

## Pacific Islands - Online Climate Outlook Forum (OCOF) No. 92

Country Name: Fiji

TABLE 1: Monthly Rainfall

Station (include data period)	April 2015						
	February 2015 Total	March 2015 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
<b>Western Division</b>							
Penang Mill (1910-2015)	354.1	143.4	<b>101.8</b>	173.1	272.5	205.2	13/105
Lautoka Mill (1900-2015)	342.1	130.0	<b>63.7</b>	116.2	198.0	147.1	16/116
Nadi Airport (1942-2015)	346.6	154.0	<b>94.5</b>	117.1	207.8	152.0	16/73
Yasawa-i-rara (1950-2015)	365.7	72.2	<b>22.0</b>	110.6	208.4	151.5	<b>3/64</b>
<b>Central Division</b>							
Laucala Bay (Suva) (1942-2015)	273.1	187.9	<b>78.3</b>	270.5	387.6	324.4	<b>2/74</b>
Nausori Airport (1957-2015)	310.0	172.7	<b>138.1</b>	262.9	391.6	321.9	6/59
Tokotoko (Navua) (1945-2015)	324.3	89.3	<b>138.1</b>	305.5	450.6	347.2	<b>5/71</b>
<b>Eastern Division</b>							
Lakeba (1950-2015)	187.4	332.4	<b>58.3</b>	132.7	219.6	175.3	<b>4/65</b>
Vunisea (Kadavu) (1931-2015)	312.2	186.4	<b>76.1</b>	150.0	269.7	212.9	<b>5/80</b>
Ono-i-lau (1943-2015)	144.0	304.5	<b>30.1</b>	103.8	212.0	170.8	<b>4/68</b>
<b>Northern Division</b>							
Labasa Airport (1956-2015)	298.2	204.0	<b>11.3</b>	160.5	283.3	244.7	<b>1/60</b>
Nabouwalu (1918-2015)	574.5	152.2	<b>M</b>	203.5	328.5	244.6	
Rotuma (1912-2015)	342.5	200.9	<b>305.4</b>	211.3	305.1	255.0	69/103

Period: \*below normal/normal/above normal

M- Missing

**TABLE 2: Three-monthly Rainfall  
February to April 2015  
Predictors and Period used: NIÑO 3.4 (October to December 2014)**

Station	Three-month Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking	Forecast probs.* (include LEPS)	Verification* (Consistent, Near-consistent or Inconsistent)
<b>Western Division</b>							
Penang Mill (1910-2015)	<b>599.3</b>	828.2	1099.2	992.8	11/105	<b>45:33:22</b> (9.8)	Consistent
Lautoka Mill (1900-2015)	<b>535.8</b>	681.3	921.2	809.0	20/115	<b>45:32:23</b> (8.0)	Consistent
Nadi Airport (1942-2015)	<b>595.1</b>	662.9	908.9	792.5	14/72	<b>49:36:15</b> (18.9)	Consistent
Yasawa-i-rara (1950-2015)	<b>459.9</b>	567.3	834.5	662.7	13/64	<b>50:27:23</b> (12.6)	Consistent
<b>Central Division</b>							
Laucala Bay (Suva) (1942-2015)	<b>539.3</b>	883.8	1119.2	947.0	<b>2/74</b>	<b>34:29:37</b> (-1.3)	Inconsistent
Nausori Airport (1957-2015)	<b>620.8</b>	893.8	1047.4	966.4	<b>4/59</b>	<b>31:30:39</b> (0.4)	Inconsistent
Tokotoko (Navua) (1945-2015)	<b>551.7</b>	1007.3	1217.8	1116.1	<b>2/71</b>	<b>31:29:40</b> (0.8)	Inconsistent
<b>Eastern Division</b>							
Lakeba, Lau (1950-2015)	<b>578.1</b>	641.1	824.6	698.9	19/65	<b>46:29:25</b> (6.1)	Consistent
Vunisea (Kadavu) (1931-2015)	<b>574.7</b>	640.5	827.0	735.4	16/79	<b>45:29:26</b> (6.6)	Consistent
Ono-i-lau (1943-2015)	<b>478.6</b>	471.4	693.8	580.9	24/66	<b>41:35:24</b> (4.4)	Near Consistent
<b>Northern Division</b>							
Labasa Airport (1956-2015)	<b>513.5</b>	798.4	1120.8	1019.2	<b>3/60</b>	<b>42:31:27</b> (4.2)	Consistent
Nabouwalu (1918-2015)	<b>M</b>	775.1	1031.7	879.2	-		-
Rotuma (1912-2015)	<b>848.8</b>	898.1	1081.7	1001.0	28/102	<b>38:35:27</b> (0.9)	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  
June to August 2015**

