

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 166

Country: Fiji

TABLE 1: Monthly Rainfall

Station (include data period)	Apr-2021	May-2021	Jun-2021				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Western Division							
Penang Mill (1910-2021)	217.6	400.9	72.4	44.6	99.1	59.4	68/112
Lautoka Mill (1900-2021)	228.5	162.0	42.6	33.1	77.1	49.6	58/122
Nadi Airport (1942-2021)	63.4	122.3	42.1	25.6	72.6	53.2	36/80
Central Division							
Laucala Bay (Suva) (1942-2021)	136.6	508.9	93.4	104.3	208.4	137.6	23/80
Nausori Airport (1957-2021)	352.0	624.4	109.0	92.7	201.4	144.1	29/65
Tokotoko (Navua) (1945-2021)	133.1	717.2	190.7	129.9	237.0	162.5	42/77
Eastern Division							
Lakeba (1950-2021)	57.2	402.1	70.2	52.0	127.1	84.6	31/72
Vunisea (Kadavu) (1931-2021)	274.7	394.1	88.0	84.4	145.7	116.2	35/85
Ono-i-Lau (1943-2021)	62.2	149.3	116.4	62.7	108.2	79.3	51/74
Northern Division							
Labasa Airport (1946-2021)	159.6	293.6	23.7	29.0	81.0	46.1	19/65
Savusavu Airfield (1956-2021)	M	M	M	62.2	136.0	107.9	
Udu Point (1946-2021)	240.9	326.2	104.5	75.4	152.5	105.6	36/73
Rotuma (1912-2021)	552.3	400.9	151.5	203.9	303.7	246.9	23/107

