

## Pacific Islands - Online Climate Outlook Forum (OCOF) No.79

**Country Name:** Fiji

### TABLE 1: Monthly Rainfall

Station (include data period)			March 2014				
	January 2014 Total	February 2014 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
<b>Western Division</b>							
Penang Mill (1910-2014)	363.0	482.6	<b>242.9</b>	270.7	446.9	363.8	31/105
Lautoka Mill (1900-2014)	311.3	154.6	<b>101.1</b>	220.7	398.1	290.1	5/114
Nadi Airport (1942-2014)	401.7	231.4	<b>136.7</b>	245.6	411.6	319.3	6/71
Yasawa-I-Rara (1950-2014)	327.0	206.7	<b>155.0</b>	184.6	324.8	238.2	14/63
<b>Central Division</b>							
Laucala Bay (Suva) (1942-2014)	405.0	680.8	<b>497.1</b>	298.4	433.9	345.2	59/73
Nausori Airport (1957-2014)	281.9	453.1	<b>427.8</b>	309.9	448.9	367.0	37/58
Tokotoko (Navua) (1945-2014)	449.2	678.2	<b>752.5</b>	322.5	439.0	381.1	68/70
<b>Eastern Division</b>							
Lakeba (1950-2014)	102.6	317.7	<b>192.9</b>	222.6	336.5	265.4	10/64
Vunisea (Kadavu) (1931-2014)	298.0	337.8	<b>309.8</b>	218.7	302.8	274.0	55/78
Ono-I-Lau (1943-2014)	117.9	255.9	<b>63.2</b>	172.3	294.4	213.7	3/67
<b>Northern Division</b>							
Labasa Airfield (1956-2014)	385.0	451.8	<b>158.1</b>	273.4	439.3	356.0	6/59
Nabouwalu (1918-2014)	309.0	265.9	<b>251.3</b>	245.0	373.8	298.2	36/97
Rotuma (1912-2014)	386.5	433.4	<b>303.9</b>	260.5	421.7	327.5	44/101

Period: \*below normal/normal/above normal

**TABLE 2: Three-monthly Rainfall  
January to March 2014**  
**Predictors and Period used: SOI (September to November 2013)**

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?)
<b>Western Division</b>							
Penang Mill (1910-2014)	<b>1088.5</b>	931.2	1188.7	1068.6	56/105	25/36/ <b>39</b> (15.8)	Near Consistent
Lautoka Mill (1900-2014)	<b>567.0</b>	806.0	1073.4	945.8	18/114	25/35/ <b>40</b> (14.7)	Inconsistent
Nadi Airport (1942-2014)	<b>769.8</b>	838.6	1094.7	937.5	21/71	26/36/ <b>38</b> (12.8)	Inconsistent
Yasawa-I-Rara (1950-2014)	<b>688.7</b>	638.9	908.3	764.9	24/62	17/ <b>42</b> /41 (25.4)	Consistent
<b>Central Division</b>							
Laucala Bay (Suva) (1942-2014)	<b>1582.9</b>	853.0	1085.9	1012.4	<b>71/73</b>	32/33/ <b>35</b> (-1.1)	Consistent
Nausori Airport (1957-204)	<b>1162.8</b>	888.2	1077.4	956.3	43/58	<b>33/34/33</b> (-2.2)	Near Consistent
Tokotoko (Navua) (1945-2014)	<b>1879.9</b>	926.8	1245.5	1086.6	<b>70/70</b>	34/ <b>35</b> /31 (-0.4)	Near Consistent
<b>Eastern Division</b>							
Lakeba, Lau (1950-2014)	<b>613.2</b>	661.1	890.4	765.0	17/64	26/36/ <b>38</b> (17.5)	Inconsistent
Vunisea (Kadavu) (1931-2014)	<b>945.6</b>	615.1	834.2	743.9	64/78	30/ <b>35/35</b> (1.1)	Near Consistent
Ono-I-Lau (1943-2014)	<b>437.0</b>	500.9	687.7	617.8	12/66	31/33/ <b>36</b> (0.5)	Inconsistent
<b>Northern Division</b>							
Labasa Airfield (1956-2014)	<b>994.9</b>	981.0	1305.0	1128.7	22/58	25/37/ <b>38</b> (9.9)	Near Consistent
Nabouwalu (1918-2014)	<b>826.2</b>	827.1	1073.2	944.0	32/97	24/37/ <b>39</b> (13.1)	Inconsistent
Rotuma (1912-2014)	<b>1123.8</b>	930.0	1164.0	1049.3	60/101	25/37/ <b>38</b> (9.1)	Near Consistent

