

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 163

Country: Fiji

TABLE 1: Monthly Rainfall

Station (include data period)	Jan-2021	Feb-2021	Mar-2021					Rank
			Total (mm)	33%tile	67%tile	Median		
	Total (mm)	Total (mm)	Rainfall (mm)					
<i>Western Division</i>								
Penang Mill (1910-2021)	1008.0	471.7	392.3	285.8	456.6	381.3	65/112	
Lautoka Mill (1900-2021)	676.3	305.2	308.3	229.3	418.2	301.8	66/121	
Nadi Airport (1942-2021)	538.8	332.8	308.9	249.8	415.6	321.2	38/78	
<i>Central Division</i>								
Laucala Bay (Suva) (1942-2021)	578.4	143.9	545.8	298.0	429.0	343.3	70/80	
Nausori Airport (1957-2021)	553.7	211.7	466.9	312.8	439.9	362.6	52/65	
Tokotoko (Navua) (1945-2021)	432.5	M	322.6	314.5	440.3	378.8	27/77	
<i>Eastern Division</i>								
Lakeba (1950-2021)	487.7	346.2	245.2	212.6	330.8	260.2	33/71	
Vunisea (Kadavu) (1931-2021)	446.9	177.8	135.6	229.4	309.1	285.3	10/85	
Ono-i-Lau (1943-2021)	295.4	97.8	273.3	163.1	295.7	226.6	48/74	
<i>Northern Division</i>								
Labasa Airport (1946-2021)	M	346.2	259.5	264.5	430.6	329.4	21/65	
Savusavu Airfield (1956-2021)	M	M	M	179.9	272.9	228.2	M	
Udu Point (1946-2021)	582.4	320.2	344.7	255.7	363.7	300.7	45/74	
Rotuma (1912-2021)	671.9	559.6	157.0	275.9	409.3	326.5	7/108	

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

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIIC forecast probabilities based on NINO3.4 October-November 2020				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
<i>Western Division</i>											
Penang Mill (1910-2021)	1872.0	Above normal	1035.8	1250.0	1124.2	106/112	7	34	59	27	Consistent
Lautoka Mill (1900-2021)	1289.8	Above normal	863.7	1133.0	1011.6	101/121	11	32	57	19	Consistent
Nadi Airport (1942-2021)	1180.5	Above normal	818.6	1121.5	938.8	58/78	10	32	58	22	Consistent
<i>Central Division</i>											
Laucala Bay (Suva) (1942-2021)	1268.1	Above normal	847.4	1070.6	996.4	65/80	28	35	37	-1	Consistent
Nausori Airport (1957-2021)	1232.3	Above normal	892.5	1076.2	979.4	52/65	27	40	33	-1	Near-consistent
Tokotoko (Navua) (1945-2021)	M		913.4	1202.9	1061.1	-	29	43	28	-1	-
<i>Eastern Division</i>											
Lakeba (1950-2021)	1079.1	Above normal	652.4	884.6	765.0	63/70	14	32	54	16	Consistent
Vunisea (Kadavu) (1931-2021)	760.3	Normal	674.5	876.6	789.1	43/85	23	39	38	1	Consistent
Ono-i-Lau (1943-2021)	666.5	Normal	481.9	752.3	618.4	41/72	23	37	40	2	Near-consistent
<i>Northern Division</i>											
Labasa Airport (1947-2021)	M		945.7	1299.6	1108.6		7	48	45	19	-
Savusavu Airfield (1957-2021)	M		669.4	855.5	780.7		16	38	46	7	-
Udu Point (1946-2021)	1247.3	Above normal	813.8	1038.7	965.2	62/72	12	39	49	14	Consistent
Rotuma (1912-2021)	1388.5	Above normal	887.4	1152.0	1031.5	98/108	14	29	57	17	Consistent