TABLE 2: Three-month Rainfall for April to June 2021

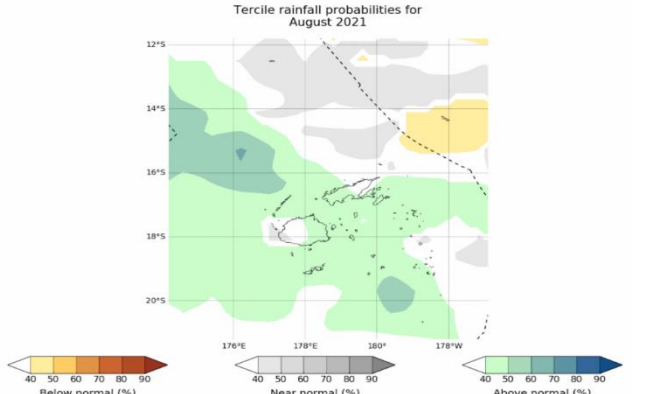
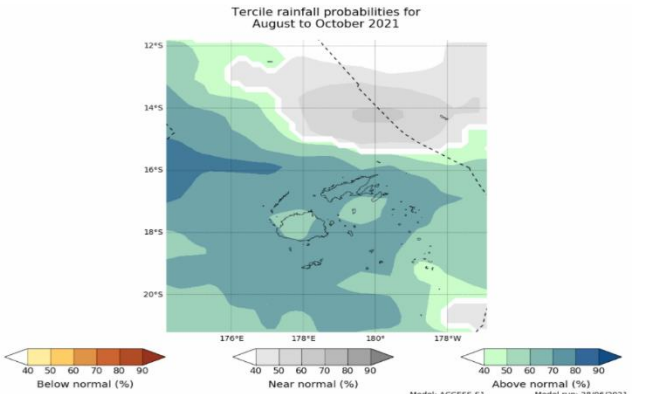
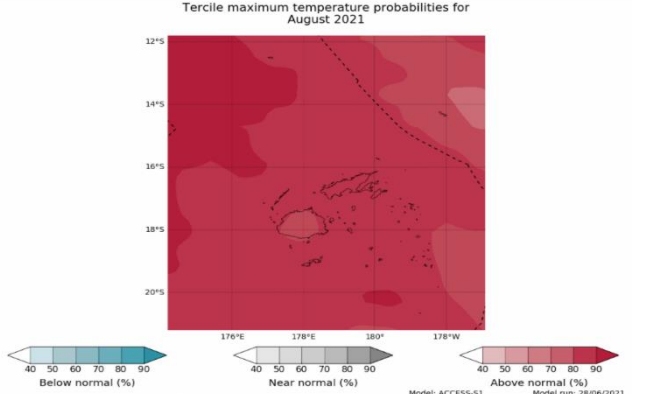
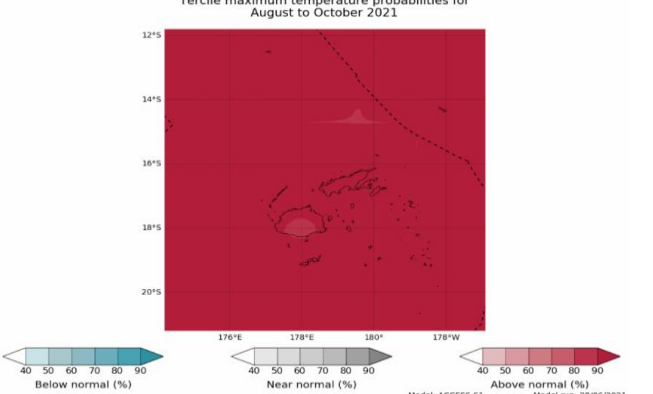
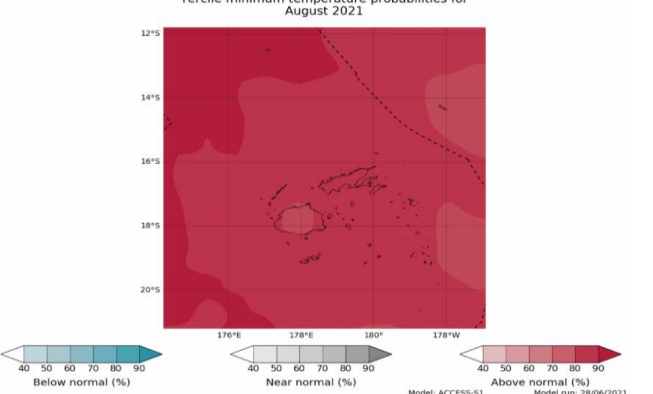
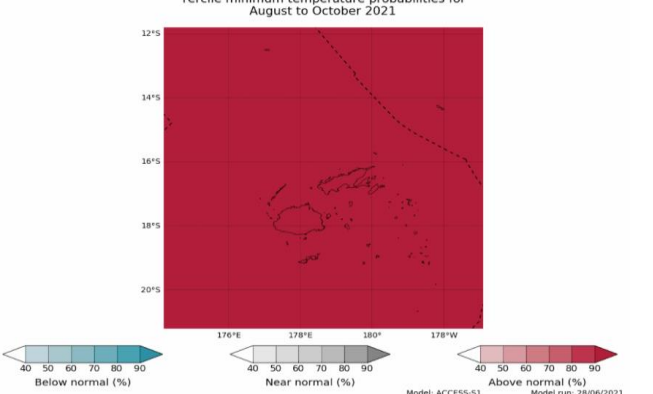
Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 January - February 2021				Verification: Consistent, Near- consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Western Division											
Penang Mill (1910-2021)	690.9	Above normal	372.8	542.7	450.1	99/111	27	34	39	1	Consistent
Lautoka Mill (1900-2021)	433.1	Above normal	264.0	411.5	347.5	91/122	19	33	48	11	Consistent
Nadi Airport (1942-2021)	227.8	Below normal	254.3	376.2	315.7	19/79	22	32	46	8	Inconsistent
Central Division											
Laucala Bay (Suva) (1942-2021)	738.9	Normal	682.4	849.4	732.4	42/80	25	32	43	4	Near-consistent
Nausori Airport (1957-2021)	1085.4	Above normal	645.9	794.0	708.2	58/65	19	37	44	6	Consistent
Tokotoko (Navua) (1945-2021)	1041.0	Above normal	737.5	992.1	864.5	53/77	24	31	45	5	Consistent
Eastern Division											
Lakeba (1950-2021)	529.5	Above normal	357.3	502.8	434.8	48/69	22	37	41	5	Consistent
Vunisea (Kadavu) (1931-2021)	756.8	Above normal	485.5	620.7	549.3	73/85	18	40	42	7	Consistent
Ono-i-Lau (1943-2021)	327.9	Normal	324.1	486.6	428.6	25/71	13	45	42	10	Consistent
Northern Division											
Labasa Airport (1947-2021)	476.9	Above normal	331.4	447.5	407.4	48/65	26	34	40	2	Consistent
Savusavu Airfield (1957-2021)			398.0	629.3	506.7		18	30	52	12	
Udu Point (1946-2021)	671.6	Above normal	447.6	662.2	535.5	50/72	24	40	36	2	Near-consistent
Rotuma (1912-2021)	1104.7	Above normal	744.0	913.8	825.7	97/107	37	32	31	-2	Inconsistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for August to October 2021**Predictor and Period used: NINO3.4 for May to June 2021**

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Western Division						
Penang Mill (1910-2021)	48	239.6	52		1	53
Lautoka Mill (1900-2021)	48	214.3	52		2	52
Nadi Airport (1942-2021)	48	225.0	52		2	51
Central Division						
Lautoka Bay (Suva) (1942-2021)	48	513.2	52		1	49
Nausori Airport (1957-2021)	47	486.0	53		2	55
Tokotoko (Navua) (1945-2021)	47	647.6	53		7	55
Eastern Division						
Lakeba (1950-2021)	50	307.9	50		-1	58
Vunisea (Kadavu) (1931-2021)	49	394.0	51		-1	49
Ono-i-Lau (1943-2021)	48	312.5	52		1	57
Northern Division						
Labasa Airport (1946-2021)	46	198.6	54		4	61
Savusavu Airfield (1956-2021)	47	354.6	53		1	56
Udu Point (1946-2021)	48	346.4	52		0	58
Rotuma (1912-2021)	51	718.2	49		0	54

