

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 143

Country: Fiji

TABLE 1: Monthly Rainfall

Station (include data period)	May-2019	Jun-2019	Jul-2019				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Western Division							
Penang Mill (1910-2019)	29.5	64.0	59.8	23.4	55.1	34.8	77/110
Lautoka Mill (1900-2019)	6.2	49.7	61.2	14.1	54.8	32.8	83/120
Nadi Airport (1942-2019)	2.2	58.1	65.0	15.2	63.8	32.7	54/78
Central Division							
Laucala Bay (Suva) (1942-2019)	115.6	134.8	214.0	92.6	158.1	125.9	64/78
Nausori Airport (1957-2019)	65.9	190.5	226.4	92.6	134.2	119.2	55/63
Tokotoko (Navua) (1945-2019)	153.2	217.5	244.5	144.9	210.7	172.9	58/74
Eastern Division							
Lakeba (1950-2019)	57.5	124.9	57.6	47.4	80.1	57.3	35/68
Vunisea (Kadavu) (1931-2019)	125.3	115.1	254.3	83.3	125.0	95.7	80/82
Ono-i-Lau (1943-2019)	112.4	162.1	80.0	59.2	112.3	71.4	40/72
Northern Division							
Labasa Airport (1946-2019)	5.1	129.9	46.1	20.0	49.1	32.2	43/64
Savusavu Airfield (1956-2019)	131.9	135.8	99.8	54.5	105.5	83.0	38/64
Udu Point (1946-2019)	137.6	260.5	65.2	61.6	95.7	80.2	27/70
Rotuma (1912-2019)	377.6	403.2	140.8	172.9	261.0	217.2	32/104

TABLE 2: Three-month Rainfall for May to July 2019

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 February-March 2019				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
<i>Western Division</i>											
Penang Mill (1910-2019)	153.3	Below normal	169.0	301.9	254.8	28/110	55	31	14	12	Consistent
Lautoka Mill (1900-2019)	117.1	Below normal	141.4	219.0	179.2	27/120	62	24	14	18	Consistent
Nadi Airport (1942-2019)	125.3	Below normal	140.5	241.5	174.8	22/77	55	30	15	12	Consistent
<i>Central Division</i>											
Laucala Bay (Suva) (1942-2019)	464.4	Normal	442.7	615.2	509.5	30/78	58	29	13	16	Near-consistent
Nausori Airport (1957-2019)	482.8	Normal	423.6	580.8	508.9	26/63	65	22	13	21	Near-consistent
Tokotoko (Navua) (1945-2019)	615.2	Normal	555.0	743.1	642.0	30/74	60	29	11	19	Near-consistent
<i>Eastern Division</i>											
Lakeba (1950-2019)	240.0	Below normal	250.3	364.1	319.1	20/67	65	21	14	19	Consistent
Vunisea (Kadavu) (1931-2019)	494.7	Above normal	338.5	450.5	389.3	62/81	44	38	18	4	Inconsistent
Ono-i-Lau (1943-2019)	354.5	Normal	227.7	369.4	303.1	44/68	56	28	16	13	Near-consistent
<i>Northern Division</i>											
Labasa Airport (1947-2019)	181.1	Normal	152.1	258.4	197.6	26/63	57	29	14	16	Near-consistent
Savusavu Airfield (1957-2019)	367.5	Normal	295.9	460.0	358.5	31/60	60	25	15	17	Near-consistent
Udu Point (1946-2019)	463.3	Normal	302.5	467.0	366.9	45/69	50	26	24	5	Near-consistent
Rotuma (1912-2019)	921.6	Above normal	680.2	862.7	789.8	80/103	29	35	36	-1	Consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for September to November 2019

Predictor and Period used: NINO3.4 for June to July 2019

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
<i>Western Division</i>						
Penang Mill (1910-2019)	74	295.9	26		17	72
Lautoka Mill (1900-2019)	71	279.8	29		15	71
Nadi Airport (1942-2019)	78	295.3	22		23	73
<i>Central Division</i>						
Laucala Bay (Suva) (1942-2019)	60	650.2	40		3	59
Nausori Airport (1957-2019)	64	597.2	36		6	58
Tokotoko (Navua) (1945-2019)	76	779.1	24		21	73
<i>Eastern Division</i>						
Lakeba (1950-2019)	67	333.4	33		8	66
Vunisea (Kadavu) (1931-2019)	70	408.2	30		11	67
Ono-i-Lau (1943-2019)	70	299.4	30		12	70
<i>Northern Division</i>						
Labasa Airport (1946-2019)	69	307.7	31		13	67
Savusavu Airfield (1956-2019)	72	424.3	28		19	74
Udu Point (1946-2019)	64	497.4	36		5	59
Rotuma (1912-2019)	44	878.2	56		0	59

