

## Pacific Islands - Online Climate Outlook Forum (OCOF) No. 94

Country Name: Fiji

TABLE 1: Monthly Rainfall

Station (include data period)			JULY 2015				
	MAY 2015 Total	JUNE 2015 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
<b>Western Division</b>							
Penang Mill (1910-2015)	72.2	14.6	3.6	25.6	57.7	38.0	4/106
Lautoka Mill (1900-2015)	10.0	9.7	27.5	21.3	59.6	40.6	45/116
Nadi Airport (1942-2015)	2.8	14.8	15.6	17.0	61.0	34.8	25/74
Yasawa-i-rara (1950-2015)	8.6	37.0	3.0	21.3	51.3	34.0	3/62
<b>Central Division</b>							
Laucala Bay (Suva) (1942-2015)	92.9	56.9	53.3	93.5	158.8	120.7	5/74
Nausori Airport (1957-2015)	150.6	81.1	69.2	98.8	135.3	122.1	12/59
Tokotoko (Navua) (1945-2015)	194.4	135.9	133.4	145.8	214.1	184.6	22/71
<b>Eastern Division</b>							
Lakeba (1950-2015)	20.3	74.4	70.0	48.5	93.3	59.0	37/65
Vunisea (Kadavu) (1931-2015)	438.5	M	82.7	80.4	123.0	94.4	30/79
Ono-i-lau (1943-2015)	31.5	59.5	38.8	57.6	116.2	70.7	12/69
<b>Northern Division</b>							
Labasa Airport (1956-2015)	62.3	10.8	0	23.2	57.0	33.3	1/60
Nabouwalu (1918-2015)	161.8	51.8	M	51.2	103.5	79.7	
Rotuma (1912-2015)	125.0	211.5	209.2	180.1	254.7	214.0	51/102

Period: \*below normal/normal/above normal

M- Missing

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

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)
<i>Western Division</i>							
Penang Mill (1910-2015)	<b>90.4</b>	179.7	299.0	254.0	7/106	43:35:22 (8.4)	<b>Consistent</b>
Lautoka Mill (1900-2015)	<b>47.2</b>	153.6	235.7	206.8	<b>3/116</b>	51:29:20 (17.4)	<b>Consistent</b>
Nadi Airport (1942-2015)	<b>33.2</b>	144.6	247.4	185.0	<b>2/73</b>	45:33:22(10.0)	<b>Consistent</b>
Yasawa-i-rara (1950-2015)	<b>48.6</b>	173.2	273.6	230.8	<b>3/62</b>	51:23:26 (16.3)	<b>Consistent</b>
<i>Central Division</i>							
Laucala Bay (Suva) (1942-2015)	<b>203.1</b>	440.0	614.5	509.5	<b>3/74</b>	45:36:19 (12.4)	<b>Consistent</b>
Nausori Airport (1957-2015)	<b>300.9</b>	431.0	585.0	516.8	7/59	48:33:19 (17.0)	<b>Consistent</b>
Tokotoko (Navua) (1945-2015)	<b>463.7</b>	576.5	760.1	661.8	13/71	48:38:14 (16.7)	<b>Consistent</b>
<i>Eastern Division</i>							
Lakeba, Lau (1950-2015)	<b>164.7</b>	258.6	365.0	321.3	11/165	52:27:21(17.8)	<b>Consistent</b>
Vunisea (Kadavu) (1931-2015)	<b>M</b>	326.0	435.7	380.1	-	40:37:23 (3.5)	-
Ono-i-lau (1943-2015)	<b>129.8</b>	236.9	378.3	311.6	<b>4/65</b>	49:29:22 (14.8)	<b>Consistent</b>
<i>Northern Division</i>							
Labasa Airport (1956-2015)	<b>73.1</b>	171.8	269.8	210.5	6/59	47:37:16 (17.6)	<b>Consistent</b>
Nabouwalu (1918-2015)	<b>M</b>	323.2	444.0	368.0	-	54:26:20 (20.1)	-
Rotuma (1912-2015)	<b>545.7</b>	691.8	872.8	787.9	13/101	29:35:36 (-0.7)	<b>Inconsistent</b>

\* 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: 3-Month Timescale Drought Monitoring  
May to July 2015**

<b>Station</b>	<b>Status</b>	<b>Drought Rank</b>	<b>Duration</b>	<b>Rainfall Required (mm)</b>	<b>Chance of Breaking Drought</b>
<b><i>Western Division</i></b>					
Penang Mill (1910-2015)	<b>Drought</b>	8 <sup>th</sup>	5 months	>177	36%
Lautoka Mill (1900-2015)	<b>Drought</b>	6 <sup>th</sup>	12 months	>117	52%
Nadi Airport (1942-2015)	<b>Drought</b>	4 <sup>th</sup>	12 months	>134	47%
Yasawa-i-rara (1950-2015)	<b>Drought</b>	14 <sup>th</sup>	3 months	>133	44%
<b><i>Central Division</i></b>					
Laucala Bay (Suva) (1942-2015)	<b>Drought</b>	8 <sup>th</sup>	4 months	>380	33%
Nausori Airport (1957-2015)	<b>Drought</b>	7 <sup>th</sup>	<b>4 months</b>	>349	36%
Tokotoko (Navua) (1945-2015)	<b>Drought</b>	12 <sup>th</sup>	<b>4 months</b>	>428	41%
<b><i>Eastern Division</i></b>					
Lakeba (1950-2015)	<b>Drought</b>	4 <sup>th</sup>	10 months	>144	58%
Vunisea (Kadavu) (1931-2015)	<b>Not Available</b>	-			
Ono-i-lau (1943-2015)	<b>Drought</b>	14 <sup>th</sup>	2 months	>241	38%
<b><i>Northern Division</i></b>					
Labasa Airport (1956-2015)	<b>Drought</b>	Most Severe	15 months	>138	37%
Nabouwalu (1918-2015)	<b>Not Available</b>	-			
Rotuma (1912 -2015)	Warning	-	3 months	<169	<b>1%</b>

