

# Pacific Islands - Online Climate Outlook Forum (OCOF) No. 161

Country: Fiji

TABLE 1: Monthly Rainfall

Station (include data period)	Nov-2020	Dec-2020	Jan-2021				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Western Division							
Penang Mill (1910-2021)	197.8	527.4	1008.0	241.1	455.2	321.9	110/112
Lautoka Mill (1900-2021)	161.3	143.3	676.3	208.5	406.1	311.3	116/121
Nadi Airport (1942-2021)	144.5	170.4	538.8	222.1	356.5	301.8	68/80
Central Division							
Laucala Bay (Suva) (1942-2021)	385.6	481.5	578.4	253.1	392.5	315.3	75/80
Nausori Airport (1957-2021)	330.4	443.0	553.7	261.0	406.2	318.3	57/65
Tokotoko (Navua) (1945-2021)	395.9	463.0	432.5	275.4	408.0	342.8	56/76
Eastern Division							
Lakeba (1950-2021)	64.2	353.4	487.7	171.9	305.8	239.9	68/71
Vunisea (Kadavu) (1931-2021)	65.6	282.5	446.9	171.8	296.1	243.3	77/86
Ono-i-Lau (1943-2021)	103.6	102.6	295.4	130.0	230.1	184.4	64/74
Northern Division							
Labasa Airport (1946-2021)	M	M	M	221.9	458.6	366.0	M
Savusavu Airfield (1956-2021)	M	M	M	190.1	319.0	253.8	M
Udu Point (1946-2021)	170.6	385.1	582.4	232.4	389.0	322.6	65/72
Rotuma (1912-2021)	476.2	373.4	671.9	274.5	409.8	335.0	107/109

**TABLE 2: Three-month Rainfall for November 2020 to January 2021**

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 August-September 2020				Verification: Consistent, Near- consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Western Division											
Penang Mill (1910-2021)	1733.2	Above normal	561.7	922.7	713.9	104/106	17	34	49	23	Consistent
Lautoka Mill (1900-2021)	980.9	Above normal	418.2	752.2	613.6	106/121	8	43	49	31	Consistent
Nadi Airport (1942-2021)	853.7	Above normal	425.4	750.4	647.6	63/78	12	38	50	32	Consistent
Central Division											
Laucala Bay (Suva) (1942-2021)	1445.5	Above normal	688.3	1041.5	909.5	77/79	29	30	41	4	Consistent
Nausori Airport (1957-2021)	1327.1	Above normal	742.5	1046.2	857.1	63/65	23	33	44	10	Consistent
Tokotoko (Navua) (1945-2021)	1291.4	Above normal	853.7	1135.1	953.2	61/74	23	38	39	6	Consistent
Eastern Division											
Lakeba (1950-2021)	905.3	Above normal	462.7	682.8	586.5	64/71	22	34	44	15	Consistent
Vunisea (Kadavu) (1931-2021)	795.0	Above normal	487.2	704.8	568.7	67/83	22	34	44	12	Consistent
Ono-i-Lau (1943-2021)	501.6	Normal	364.2	515.5	448.6	44/71	16	33	51	26	Near-consistent
Northern Division											
Labasa Airport (1947-2021)	M		564.6	920.9	662.6	M	13	27	60	30	-
Savusavu Airfield (1957-2021)	M		573.6	745.0	658.7	M	20	37	43	11	-
Udu Point (1946-2021)	1138.1	Above normal	682.6	911.2	754.2	60/70	29	29	42	5	Consistent
Rotuma (1912-2021)	1521.5	Above normal	853.9	1061.0	965.4	103/105	18	41	41	10	Near-consistent