**Predictors and Period used: NINO 3.4 (February to April 2015)**

<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 (1910-2015)	<b>46</b>	159.8	26	226.1	28	2.7	30.8
Lautoka Mill (1900-2015)	<b>48</b>	120.7	29	223.5	23	4.7	35.4
Nadi Airport (1942-2015)	<b>48</b>	123.8	31	207.5	21	7.4	36.9
Yasawa-i-rara (1950-2015)	<b>47</b>	131.8	35	240.0	18	6.1	42.6
<b><i>Central Division</i></b>							
Laucala Bay (Suva) (1942-2015)	<b>43</b>	366.7	33	507.9	24	3.6	35.4
Nausori Airport (1957-2015)	<b>50</b>	345.2	31	498.8	19	8.4	44.8
Tokotoko (Navua) (1945- 2015)	<b>45</b>	495.9	35	680.8	20	4.4	35.9
<b><i>Eastern Division</i></b>							
Lakeba (1950-2015)	<b>50</b>	191.5	34	304.5	16	9.8	50.0
Vunisea (Kadavu) (1931- 2015)	<b>48</b>	254.5	22	397.9	30	2.8	41.5
Ono-i-lau (1943-2015)	<b>47</b>	250.9	29	345.0	24	3.5	37.7
<b><i>Northern Division</i></b>							
Labasa Airport (1956- 2015)	<b>45</b>	115.6	29	186.9	26	3.2	46.6
Nabouwalu (1918-2015)	<b>55</b>	231.5	29	336.5	16	14.1	54.7
Rotuma (1912 -2015)	24	593.7	36	782.0	<b>40</b>	1.4	42.9

## Seasonal Climate Outlook:

### June to August 2015 - Median Table:

Predictors and Period used: NINO 3.4 (February to April 2015)

Station	Below Median (prob)	Median rainfall (mm)	Above Median (prob)	LEPS	Hit-rate
<b>Western Division</b>					
Penang Mill (1910-2015)	55	185.4	45	-0.9	55.4
Lautoka Mill (1900-2015)	<b>63</b>	169.2	37	3.9	58.5
Nadi Airport (1942-2015)	<b>63</b>	167.9	37	4.7	55.4
Yasawa-i-rara (1950-2015)	<b>67</b>	193.8	33	6.9	60.7
<b>Central Division</b>					
Laucala Bay (Suva) (1942-2015)	<b>60</b>	436.2	40	1.5	55.4
Nausori Airport(1957-2015)	<b>67</b>	428	33	9.2	60.3
Tokotoko (Navua) (1945-2015)	<b>66</b>	576.5	34	6.7	57.8
<b>Eastern Division</b>					
Lakeba (1950-2015)	<b>63</b>	270.5	37	4.6	51.6
Vunisea (Kadavu) (1931-2015)	<b>66</b>	309.9	34	6.8	60.0
Ono-i-lau (1943-2015)	<b>62</b>	289.2	38	3.6	55.7
<b>Northern Division</b>					
Labasa Airport (1956-2015)	<b>61</b>	146.5	39	2.8	56.9
Nabouwalu (1918-2015)	<b>70</b>	283.3	30	11.1	60.9
Rotuma (1912 -2015)	41	709.4	59	1.5	57.1

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for  
June to August 2015**

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Lakeba	<b>73</b>	184	22	299	5
Nadi	<b>58</b>	126	33	215	9
Nabouwalu	<b>49</b>	212	<b>46</b>	316	5
Udu Point	<b>61</b>	159	34	295	5
Vunisea	<b>58</b>	294	33	448	9
Suva	<b>58</b>	359	33	501	9
Rotuma	<b>58</b>	587	37	843	5

### **Summary Statements**

#### **Rainfall for April 2015:**

Rainfall in April was *below normal* across the country except at Rotuma, which recorded *above normal* rainfall.

April 2015 is ranked as the driest April for Labasa Airfield, second driest for Laucala Bay (Suva), third driest for Yasawa-i-rara, fourth driest for Ono-i-Lau and Lakeba and fifth driest for Vunisea (Kadavu) and Tokotoko (Navua).

#### **Accumulated rainfall February to April 2015 and outlook verification:**

Rainfall over the February to April 2015 period was also *below normal* majority of the country. The only exception to this was Ono-i-lau, which received near normal rainfall.

Navua and Suva recorded their second lowest February to April rainfall total, Labasa Airfield recorded its third lowest and Nausori Airfield recorded its fourth lowest.

Eight out of the 12 forecasts for February to April 2015 period were consistent with the observed rainfall, one was near-consistent and three were inconsistent.

Majority of the country in a warning state for drought or in a drought at all three timescales that Fiji Meteorological Service monitors drought, that is, 3, 6 and 12 month.

## Outlooks for June to August 2015:

### 1. SCOPIC:

The seasonal rainfall outlook for June to August 2015 shows:

- *Below normal* rainfall is the most likely outcome across the Western, Central Northern and Eastern Divisions, with generally *normal* the next most likely;
- *Above normal* rainfall is most likely for Rotuma, with *normal* the next most likely; and
- The forecast confidences are generally *low to moderate*.

### 2. POAMA:

POAMA model favours *below normal* at most of the stations, except at Nabouwalu, which has a mixed outlook with almost equal chance of *normal* and *below normal* rainfall.

**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:  $X \geq 35$