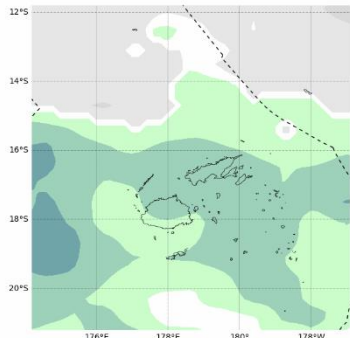
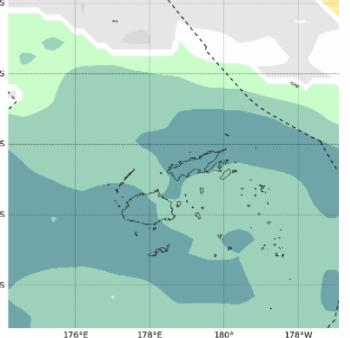
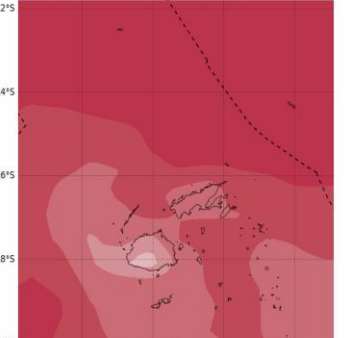
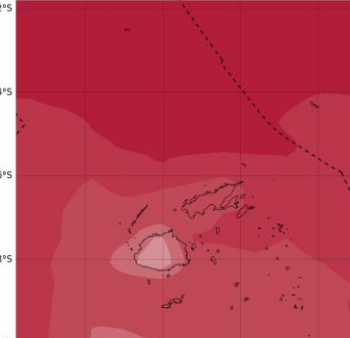
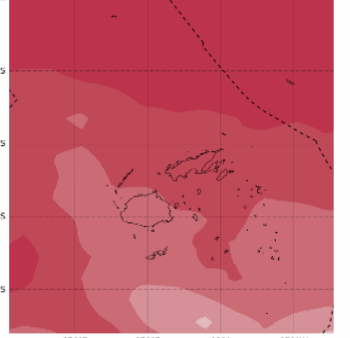
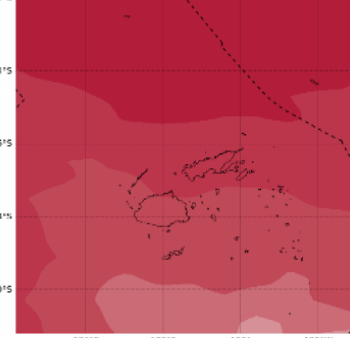
TABLE 3: Seasonal Climate Outlooks using SCOPIC for May to July 2021

Predictor and Period used: NINO3.4 for February to March 2021

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Western Division						
Penang Mill (1910-2021)	34	254.8	66		8	62
Lautoka Mill (1900-2021)	22	179.2	78		24	72
Nadi Airport (1942-2021)	31	174.8	69		12	65
Central Division						
Laucala Bay (Suva) (1942-2021)	25	509.5	75		19	65
Nausori Airport (1957-2021)	16	500.6	84		31	73
Tokotoko (Navua) (1945-2021)	35	642.0	65		8	60
Eastern Division						
Lakeba (1950-2021)	29	317.6	71		13	56
Vunisea (Kadavu) (1931-2021)	40	391.7	60		2	58
Ono-i-Lau (1943-2021)	33	312.7	67		9	63
Northern Division						
Labasa Airport (1946-2021)	28	197.9	72		13	64
Savusavu Airfield (1956-2021)	27	370.7	73		17	71
Udu Point (1946-2021)	35	367.5	65		7	57
Rotuma (1912-2021)	55	795.5	45		-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)	16	167.0	35	302.4	49	13	54
Lautoka Mill (1900-2021)	11	140.6	40	219.9	49	17	47
Nadi Airport (1942-2021)	16	140.4	36	244.4	48	12	49
Central Division							
Laucala Bay (Suva) (1942-2021)	15	445.8	33	613.2	52	15	51
Nausori Airport (1957-2021)	9	430.9	38	579.4	53	20	52
Tokotoko (Navua) (1945-2021)	10	553.4	35	742.8	55	20	51
Eastern Division							
Lakeba (1950-2021)	10	248.7	41	363.5	49	18	49
Vunisea (Kadavu) (1931-2021)	27	341.0	29	450.3	44	2	39
Ono-i-Lau (1943-2021)	15	237.4	37	375.7	48	12	49
Northern Division							
Labasa Airport (1946-2021)	13	154.7	32	258.8	55	14	45
Savusavu Airfield (1956-2021)	11	297.4	37	446.9	52	16	49
Udu Point (1946-2021)	20	302.9	38	468.1	42	5	42
Rotuma (1912-2021)	37	691.8	34	887.2	29	-1	39

