

Pacific Islands - Online Climate Outlook Forum (OCOF) No.73

Country Name: Fiji

TABLE 1: Monthly Rainfall

Station (include data period)	September 2013						
	July 2013 Total	August 2013 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Western Division							
Penang Mill (1910-2013)	61.5	36.9	37.2	42.4	108.0	69.4	30/103
Lautoka Mill (1900-2013)	9.7	18.3	73.8	32.6	83.6	52.8	73/114
Nadi Airport (1942-2013)	6.3	10.7	159.0	36.5	92.4	62.8	62/72
Yasawa-I-Rara (1950-2013)	61.1	119.0	57.3	37.0	95.2	61.6	28/61
Central Division							
Laucala Bay (Suva) (1942-2013)	238.3	155.4	173.7	122.9	231.1	160.9	39/72
Nausori Airport (1957-2013)	284.5	149.3	139.9	107.7	211.4	150.2	25/57
Tokotoko (Navua) (1945-2013)	273.0	288.2	394.1	158.7	287.1	217.0	60/69
Eastern Division							
Lakeba (1950-2013)	188.4	148.2	111.3	69.6	125.5	92.5	39/65
Vunisea (Kadavu) (1931-2013)	81.3	85.4	372.5	76.8	151.0	109.9	77/78
Ono-I-Lau (1943-2013)	56.2	118.1	75.6	70.1	126.1	101.0	27/66
Northern Division							
Labasa Airfield (1956-2013)	33.2	131.4	131.7	37.7	82.6	63.0	48/57
Nabouwalu (1918-2013)	108.3	Missing	65.8	83.0	156.3	106.4	24/95
Rotuma (1912-2013)	Missing	Missing	Missing	180.5	242.3	210.9	Missing

- Nabouwalu had missing readings during the first 3 days of September, during which most of the stations across the country recorded some rainfall.

**TABLE 2: Three-monthly Rainfall
July to September 2013
Predictors and Period used: SST 1 & 9 (March to May)**

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)	135.6	155.7	235.2	198.4	30/103	29/34/ 37 (1.1)	Inconsistent
Lautoka Mill (1900-2013)	101.8	131.8	221.9	174.0	28/114	25/26/ 49 (5.8)	inconsistent
Nadi Airport (1942-2013)	176.0	131.6	216.0	175.1	37/72	26/26/ 48 (4.2)	Near-consistent
Yasawa-I-Rara (1950-2013)	237.4	123.3	216.3	141.9	41/60	27/28/ 45 (2.9)	Consistent
Central Division							
Laucala Bay (Suva) (1942-2013)	567.4	389.5	564.5	464.6	49/72	34/28/ 38 (-3.3)	Consistent
Nausori Airport (1957-2013)	573.7	366.9	531.5	441.8	46/57	32/25/ 43 (-2.3)	Consistent
Tokotoko (Navua) (1945-2013)	955.3	532.1	684.3	625.7	63/68	35/28/ 37 (-2.3)	Consistent
Eastern Division							
Lakeba (1950-2013)	447.9	206.2	318.7	244.9	57/63	28/31/ 41 (1.8)	Consistent
Vunisea (Kadavu) (1931-2013)	539.2	272.9	381.7	331.6	66/77	26/ 46 /28/ (-1.8)	Near-consistent
Ono-I-Lau (1943-2013)	249.9	252.4	348.0	295.5	20/66	29/ 36 /35 (-2.4)	Near-consistent
Northern Division							
Labasa Airfield (1956-2013)	296.3	113.4	196.8	157.8	49/57	23/ 40 /37 (2.8)	Near-consistent
Nabouwalu (1918-2013)	Missing	212.0	367.0	279.8	Missing	27/ 39 /34 (3.9)	Unverified
Rotuma (1912-2013)	Missing	576.5	775.2	656.9	Missing	34/ 39 /27 (-2.1)	Unverified

* 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
November 2013 to January 2014**

