

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 150

Country: Fiji

TABLE 1: Monthly Rainfall

Station (include data period)	Dec-2019	Jan-2020	Feb-2020				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
<i>Western Division</i>							
Penang Mill (1910-2020)	164.6	127.5	176.8	293.1	404.9	348.2	19/111
Lautoka Mill (1900-2020)	158.6	114.1	245.6	223.1	388.6	281.9	47/120
Nadi Airport (1942-2020)	202.3	78.2	116.8	223.0	375.4	285.8	11/78
<i>Central Division</i>							
Laucala Bay (Suva) (1942-2020)	293.8	157.7	86.4	243.7	328.1	290.4	2/79
Nausori Airport (1957-2020)	254.4	162.1	119.1	228.5	317.9	286.0	2/64
Tokotoko (Navua) (1945-2020)	239.5	327.5	94.0	258.9	352.1	291.4	2/75
<i>Eastern Division</i>							
Lakeba (1950-2020)	170.8	121.4	191.2	160.8	277.7	198.4	36/71
Vunisea (Kadavu) (1931-2020)	387.9	132.9	103.6	165.7	276.6	231.0	14/85
Ono-i-Lau (1943-2020)	226.0	53.1	35.1	129.3	226.3	178.2	5/74
<i>Northern Division</i>							
Labasa Airport (1946-2020)	198.2	181.3	163.6	246.3	459.6	348.3	8/64
Savusavu Airfield (1956-2020)	341.8	142.9	114.0	157.3	303.6	258.6	11/62
Udu Point	294.4	311.7	162.0	219.6	358.9	275.6	15/73
Rotuma (1912-2020)	184.6	281.5	194.8	281.4	364.8	313.3	15/108

TABLE 2: Three-month Rainfall for December 2019 to February 2020

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities* based on NINO3.4 September-October 2019				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
<i>Western Division</i>											
Penang Mill (1910-2020)	468.9	Below normal	825.6	1089.7	957.7	9/107	43	42	15	23	Consistent
Lautoka Mill (1900-2020)	518.3	Below normal	678.0	999.7	846.2	27/120	43	40	17	27	Consistent
Nadi Airport (1942-2020)	397.3	Below normal	672.4	948.6	848.4	10/77	42	38	20	18	Consistent
<i>Central Division</i>											
Laucala Bay (Suva) (1942-2020)	537.9	Below normal	782.9	1015.2	880.0	3/78	36	34	30	1	Consistent
Nausori Airport (1957-2020)	535.6	Below normal	786.9	1023.7	870.8	3/64	34	34	32	-1	Near-consistent
Tokotoko (Navua) (1945-2020)	661.0	Below normal	879.9	1113.2	989.9	6/73	34	34	32	-2	Near-consistent
<i>Eastern Division</i>											
Lakeba (1950-2020)	483.4	Below normal	582.1	757.3	666.2	12/70	44	40	16	29	Consistent
Vunisea (Kadavu) (1931-2020)	624.4	Normal	548.2	764.6	652.5	43/82	41	30	29	8	Near-consistent
Ono-i-Lau (1943-2020)	314.2	Below normal	439.1	630.9	547.6	12/70	38	33	29	4	Consistent
<i>Northern Division</i>											
Labasa Airport (1947-2020)	543.1	Below normal	785.9	1088.0	897.2	14/61	41	42	17	30	Near-consistent
Savusavu Airfield (1957-2020)	598.7	Normal	581.5	854.6	707.8	22/60	39	36	25	9	Near-consistent
Udu Point	768.1	Normal	749.2	1049.1	929.8	28/70	42	28	30	10	Near-consistent
Rotuma (1912-2020)	660.9	Below normal	866.5	1058.8	964.2	9/104	41	39	20	17	Consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for April to June 2020

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

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
<i>Western Division</i>						
Penang Mill (1910-2020)	55	440.4	45		1	58
Lautoka Mill (1900-2020)	60	346.3	40		9	66
Nadi Airport (1942-2020)	58	314.4	42		7	63
<i>Central Division</i>						
Laucala Bay (Suva) (1942-2020)	57	731.6	43		4	57
Nausori Airport (1957-2020)	57	706.2	43		5	60
Tokotoko (Navua) (1945-2020)	56	861.9	44		3	57
<i>Eastern Division</i>						
Lakeba (1950-2020)	58	429.8	42		5	61
Vunisea (Kadavu) (1931-2020)	57	547.8	43		4	65
Ono-i-Lau (1943-2020)	56	426.0	44		3	62
<i>Northern Division</i>						
Labasa Airport (1946-2020)	55	404.8	45		2	62
Savusavu Airfield (1956-2020)	61	497.5	39		15	67
Udu Point (1946-2020)	53	533.8	47		0	57
Rotuma (1912-2020)	47	836.8	53		-1	49