**TABLE 4: Seasonal Climate Outlooks using SCOPIC for  
September to November 2015**

**Predictors and Period used: NINO 3.4 (April to June 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>66</b>	245.2	30	362.9	4	15.7	55.6
Lautoka Mill (1900-2015)	<b>67</b>	184.5	29	324.8	4	17	41.5
Nadi Airport (1942-2015)	<b>85</b>	239.7	14	343.5	1	28.3	43.1
Yasawa-i-rara (1950-2015)	<b>56</b>	195.8	41	352.2	3	12.6	34.4
<b><i>Central Division</i></b>							
Laucala Bay (Suva) (1942-2015)	<b>73</b>	461.9	18	754.6	9	8.1	47.7
Nausori Airport (1957-2015)	<b>64</b>	438.0	28	713.6	8	9.7	48.3
Tokotoko (Navua) (1945- 2015)	<b>74</b>	648.5	24	936.8	2	22.6	62.5
<b><i>Eastern Division</i></b>							
Lakeba (1950-2015)	<b>71</b>	289.7	21	399.2	8	11.3	50.8
Vunisea (Kadavu) (1931- 2015)	<b>78</b>	310.2	15	440.4	7	14.8	46.9
Ono-i-lau (1943-2015)	<b>75</b>	207.9	20	358.9	5	13.5	46.9
<b><i>Northern Division</i></b>							
Labasa Airport (1956- 2015)	<b>69</b>	263.0	28	386.8	3	17.4	47.5
Nabouwalu (1918-2015)	<b>88</b>	352.3	9	541.0	3	22.2	47.3
Rotuma (1912 -2015)	35	724.7	15	936.6	<b>50</b>	-1.1	34.4

## Seasonal Climate Outlook:

### September to November 2015 - Median Table:

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

Station	Below Median (prob)	Median rainfall (mm)	Above Median (prob)	LEPS	Hit-rate
<b>Western Division</b>					
Penang Mill (1910-2015)	<b>89</b>	293.7	11	17.2	71.4
Lautoka Mill (1900-2015)	<b>89</b>	264.7	11	16.7	67.7
Nadi Airport (1942-2015)	<b>92</b>	296.8	8	20.4	69.2
Yasawa-i-rara (1950-2015)	<b>83</b>	268.7	17	9.1	63.9
<b>Central Division</b>					
Laucala Bay (Suva) (1942-2015)	<b>76</b>	626.9	24	5.0	67.7
Nausori Airport(1957-2015)	<b>75</b>	597.3	25	4.5	63.8
Tokotoko (Navua) (1945-2015)	<b>93</b>	779.1	7	22.8	76.6
<b>Eastern Division</b>					
Lakeba (1950-2015)	<b>84</b>	331.2	16	10.7	69.2
Vunisea (Kadavu) (1931-2015)	<b>85</b>	388.2	15	13.0	67.2
Ono-i-lau (1943-2015)	<b>88</b>	293.1	12	16.5	72.1
<b>Northern Division</b>					
Labasa Airport (1956-2015)	<b>85</b>	311.7	15	12.5	69.1
Nabouwalu (1918-2015)	<b>94</b>	424.0	6	24.3	78.1
Rotuma (1912 -2015)	43	845.5	<b>57</b>	-1.3	54.7

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for  
September to November 2015**

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Lakeba	23	192	<b>52</b>	298	15
Nadi	24	152	<b>61</b>	266	15
Nabouwalu	<b>64</b>	234	31	318	5
Udu Point	<b>64</b>	241	21	364	15
Vunisea	24	302	<b>61</b>	459	15
Suva	24	434	<b>61</b>	590	15
Rotuma	<b>61</b>	650	12	894	27

### **Summary Statements**

#### **Rainfall for July 2015:**

Rainfall during July ranged from *normal* to *below normal* across the Fiji Group. July 2015 rainfall ranked as the driest July for Labasa Airport, 3<sup>rd</sup> driest for Yasawa-i-Rara, 4<sup>th</sup> driest at Penang Mill and 5<sup>th</sup> driest at Laucala Bay.

#### **Accumulated rainfall for May to July 2015 and outlook verification:**

Rainfall over the May to July 2015 period was *below normal* across the country.

May to July 2015 ranked at 2<sup>nd</sup> driest may to July period on record for Nadi Airport, 3<sup>rd</sup> driest for Lautoka Mill, Yasawa-I-Rara & Laucala Bay and 4<sup>th</sup> driest for Ono-I-Lau.

Forecasts were consistent at 10 of the stations, inconsistent at 1 station and forecast for 2 stations could not be verified due to missing data.

#### **Outlooks for September to November 2015:**

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

The seasonal rainfall outlook for July to September 2015:

- Favours *below normal* rainfall at the Western, Eastern, Central and Northern Division;
- *Above normal* favoured for Rotuma;
- The forecast confidences are generally *moderate to good*

##### **2. POAMA:**

*Below normal* rainfall favoured for Rotuma, Nabouwalu and Udu point while *normal* rainfall favoured at the rest of the 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:  $X \geq 35$