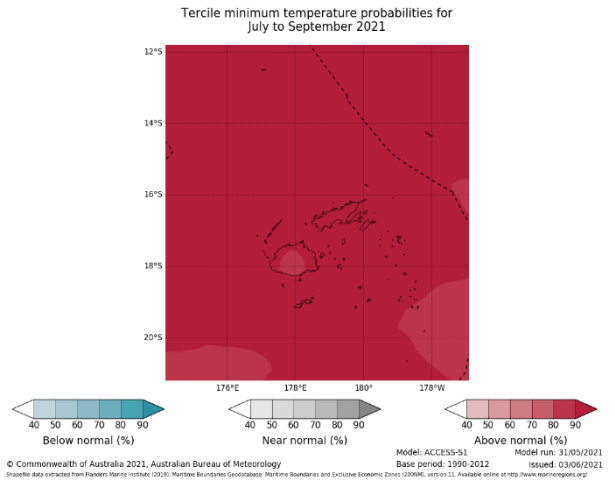
TABLE 3: Seasonal Climate Outlooks using SCOPIC for July to September 2021

Predictor and Period used: NINO3.4 for April to May 2021

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Western Division						
Penang Mill (1910-2021)	46	184.8	54		1	51
Lautoka Mill (1900-2021)	46	156.2	54		1	54
Nadi Airport (1942-2021)	43	175.0	57		3	52
Central Division						
Laucala Bay (Suva) (1942-2021)	45	464.6	55		1	51
Nausori Airport (1957-2021)	48	436.8	52		-1	48
Tokotoko (Navua) (1945-2021)	42	594.7	58		5	52
Eastern Division						
Lakeba (1950-2021)	46	233.2	54		0	52
Vunisea (Kadavu) (1931-2021)	47	345.3	53		0	54
Ono-i-Lau (1943-2021)	48	295.5	52		-1	52
Northern Division						
Labasa Airport (1946-2021)	44	153.0	56		1	54
Savusavu Airfield (1956-2021)	41	305.5	59		6	59
Udu Point (1946-2021)	36	294.0	64		14	64
Rotuma (1912-2021)	54	655.2	46		-1	51

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)	LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Western Division							
Penang Mill (1910-2021)	28	130.0	33	227.9	39	4	43
Lautoka Mill (1900-2021)	27	117.9	35	216.7	38	3	38
Nadi Airport (1942-2021)	25	128.8	37	211.4	38	5	41
Central Division							
Laucala Bay (Suva) (1942-2021)	27	386.3	36	564.5	37	2	25
Nausori Airport (1957-2021)	34	367.9	28	530.7	38	-1	34
Tokotoko (Navua) (1945-2021)	26	520.7	32	664.9	42	7	42
Eastern Division							
Lakeba (1950-2021)	31	199.6	31	315.8	38	1	38
Vunisea (Kadavu) (1931-2021)	31	292.6	33	398.4	36	0	35
Ono-i-Lau (1943-2021)	29	252.6	34	344.5	37	1	33
Northern Division							
Labasa Airport (1946-2021)	30	109.0	30	188.5	40	1	25
Savusavu Airfield (1956-2021)	24	240.6	41	336.7	35	2	41
Udu Point (1946-2021)	24	230.1	36	337.6	40	5	40
Rotuma (1912-2021)	33	575.4	37	768.9	30	-2	33

TABLE 4: Monthly and Seasonal Climate Outlooks using ACCESS-S for July to September 2021

Monthly rainfall	Seasonal rainfall
	
Monthly Tmax	**Seasonal Tmax**
	
Monthly Tmin	**Seasonal Tmin**
	

Summary Statements

Rainfall for May 2021:

Above normal rainfall was recorded across most of the country, with *normal* rainfall at Ono-i-Lau (Eastern Division) being the only exception. Rainfall data was not available for Savusavu Airfield.

Nausori and Lakeba recorded their wettest May in their 65 and 71 years of record, respectively. Navua and Vunisea recorded their second wettest May in their 77 and 85 years of record, respectively. Labasa recorded its third wettest May in its 66 years of record. Penang and Udu Point recorded their fourth wettest May in 112 and 73 years of record, respectively.

Accumulated rainfall for March to May 2021, including outlook verification:

Near normal to *above normal* rainfall was received across all the Divisions, except at Nadi which recorded *below normal* rainfall. Rotuma registered *above normal* rainfall. Savusavu Airfield could not be analysed due to missing rainfall data.

Nausori recorded its fifth wettest March –May period in 65 years of record.

The rainfall outlooks issued in February were verified as 'Consistent' at five sites, 'Near-Consistent' at five sites and 'Inconsistent' at two sites, while Savusavu Airfield could not be verified due to missing data.

Outlooks for July to September 2021:

1. **SCOPIC:**

- **Labasa, Tokotoko (Navua) and Udu Point:** The outlook shows *above normal* rainfall as the most likely outcome, with *near-normal* the next most likely. *Below normal* rainfall is the least likely.
- **Savusavu:** The outlook shows *near-normal* rainfall as the most likely outcome, with *above normal* the next most likely. *Below normal* rainfall is the least likely.
- **Lautoka, Laucala Bay (Suva) and Nadi Airport:** The outlook shows near-equal likelihood of *above normal* and *normal* rainfall. *Below normal* is the least likely.
- **Penang Mill, Nausori, Lakeba, Vunisea, Oni-i-Lau, and Rotuma:** The outlook offers little guidance as the chances of *above normal*, *normal* and *below normal* rainfall are similar.

2. **ACCESS-S:**

Monthly rainfall:

- **All regions: :** *Above normal* rainfall is favoured across most of the Fiji Group, except for Viti Levu, Mamanuca Group and parts of Lomaiviti Group where there is little guidance.
- **Rotuma:** *Below normal* rainfall is the most likely outcome.

Monthly/Seasonal maximum and minimum temperatures:

- **All regions:** Temperatures are favoured to be *above normal* across the Fiji Group in July to September.

Seasonal rainfall:

- **All regions:** *Above normal* rainfall is favoured across Fiji Group for the July to September period.
- **Rotuma:** The outlook offers little guidance as the chances of above-normal, normal and below-normal are similar.

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 ≤X < 35 Exceptional: X ≥ 35

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

Product	Date: May 2021	Stakeholder	Total Number of Participants	Number of male	Number of female
Fiji Climate Summary	07/05/21	General public	140	106	34
EAR Watch	06/05/21	Humanitarian partners	122	96	26
Fiji Climate Outlook	28/05/21	General public	124	93	31
Climate Outlook for Monasavu	28/05/21	Energy Fiji Limited	13	13	-
Ocean Outlook	20/05/21	A number of key ocean related stakeholders	36	29	7
ENSO Update	25/05/21	General public	142	116	26
Meteorological Data Request	01/05/21/ to 31/05/21	A range of stakeholders	20	14	6
Total			**597**	**467**	**130**