\* 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  
May to July 2014**

**Predictors and Period used: SST 1 & 9 (January to March 2014)**

<b>Station</b>	<b>Below Normal (prob)</b>	<b>33%ile rainfall (mm)</b>	<b>Normal (prob)</b>	<b>66%ile rainfall (mm)</b>	<b>Above Normal (prob)</b>	<b>LEPS (%)</b>	<b>Hit-rate (%)</b>
<b><i>Western Division</i></b>							
Penang Mill (1910-2014)	26	179.3	22	300.0	<b>52</b>	10.4	47.7
Lautoka Mill (1900-2014)	23	153.2	37	235.7	<b>40</b>	15.2	47.7
Nadi Airport (1942-2014)	23	143.2	35	247.5	<b>42</b>	9.1	43.1
Yasawa-I-Rara (1950-2014)	20	172.5	27	275.0	<b>53</b>	18.4	55.0
<b><i>Central Division</i></b>							
Laucala Bay (Suva) (1942-2014)	<b>41</b>	440.0	34	611.9	25	13.7	44.6
Nausori Airport (1957-2014)	20	433.8	<b>43</b>	586.8	37	14.7	45.6
Tokotoko (Navua) (1945-2014)	<b>43</b>	586.5	30	771.1	27	14.0	47.7
<b><i>Eastern Division</i></b>							
Lakeba (1950-2014)	13	262.9	31	367.0	<b>56</b>	19.3	44.4
Vunisea (Kadavu) (1931- 2014)	20	327.9	<b>63</b>	450.2	17	2.0	43.8
Ono-I-Lau (1943-2014)	<b>36</b>	232.3	28	370.9	<b>36</b>	5.8	50.0
<b><i>Northern Division</i></b>							
Labasa Airfield (1956- 2014)	18	174.6	27	272.5	<b>55</b>	19.8	50.9
Nabouwalu (1918-2014)	17	321.4	36	442.9	<b>47</b>	18.3	47.7
Rotuma (1912 -2014)	23	690.9	<b>42</b>	871.6	35	1.1	41.3

## Seasonal Climate Outlook:

### May to July 2014- Median Table:

Predictors and Period used: SST 1 & 9 (January to March 2014)

Station	Below Median (prob)	Median rainfall (mm)	Above Median (prob)	LEPS	Hit-rate
<b>Western Division</b>					
Penang Mill (1910-2014)	38	252.5	62	6.2	63.1
Lautoka Mill (1900-2014)	39	201.5	61	13.1	70.8
Nadi Airport (1942-2014)	39	185.3	61	15.6	69.2
Yasawa-I-Rara (1950-2014)	30	230.9	70	16.2	68.3
<b>Central Division</b>					
Laucala Bay (Suva) (1942-2014)	53	507.8	47	15.7	64.6
Nausori Airport (1957-2014)	47	517.0	53	16.4	63.2
Tokotoko (Navua) (1945-2014)	53	671.9	47	5.3	63.1
<b>Eastern Division</b>					
Lakeba (1950-2014)	26	322.9	74	12.1	65.1
Vunisea (Kadavu) (1931-2014)	50	383.5	50	-0.8	54.7
Ono-I-Lau (1943-2014)	54	311.2	46	2.0	60.0
<b>Northern Division</b>					
Labasa Airfield (1956-2014)	26	213.1	74	19.4	66.7
Nabouwalu (1918-2014)	41	366.0	59	12.7	58.5
Rotuma (1912 -2014)	43	786.0	57	3.4	60.3

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for  
May to July 2014**

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Nadi Airport	33	250.0	55	385.0	12
Suva	33	646.0	55	821.0	12
Udu Point	12	397.0	83	618.0	5
Rotuma	9	761.0	86	973.0	5

### **Summary Statements**

#### **Rainfall for March 2014:**

Rainfall was below normal across the Western Division, Lakeba and Ono-i-Lau in the Eastern Division and at Labasa in the Northern Division. Normal rainfall was recorded at Nausori Airport, Nabouwalu and Rotuma, while above normal rainfall was recorded at Laucala Bay, Tokotoko (Navua) and Vunisea (Kadavu).

Rainfall across at Ono-I-Lau and Lautoka ranked at 3<sup>rd</sup> and 5<sup>th</sup> driest respectively while at Nadi Airport and Labasa Airport, it ranked at 6<sup>th</sup> driest.

#### **Accumulated rainfall for January to March 2014, including outlook verification:**

Normal to below normal rainfall was recorded across the Western and Northern Divisions, while above normal rainfall was recorded across the Central Division and Vunisea in the Eastern Division. Lakeba and Ono-i-Lau in the Eastern Division received below normal rainfall. Normal rainfall was recorded at Rotuma.

The total three monthly rainfall at Tototoko ranked highest in the historical record, while at Laucala Bay it ranked third highest.

The SCOPIC forecasts for the past 3 months (January to March 2014) were consistent at 2 out of the 13 stations, inconsistent at 5 and near-consistent at 6.

#### **Outlooks for May to July 2014:**

##### **1. SCOPIC:**

The seasonal rainfall outlook for May to July 2014 shows:

- Above-normal is the most likely outcome for most stations, including Penang Mill, Lautoka Mill, Nadi Airport, Yasawa-i-Rara, Lakeba, Labasa and Nabouwalu;
- Normal is the most likely outcome for Nausori Airport, Vunisea and Rotuma; and
- Below normal rainfall is most likely for Laucala Bay and Tokotoko; and
- There is equal chance of below normal and above-normal rainfall at Ono-i-Lau.

## 2. POAMA:

Normal rainfall is favoured for all stations.

**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:  $X \geq 35$