

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 72

Country Name: Fiji

TABLE 1: Monthly Rainfall

Station (include data period)	August 2013						
	June 2013 Total	July 2013 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Western Division							
Penang Mill (1910-2013)	102.6	61.5	36.9	39.4	78.6	56.0	32/104
Lautoka Mill (1900-2013)	138.6	9.7	18.3	24.1	81.8	43.7	27/114
Nadi Airport (1942-2013)	124.9	6.3	10.7	26.7	74.4	49.6	13/72
Yasawa-I-Rara (1950-2013)	43.0	61.1	119.0	29.4	58.4	46.0	51/60
Central Division							
Laucala Bay (Suva) (1942-2013)	140.9	238.3	155.4	93.1	147.2	126.7	51/72
Nausori Airport (1957-2013)	229.5	284.5	149.3	90.2	167.0	113.4	37/57
Tokotoko (Navua) (1945-2013)	361.7	273.0	288.2	140.1	213.5	187.1	52/68
Eastern Division							
Lakeba (1950-2013)	78.8	188.4	148.2	53.4	100.8	73.0	51/65
Vunisea (Kadavu) (1931-2013)	123.5	81.3	85.4	56.4	124.3	87.1	36/77
Ono-I-Lau (1943-2013)	77.5	56.2	118.1	52.8	105.2	76.7	46/66
Northern Division							
Labasa Airfield (1956-2013)	82.4	33.2	131.4	13.7	63.2	47.7	56/58
Nabouwalu (1918-2013)	153.9	108.3	Missing	53.5	120.0	85.0	Missing
Rotuma (1912-2013)	208.2	Missing	Missing	153.0	256.2	197.3	Missing

**TABLE 2: Three-monthly Rainfall
June to August 2013
Predictors and Period used : SST 1 & 9 (Feb to April)**

Station	Three-month Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking	Forecast probs.* (include LEPS)	Verification* (Consistent, Near-consistent Inconsistent?)
Western Division							
Penang Mill (1910-2013)	201.0	160.0	226.4	185.4	61/104	35:25: 40 (1.0)	Near-consistent
Lautoka Mill (1900-2013)	166.6	121.2	223.8	170.1	55/114	25:28: 47 (9.3)	Near-consistent
Nadi Airport (1942-2013)	141.9	124.6	208.8	179.9	30/72	24:34: 42 (8.3)	Near-consistent
Yasawa-I-Rara (1950-2013)	223.1	132.2	246.4	193.8	33/60	31:31: 38 (7.6)	Near-consistent
Central Division							
Laucala Bay (Suva) (1942-2013)	534.6	366.9	506.5	436.2	50/72	37:26:37 (2.4)	Near-consistent
Nausori Airport (1957-2013)	663.3	350.3	495.5	428.0	49/57	35:27: 38 (7.7)	Consistent
Tokotoko (Navua) (1945-2013)	922.9	500.3	679.0	576.5	63/68	33:33:34 (4.3)	Near-consistent
Eastern Division							
Lakeba (1950-2013)	415.4	196.8	304.0	270.5	54/63	29:34: 37 (12.0)	Consistent
Vunisea (Kadavu) (1931-2013)	290.2	255.0	398.0	320.1	35/77	31: 36 :33 (2.1)	Consistent
Ono-I-Lau (1943-2013)	251.8	254.8	347.4	289.9	21/64	38 :26:36 (-0.7)	Consistent
Northern Division							
Labasa Airfield (1956-2013)	247.0	116.0	184.2	146.5	54/57	25:28: 47 (11.0)	Consistent
Nabouwalu (1918-2013)	Missing	231.9	336.9	283.5	Missing	26: 38 :36 (15.8)	Missing
Rotuma (1912-2013)	Missing	589.6	784.5	705.8	Missing	28: 41 :31 (1.8)	Missing

* Forecast is consistent when observed and predicted (tercile with the highest probability) categories coincide (are in the same tercile).

Forecast is near-consistent when observed and predicted (tercile with the highest probability) differ by only one category (i.e. terciles 1 and 2 or terciles 2 and 3).

Forecast is inconsistent when observed and predicted (tercile with the highest probability) differ by two categories (i.e. terciles 1 and 3).