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 (1910-2019)	51	255.9	34	415.4	15	14	46
Lautoka Mill (1900-2019)	57	193.5	31	350.3	12	19	51
Nadi Airport (1942-2019)	64	239.7	28	342.9	8	27	49
<i>Central Division</i>							
Laucala Bay (Suva) (1942-2019)	47	468.4	32	763.6	21	7	45
Nausori Airport (1957-2019)	47	434.7	36	728.6	17	10	39
Tokotoko (Navua) (1945-2019)	58	643.1	31	937.6	11	23	49
<i>Eastern Division</i>							
Lakeba (1950-2019)	49	297.6	35	410.4	16	10	46
Vunisea (Kadavu) (1931-2019)	54	341.5	31	453.9	15	12	55
Ono-i-Lau (1943-2019)	56	207.9	29	384.2	15	13	50
<i>Northern Division</i>							
Labasa Airport (1946-2019)	53	260.0	34	374.3	13	18	47
Savusavu Airfield (1956-2019)	65	366.4	22	515.5	13	26	57
Udu Point (1946-2019)	44	376.9	30	564.0	26	3	41
Rotuma (1912-2019)	33	727.5	29	963.7	38	-1	38

TABLE 4: Seasonal Climate Outlooks using POAMA2 for September to November 2019

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Lakeba	49	225.0	15	313.0	36
Nadi	52	178.0	15	305.0	33
Nabouwalu	52	284.0	5	439.0	43
Udu Point	33	325.0	12	501.0	55
Vunisea	52	291.0	15	431.0	33
Suva	52	369.0	15	713.0	33
Rotuma	15	723.0	18	970.0	67

Summary Statements

Rainfall for July 2019:

Above normal rainfall was recorded across the Western and Central Divisions, together with Vunisea in the Eastern Division. *Near normal* rainfall was recorded across the Northern Division, with Lakeba and Ono-i-Lau also experiencing similar conditions in the Eastern Division. In contrast, Rotuma received *below normal* rainfall.

Accumulated rainfall for May to July 2019, including outlook verification:

Below normal to *normal* rainfall was recorded at majority of the places, except for Vunisea and Rotuma, which recorded *above normal* rainfall.

The rainfall outlooks were 'Consistent' at 5 sites, 'Near-Consistent' at 7 sites and 'Inconsistent' at 1 site.

Outlooks for September to November 2019:

1. SCOPIC:

- **Western Division, Navua (Central Division), Vunisea, Ono-i-Lau (Eastern Division), Labasa Airport and Savusavu Airfield (Northern Division):** The outlook favours *below normal* rainfall, with *near normal* the next most likely.
- **Laucala Bay (Suva), Nausori Airport (Central Division), Lakeba (Eastern Division), Udu Point (Northern Division):** The outlook shows *below normal* rainfall as the most likely outcome, with *near normal* the next most likely and *above normal* the least likely.
- **Rotuma:** The outlook offers little guidance as the chances of *above normal*, *normal* and *below normal* rainfall are similar.

2. POAMA:

The outlook favours *below normal* rainfall across the country, except at Udu Point and Rotuma where *above normal* rainfall is likely.

Table: 5 Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholder

Product	Date: July 2019	Stakeholder	Total Number of Participants	Number of male	Number of female
Fiji Climate Summary	05/07/2019	General public	140	106	34
Fiji Climate Outlook	11/07/2019	General public	124	93	31
Climate Outlook for Monasavu	09/07/2019	EFL	13	13	-
EAR Watch	08/07/2019	Humanitarian partners	122	96	26
ENSO Outlook	25/07/2019	General public	142	116	26
Fiji Sugarcane Rainfall Outlook	30/07/2019	Sugar industry stakeholders	77	60	17
Stakeholder engagement on ocean and tides	15/07/19 to 16/07/19	Pacific Blue Foundation, USP, Fiji Ports, Fiji Navy, Government Shipping Service, FNU, WWF, WCS, Mineral Resources Department, Conservation International and Vuda Marina	36	26	10
Meteorological Data Requests	01/07/19 to 31/07/19	A range of stakeholders	54	47	7
Total			708	557	151