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

Monthly rainfall	Seasonal rainfall
<p>Tercile rainfall probabilities for May 2021</p>  <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 03/04/2021 Issued: 05/04/2021</p>	<p>Tercile rainfall probabilities for May to July 2021</p>  <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 03/04/2021 Issued: 05/04/2021</p>
Monthly Tmax	Seasonal Tmax
<p>Tercile maximum temperature probabilities for May 2021</p>  <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 03/04/2021 Issued: 05/04/2021</p>	<p>Tercile maximum temperature probabilities for May to July 2021</p>  <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 03/04/2021 Issued: 05/04/2021</p>
Monthly Tmin	Seasonal Tmin
<p>Tercile minimum temperature probabilities for May 2021</p>  <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 03/04/2021 Issued: 05/04/2021</p>	<p>Tercile minimum temperature probabilities for May to July 2021</p>  <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 03/04/2021 Issued: 05/04/2021</p>

Summary Statements

Rainfall for March 2021:

Below normal rainfall was recorded at Vunisea (Kadavu), Labasa Airport and Rotuma. On the other hand, *above normal* rainfall was registered at Suva (Laucala Bay) and Nausori Airport. *Near-normal* rainfall was received across the Western Division, at Tokotoko (Navua), Lakeba, Ono-i-Lau and Udu Point. Rainfall data is not available for Savusavu Airfield.

Rotuma recorded its seventh driest March in 108 years of record.

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

Above normal rainfall was recorded across most of the country, with normal rainfall at Vunisea and Ono-i-Lau (Eastern Division) being the only exceptions. Tokotoko (Navua), Labasa and Savusavu could not be analysed due to missing rainfall data.

Penang and Lakeba recorded their seventh and eighth wettest January to March periods in their 112 and 70 years of record respectively.

The rainfall outlooks issued in December were verified as 'Consistent' at eight sites and 'Near-Consistent' at two sites, while Tokotoko (Navua), Labasa and Savusavu could not be verified due to missing readings.

Outlooks for May to July 2021:

1. SCOPIC:

- **Central Division, Labasa and Savusavu:** The outlook favours *above normal* rainfall.
- **Western and Eastern Divisions 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.
- **Rotuma:** The outlook offers little guidance as the chances of *above normal*, *near-normal* and *below normal* rainfall are similar.

2. ACCESS-S:

Monthly rainfall:

- **All regions:** *Above-normal* rainfall is favoured across the Fiji Group in May.
- **Rotuma:** *Near-normal* rainfall is the most likely outcome.

Monthly maximum and minimum temperatures:

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

Seasonal rainfall:

- **All regions:** *Above normal* rainfall is favoured across Fiji Group for the **May to July** period.
- **Rotuma:** *Near-normal* rainfall is the most likely outcome.

Seasonal maximum and minimum temperatures:

- **All regions:** Maximum and minimum temperatures are favoured to be *above normal* across the Fiji Group for the coming three months.

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: March 2021	Stakeholder	Total Number of Participants	Number of male	Number of female
Fiji Climate Summary	05/03/21	General public	140	106	34
EAR Watch	05/03/21	Humanitarian partners	122	96	26
Fiji Climate Outlook	29/03/21	General public	124	93	31
Ocean Outlook	19/03/21	A number of key ocean related stakeholders	36	29	7
ENSO Outlook	26/03/21	General Public	142	116	26
Meteorological Data Request	01/03/21 to 31/03/21	A range of stakeholders	53	42	11
Total			617	482	135