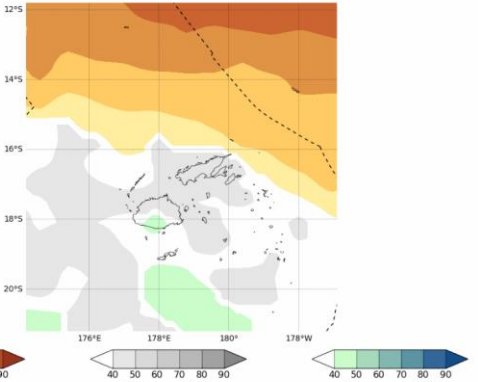
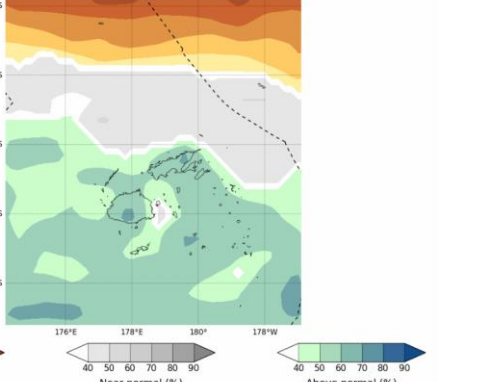
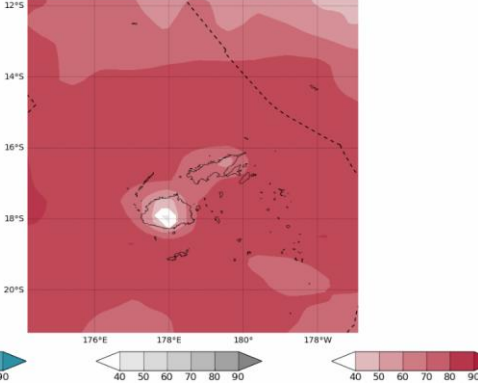
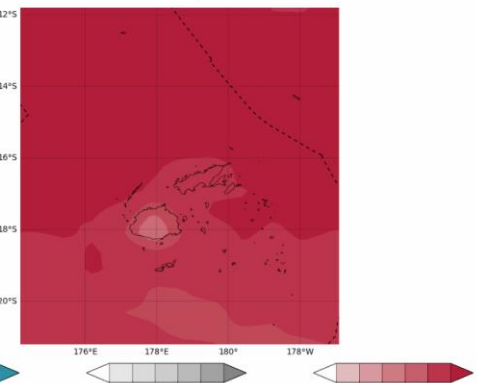
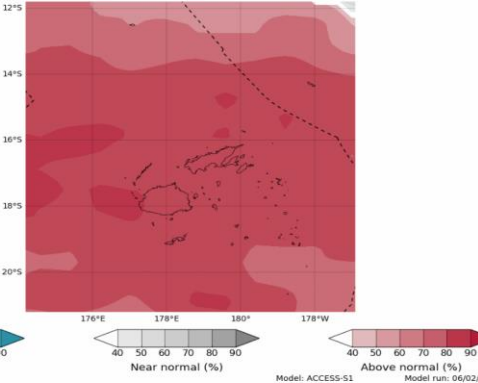
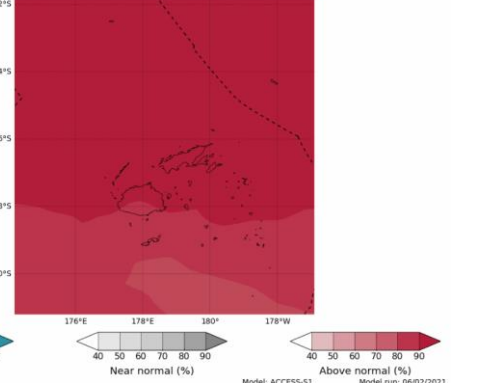
**TABLE 3: Seasonal Climate Outlooks using SCOPIC for March to May 2021**

Predictor and Period used: NINO3.4 for December 2020 to January 2021

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
<i>Western Division</i>						
Penang Mill (1910-2021)	34	774.0	66		12	62
Lautoka Mill (1900-2021)	39	601.5	61		4	61
Nadi Airport (1942-2021)	39	585.2	61		5	63
<i>Central Division</i>						
Laucala Bay (Suva) (1942-2021)	47	912.7	53		-1	50
Nausori Airport (1957-2021)	44	916.4	56		0	50
Tokotoko (Navua) (1945-2021)	46	1029.7	54		0	53
<i>Eastern Division</i>						
Lakeba (1950-2021)	40	649.5	60		4	60
Vunisea (Kadavu) (1931-2021)	43	718.9	57		3	62
Ono-i-Lau (1943-2021)	38	527.0	62		5	64
<i>Northern Division</i>						
Labasa Airport (1946-2021)	45	674.4	55		0	56
Savusavu Airfield (1956-2021)	37	664.1	63		6	65
Udu Point (1946-2021)	49	723.0	51		-2	33
Rotuma (1912-2021)	53	945.8	47		-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]
<i>Western Division</i>							
Penang Mill (1910-2021)	19	648.6	37	872.5	44	7	49
Lautoka Mill (1900-2021)	19	524.0	37	717.3	44	9	44
Nadi Airport (1942-2021)	20	508.9	36	657.2	44	9	50
<i>Central Division</i>							
Laucala Bay (Suva) (1942-2021)	28	819.1	33	1075.4	39	1	37
Nausori Airport (1957-2021)	29	803.6	36	1035.5	35	-1	33
Tokotoko (Navua) (1945-2021)	30	929.0	38	1225.4	32	-2	36
<i>Eastern Division</i>							
Lakeba (1950-2021)	20	545.9	39	721.6	41	5	46
Vunisea (Kadavu) (1931-2021)	19	637.0	40	762.6	41	7	46
Ono-i-Lau (1943-2021)	24	462.1	33	649.9	43	4	42
<i>Northern Division</i>							
Labasa Airport (1946-2021)	27	561.3	33	843.7	40	1	39
Savusavu Airfield (1956-2021)	20	571.6	36	722.4	44	7	47
Udu Point (1946-2021)	28	619.3	32	837.0	40	1	42
Rotuma (1912-2020)	36	811.0	33	1000.2	31	-1	28