**TABLE 3: Seasonal Climate Outlooks using SCOPIC for
October to December 2013**

Predictors and Period used: SOI (June to August 2013)

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
<i>Western Division</i>							
Penang Mill (1910-2013)	23	347.6	33	570.9	44	7.0	43.9
Lautoka Mill (1900-2013)	19	277.0	36	443.9	45	11.8	44.2
Nadi Airport (1942-2013)	16	325.7	37	477.9	47	13.3	50.0
Yasawa-I-Rara (1950-2013)	20	261.6	30	433.6	50	14.7	46.7
<i>Central Division</i>							
Laucala Bay (Suva) (1942-2013)	22	539.0	34	828.2	44	6.5	42.3
Nausori Airport (1957-2013)	20	541.0	37	809.8	43	5.3	39.3
Tokotoko (Navua) (1945-2013)	21	749.1	32	1024.9	47	10.0	41.8
<i>Eastern Division</i>							
Lakeba (1950-2013)	15	334.4	38	527.0	47	13.8	45.3
Vunisea (Kadavu) (1931-2013)	19	306.9	35	502.8	46	10.1	40.3
Ono-I-Lau (1943-2013)	10	225.1	39	401.0	51	20.9	53.7
<i>Northern Division</i>							
Labasa Airfield (1956-2013)	15	364.0	31	632.3	54	15.1	46.3
Nabouwalu (1918- 2013)	11	445.2	33	700.0	56	22.6	50.0
Rotuma (1912 -2013)	30	837.4	38	1057.0	32	-0.8	42.4

Seasonal Climate Outlook:

October to December 2013 - Median Table:

Station	Below Median (prob)	Median rainfall (mm)	Above Median (prob)			LEPS	Hit-rate
<i>Western Division</i>							
Penang Mill (1910-2013)	34	461	66			12.7	67.3
Lautoka Mill (1900-2013)	34	358	66			13.6	63.7
Nadi Airport (1942-2013)	31	380.1	69			14.9	65.7
Yasawa-I-Rara (1950-2013)							
<i>Central Division</i>							
Laucala Bay (Suva) (1942-2013)	38	691.2	62			6	59.2
Nausori Airport(1957-2013)	29	679.6	71			12.8	66.1
Tokotoko (Navua) (1945-2013)	31	873.2	69			15.6	65.7
<i>Eastern Division</i>							
Lakeba (1950-2013)	32	409.1	68			15	68.8
Vunisea (Kadavu) (1931-2013)	35	409	65			8.6	67.5
Ono-I-Lau (1943-2013)	19	348.3	81			33.8	82.1
<i>Northern Division</i>							
Labasa Airfield (1956-2013)	22	485.4	78			22.2	70.4
Nabouwalu (1918-2013)	27	546	73			18.6	68.1
Rotuma (1912 -2013)	48	946.7	52			-0.9	57.6

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for
October to December 2013**

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Nadi Airport	30	305	33	410	37
Suva	30	505	33	763	37
Udu Point	30	437	30	605	40
Rotuma	30	828	40	1026	30

Summary Statements

Rainfall for August 2013:

Majority of the stations in the Western Division received *below normal* rainfall during August with *normal* to *above normal* rainfall recorded in the other Divisions.

Accumulated rainfall for June – August 2013, including outlook verification:

Rainfall over the past three months was *above normal* across the Central Division, while *normal* rainfall was received throughout the Western Division. Rainfall in the Eastern Division varied significantly, ranging from *below normal* to *above normal*, whereas Labasa Airfield in the Northern Division recorded *above normal* rainfall.

The SCOPIC forecasts for the June to August 2013 period were consistent at 4 out of the 13 stations, near-consistent at 7, while the forecast for 2 stations cannot be verified due to missing observations.

Outlooks for October - December 2013:

1. SCOPIC:

Above normal rainfall is favoured across the country over October to December 2013 period. The forecast skill generally ranges from *moderate* to *good*.

The SCOPIC Model favours *normal* rainfall at Rotuma with *very low* skill.

2. POAMA:

POAMA Model favours *above normal* rainfall at Nadi Airport, Suva and Udu Point, while *normal* rainfall is favoured at Rotuma.

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: $X \geq 35$