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 (1910-2020)	37	368.7	35	541.4	28	1	41
Lautoka Mill (1900-2020)	43	263.9	35	410.4	22	13	49
Nadi Airport (1942-2020)	41	254.1	34	377.3	25	8	53
<i>Central Division</i>							
Laucala Bay (Suva) (1942-2020)	39	678.4	35	844.1	26	4	47
Nausori Airport (1957-2020)	41	645.9	34	792.9	25	8	44
Tokotoko (Navua) (1945-2020)	39	730.0	37	977.8	24	7	49
<i>Eastern Division</i>							
Lakeba (1950-2020)	40	355.9	32	502.1	28	5	42
Vunisea (Kadavu) (1931-2020)	42	484.9	31	617.5	27	8	49
Ono-i-Lau (1943-2020)	44	321.5	27	475.8	29	12	43
<i>Northern Division</i>							
Labasa Airport (1946-2020)	39	318.6	31	448.0	30	2	43
Savusavu Airfield (1956-2020)	42	397.5	38	629.2	20	14	55
Udu Point (1946-2020)	39	443.5	30	657.7	31	1	39
Rotuma (1912-2020)	32	746.3	33	916.4	35	-2	3

TABLE 4: Seasonal Climate Outlooks using POAMA2 for April to June 2020

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Lakeba	49	341.0	12	507.0	39
Nadi	45	250.0	18	385.0	37
Nabouwalu	43	409.0	24	627.0	33
Udu Point	49	397.0	12	618.0	39
Vunisea	46	446.0	18	627.0	36
Suva	46	646.0	18	821.0	36
Rotuma	46	761.0	15	973.0	39

Summary Statements

Rainfall for February 2020:

Below normal rainfall was recorded at most of the places in the Fiji Group during the month. The only exception were Lautoka Mill and Lakeba, which received *near normal* rainfall.

Laucala Bay, Nausori Airport and Tokotoko (Navua) in the Central Division registered their second-driest February since observations began. Ono-i-Lau recorded its fifth-driest February record. In the Northern Division, Labasa Airport recorded its eighth-driest February on record.

Accumulated rainfall for December 2019 to February 2020, including outlook verification:

Below normal rainfall was recorded at most parts of the country, except for Vunisea in the Eastern Division and Savusavu Airfield and Udu Point in the Northern Division, which recorded *near normal* rainfall.

Penang Mill recorded its ninth-driest December-February on record. Laucala Bay (Suva) and Nausori Airport recorded their third-driest December to February period on record, while Tokotoko (Navua) recorded its sixth-driest period on record.

The rainfall outlooks were 'Consistent' at seven sites and 'Near-Consistent' at six sites.

Outlooks for April to June 2020:

1. SCOPIC:

- **Lautoka & Nadi (Western Division), Suva & Nausori (Central Division), Lakeba, Vunisea & Ono-i-Lau (Eastern Division) and Savusavu (Northern Division):** The outlook shows *below normal* rainfall as the most likely outcome, with *near normal* as the next most likely and *above normal* as the least likely.
- **Navua (Central Division):** The outlook shows a near equal likelihood of *below normal* and *normal* rainfall. Above normal is the least likely.
- **Penang (Western Division), Labasa & Udu Point (Northern Division) and Rotuma:** The outlook offers little guidance, as the chances of *above normal*, *normal* and *below normal* rainfall are similar.

2. POAMA:

All stations: The outlook shows *below normal* as the most likely outcome, with *above normal* rainfall as the next most likely. Normal is the least likely.

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: February 2020	Stakeholder	Total Number of Participants	Number of male	Number of female
Fiji Climate Summary	07/02/20	General public	140	106	34
Fiji Climate Outlook	13/02/20	General public	124	93	31
Climate Outlook for Monasavu	11/02/20	Energy Fiji Limited	13	13	-
EAR Watch	07/02/20	Humanitarian partners	122	96	26
Ocean Outlook	19/02/20	Reef Explorer Fiji Limited, Maritime Safety Authority of Fiji, World Wildlife Fund, Wildlife Conservation Society, Ministry of Fisheries and Tourism Sector	36	29	7
Meteorological Data Request	01/02/20 to 29/02/20	A range of stakeholders	35	30	5
Total			470	367	103