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

Monthly rainfall	Seasonal rainfall
<p>Tercile rainfall probabilities for March 2021</p>  <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology  <small>Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004M), version 11. Available online at <a href="http://www.maritimeregions.org/">http://www.maritimeregions.org/</a></small></p> <p>Model: ACCESS-S1  Base period: 1990-2012  Model run: 06/02/2021  Issued: 08/02/2021</p>	<p>Tercile rainfall probabilities for March to May 2021</p>  <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology  <small>Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004M), version 11. Available online at <a href="http://www.maritimeregions.org/">http://www.maritimeregions.org/</a></small></p> <p>Model: ACCESS-S1  Base period: 1990-2012  Model run: 06/02/2021  Issued: 08/02/2021</p>
Monthly Tmax	Seasonal Tmax
<p>Tercile maximum temperature probabilities for March 2021</p>  <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology  <small>Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004M), version 11. Available online at <a href="http://www.maritimeregions.org/">http://www.maritimeregions.org/</a></small></p> <p>Model: ACCESS-S1  Base period: 1990-2012  Model run: 06/02/2021  Issued: 08/02/2021</p>	<p>Tercile maximum temperature probabilities for March to May 2021</p>  <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology  <small>Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004M), version 11. Available online at <a href="http://www.maritimeregions.org/">http://www.maritimeregions.org/</a></small></p> <p>Model: ACCESS-S1  Base period: 1990-2012  Model run: 06/02/2021  Issued: 08/02/2021</p>
Monthly Tmin	Seasonal Tmin
<p>Tercile minimum temperature probabilities for March 2021</p>  <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology  <small>Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004M), version 11. Available online at <a href="http://www.maritimeregions.org/">http://www.maritimeregions.org/</a></small></p> <p>Model: ACCESS-S1  Base period: 1990-2012  Model run: 06/02/2021  Issued: 08/02/2021</p>	<p>Tercile minimum temperature probabilities for March to May 2021</p>  <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology  <small>Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004M), version 11. Available online at <a href="http://www.maritimeregions.org/">http://www.maritimeregions.org/</a></small></p> <p>Model: ACCESS-S1  Base period: 1990-2012  Model run: 06/02/2021  Issued: 08/02/2021</p>

## Summary Statements

### Rainfall for January 2021:

*Above normal* rainfall was recorded across the country, while rainfall data for Labasa and Savusavu Airfield were not available.

Penang Mill and Rotuma recorded their third wettest January in their 112 and 109 years of record, respectively. Lakeba recorded its fourth wettest January in its 71 years of record, while Lautoka Mill and Laucala Bay (Suva) both recorded their sixth wettest in their 121 and 80 years of record, respectively.

### Accumulated rainfall for November 2020 to January 2021, including outlook verification:

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

Penang Mill, Laucala Bay (Suva), Nausori Airport and Rotuma all recorded their third wettest November to January period in their 106, 79, 65 and 105 years of record respectively.

The rainfall outlooks issued in October were 'Consistent' at nine sites and 'Near-Consistent' at two sites, while Labasa and Savusavu could not be verified due to missing readings.

### Outlooks for March to May 2021:

#### 1. SCOPIC:

- **Western, Northern Division and Ono-i-Lau:** 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.
- **Lakeba and Vunisea:** The outlook shows a near-equal likelihood of *above normal* and *normal* rainfall. *Below normal* is the least likely.
- **Central Division and 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 region:** *Near-normal* rainfall is most likely across the Fiji Group in **March**, except for areas along the Coral Coast where *above normal* rainfall is most likely.
- **Rotuma:** *Below normal* rainfall is favoured.

##### Monthly maximum and minimum temperatures:

- **All regions:** Temperatures are favoured to be *above normal* across the Fiji Group in **March**, except for interior parts of Viti Levu where there's little guidance for maximum temperature.

##### Seasonal rainfall:

- *Above normal* rainfall is the favoured across much of the Fiji Group for the **March to May** 2021 period, the main exceptions being some parts of the **Lomaiviti Group** where there is little guidance, and **Rotuma** where *below normal* rainfall is favoured.

##### Seasonal maximum and minimum temperature:

- **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**

<b>Product</b>	<b>Date: January 2021</b>	<b>Stakeholder</b>	<b>Total Number of Participants</b>	<b>Number of male</b>	<b>Number of female</b>
Fiji Climate Summary	08/01/21	General public	140	106	34
EAR Watch	07/01/21	Humanitarian partners	122	96	26
Fiji Climate Outlook	29/01/21	General public	124	93	31
Climate Outlook for Monasavu	12/01/21	Energy Fiji Limited	13	13	-
Ocean Outlook	20/01/21	A number of key ocean related stakeholders	36	29	7
ENSO Update	25/01/21	General public	142	116	26
Fiji Sugarcane Climate Outlook	25/01/21	Sugar Industry stakeholders	77	60	17
Meteorological Data Request	01/01/21 to 31/01/21	A range of stakeholders	51	49	2
<b>Total</b>			705	562	143