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)	33	187.2	32	278.5	35	6	29
Lautoka Mill (1900-2021)	30	152.5	35	253.8	35	3	37
Nadi Airport (1942-2021)	30	171.7	35	281.7	35	7	41
Central Division							
Lautoka Bay (Suva) (1942-2021)	31	425.8	34	627.0	35	5	42
Nausori Airport (1957-2021)	34	422.5	31	605.2	35	-1	34
Tokotoko (Navua) (1945-2021)	33	551.8	32	784.2	35	5	29
Eastern Division							
Lakeba (1950-2021)	32	253.7	34	342.8	34	2	46
Vunisea (Kadavu) (1931-2021)	33	327.1	32	447.6	35	2	38
Ono-i-Lau (1943-2021)	31	236.9	34	370.6	35	0	39
Northern Division							
Labasa Airport (1946-2021)	31	176.2	34	242.0	35	0	25
Savusavu Airfield (1956-2021)	31	301.4	34	420.1	35	3	41
Udu Point (1946-2021)	33	298.6	33	419.6	35	1	25
Rotuma (1912-2021)	35	634.6	35	889.0	30	2	40

TABLE 4: Monthly and Seasonal Climate Outlooks using ACCESS-S for August to October 2021

Monthly rainfall	Seasonal rainfall
<p>Tercile rainfall probabilities for August 2021</p>  <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2008), version 11. Available online at http://www.marine.gov.au</small></p> <p>Model: ACCESS-S1 Model run: 28/06/2021 Base period: 1990-2012 Issued: 01/07/2021</p>	<p>Tercile rainfall probabilities for August to October 2021</p>  <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2008), version 11. Available online at http://www.marine.gov.au</small></p> <p>Model: ACCESS-S1 Model run: 28/06/2021 Base period: 1990-2012 Issued: 01/07/2021</p>
Monthly Tmax	Seasonal Tmax
<p>Tercile maximum temperature probabilities for August 2021</p>  <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2008), version 11. Available online at http://www.marine.gov.au</small></p> <p>Model: ACCESS-S1 Model run: 28/06/2021 Base period: 1990-2012 Issued: 01/07/2021</p>	<p>Tercile maximum temperature probabilities for August to October 2021</p>  <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2008), version 11. Available online at http://www.marine.gov.au</small></p> <p>Model: ACCESS-S1 Model run: 28/06/2021 Base period: 1990-2012 Issued: 01/07/2021</p>
Monthly Tmin	Seasonal Tmin
<p>Tercile minimum temperature probabilities for August 2021</p>  <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2008), version 11. Available online at http://www.marine.gov.au</small></p> <p>Model: ACCESS-S1 Model run: 28/06/2021 Base period: 1990-2012 Issued: 01/07/2021</p>	<p>Tercile minimum temperature probabilities for August to October 2021</p>  <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2008), version 11. Available online at http://www.marine.gov.au</small></p> <p>Model: ACCESS-S1 Model run: 28/06/2021 Base period: 1990-2012 Issued: 01/07/2021</p>

Summary Statements

Rainfall for June 2021:

Normal rainfall was recorded across most of the country, with *above normal* rainfall at Ono-i-Lau (Eastern Division) and *below normal* rainfall observed at Suva (Central Division), Labasa Airport (Northern Division) and Rotuma. Rainfall data was not available for Savusavu Airfield.

There were no extreme rainfall records established during the month of June.

Accumulated rainfall for April to June 2021, including outlook verification:

Above normal rainfall was received across most of the divisions, except *normal* rainfall at Suva and Ono-i-Lau while *below normal* rainfall was observed at Nadi Airport. Rotuma also registered *above normal* rainfall. Rotuma recorded its eleventh wettest April to June on record.

Savusavu Airfield could not be analysed due to missing rainfall data.

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

Outlooks for August to October 2021:

1. SCOPIC:

- **Western Division, Central Division, Eastern Division, Northern Division 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 likely across most of the Fiji Group, except for western parts of Viti Levu, northern parts of Vanua Levu and parts of Southern Lau Group where there is little guidance.
- **Rotuma:** The outlook shows normal rainfall as the most likely outcome.

Monthly/Seasonal maximum and minimum temperatures:

- **All regions:** Temperatures are favoured to be *above normal* across the Fiji Group in August and August to October.

Seasonal rainfall:

- **All regions:** *Above normal* rainfall is favoured across Fiji Group for the August to October period.
- **Rotuma:** *Above normal* rainfall is favoured.

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: June 2021	Stakeholder	Total Number of Participants	Number of male	Number of female
Fiji Climate Summary	05/06/21	General public	140	106	34
EAR Watch	04/06/21	Humanitarian partners	122	96	26
Fiji Climate Outlook	30/06/21	General public	124	93	31
Climate Outlook for Monasavu	30/06/21	Energy Fiji Limited	13	13	-
Ocean Outlook	18/06/21	A number of key ocean related stakeholders	36	29	7
Meteorological Data Request	01/06/21/ to 30/06/21	A range of stakeholders	19	13	6
Total			454	350	104