Predictors and Period used: SOI (July to September 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	564.7	37	822.4	40	12.6	52
Lautoka Mill (1900-2013)	21	415.4	37	691.8	42	26.2	55.8
Nadi Airport (1942-2013)	16	427.9	41	750.2	43	26.6	54.3
Yasawa-I-Rara (1950-2013)	18	392.4	40	631.8	42	27.3	55.0
<i>Central Division</i>							
Laucala Bay (Suva) (1942-2013)	31	682.5	33	1036.0	36	1.2	31
Nausori Airport (1957-2013)	28	743.6	32	1004.3	40	11.7	45.6
Tokotoko (Navua) (1945-2013)	27	863.7	37	1115.9	36	2.4	40.3
<i>Eastern Division</i>							
Lakeba (1950-2013)	25	464.2	35	672.3	40	18.5	45.3
Vunisea (Kadavu) (1931-2013)	26	443.4	35	632.8	39	10.1	44.7
Ono-I-Lau (1943-2013)	20	351.4	37	514.9	43	21.5	44.6
<i>Northern Division</i>							
Labasa Airfield (1956-2013)	22	586.5	32	953.9	46	25.4	50.9
Nabouwalu (1918- 2013)	20	649.0	36	890.0	44	24.0	55.3
Rotuma (1912 -2013)	27	898.7	37	1082.3	36	2.5	42.9

Seasonal Climate Outlook:

November 2013 to January 2014 - Median Table:

Station	Below Median (prob)	Median rainfall (mm)	Above Median (prob)	LEPS	Hit-rate
<i>Western Division</i>					
Penang Mill (1910-2013)	41	682.8	59	14	66.3
Lautoka Mill (1900-2013)	38	561.5	62	21.9	69.0
Nadi Airport (1942-2013)	37	656.2	63	25.7	68.6
Yasawa-I-Rara (1950-2013)	33	503.5	67	36.5	80.0
<i>Central Division</i>					
Laucala Bay (Suva) (1942-2013)	45	849.4	55	5.2	60.6
Nausori Airport (1957-2013)	43	850.4	57	7.2	59.6
Tokotoko (Navua) (1945-2013)	49	928.6	51	-1.4	49.3
<i>Eastern Division</i>					
Lakeba (1950-2013)	40	585.4	60	16.0	67.2
Vunisea (Kadavu) (1931-2013)	41	523.3	59	13.9	68.4
Ono-I-Lau (1943-2013)	43	448.6	57	8.7	66.2
<i>Northern Division</i>					
Labasa Airfield (1956-2013)	33	672.1	67	23.4	71.7
Nabouwalu (1918-2013)	37	759.4	63	21.9	70.2
Rotuma (1912 -2013)	47	994.7	53	1	56.1

TABLE 4: Seasonal Climate Outlooks using POAMA2 for November 2013 to January 2014

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Nadi Airport	30	410	30	711	40
Suva	30	683	30	933	40
Udu Point	23	601	37	751	40
Rotuma	37	775	30	1056	33

Summary Statements

Rainfall for September 2013:

Normal to above normal rainfall was recorded in the Central and Eastern Divisions, *normal to below normal* rainfall experienced in the Northern Division while Western Division recorded *below normal to above normal* rainfall.

Accumulated rainfall for July – September 2013, including outlook verification:

Rainfall over the past three months was *below normal* at *Penang and Lautoka Mill in the Western Division and Ono-I-Lau in the Eastern Division*, *normal* rainfall was recorded at Nadi Airport while rest of the sites recorded *above normal* rainfall.

The SCOPIC forecasts for the July to September 2013 period were consistent at 5 out of the 13 stations, near-consistent at 4, Inconsistent at 2, while the forecast for 2 stations cannot be verified due to missing observations.

Outlooks for November 2013 – January 2014:

1. SCOPIC:

Above normal rainfall is favoured across the country over November 2013 to January 2014 period. The forecast skill generally ranges from *moderate* to *good*.

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

2. POAMA:

POAMA Model favours *above normal* rainfall at Nadi Airport, Suva and Udu Point, while *below 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: $X \geq 35$