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

Country Name: Fiji

TABLE 1: Monthly Rainfall

Station (include data period)			JUNE 2015					
	APRIL 2015 Total	MAY 2015 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking	
1		Wes	tern Divi					
Penang Mill (1910- 2015)	101.8	72.2	14.6	40.1	96.3	58.6	13/106	
Lautoka Mill (1900- 2015)	63.7	10.0	9.7	30.4	78.5	46.9	25/116	
Nadi Airport (1942- 2015)	94.5	2.8	14.8	26.1	73.0	52.9	18/74	
Yasawa-i-rara (1950-2015)	22.0	8.6	37.0	39.7	130.7	70.8	21/63	
		Cen	tral Divis	ion				
Laucala Bay (Suva) (1942-2015)	78.3	92.9	56.9	110.8	211.4	140.9	11/74	
Nausori Airport (1957-2015)	138.1	150.6	81.1	94.4	206.9	144.1	16/59	
Tokotoko (Navua) (1945-2015)	138.1	194.4	135.9	136.7	255.4	186.0	24/71	
		Easte	ern Divi	sion				
Lakeba (1950-2015)	58.3	20.3	74.4	49.7	135.9	88.7	30/66	
Vunisea (Kadavu) (1931-2015)	76.1	М	М	71.0	141.4	114.2	-	
Ono-i-lau (1943- 2015)	30.1	31.5	59.5	58.3	110.9	78.2	24/68	
Northern Division								
Labasa Airport (1956-2015)	11.3	62.3	10.8	31.6	89.2	51.8	7/59	
Nabouwalu (1918- 2015)	М	161.8	51.8	60.1	145.2	102.1	26/97	
Rotuma (1912- 2015)	305.4	125.0	211.5	199.0	295.6	246.9	40/102	

Period:*below normal/normal/above normal

M- Missing

TABLE 2: Three-monthly Rainfall April to June 2015

Predictors and Period used: NIÑO 3.4 (December 2014 to February 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)	
			Wester	n Division			-	
Penang Mill (1910- 2015)	188.6	352.7	532.1	422.6	6/105	42 :31:27 (4.2)	Consistent	
Lautoka Mill (1900- 2015)	83.4	263.9	389.7	323.5	<mark>4/116</mark>	47 :37:16 (16.5)	Consistent	
Nadi Airport (1942- 2015)	112.1	258.3	375.0	314.4	<mark>5/73</mark>	50 :33:17 (19.2)	Consistent	
Yasawa-i-rara (1950- 2015)	67.6	291.9	429.9	348.0	3/63	50 :24:26 (11.4)	Consistent	
			Central	Division				
Laucala Bay (Suva) (1942-2015)	228.1	678.4	844.1	735.4	<mark>1/74</mark>	41 :37:22 (5.3)	Consistent	
Nausori Airport (1957-2015)	369.8	645.9	794.0	708.2	<mark>4/59</mark>	45 :31:24 (9.2)	Consistent	
Tokotoko (Navua) (1945-2015)	468.4	756.7	999.2	876.5	<mark>4/71</mark>	43 :37:20 (8.6)	Consistent	
			Eastern	Division		T		
Lakeba, Lau (1950- 2015)	153.0	348.5	502.1	424.2	<mark>5/65</mark>	43 :32:25 (6.1)	Consistent	
Vunisea (Kadavu) (1931-2015)	M	453.2	611.3	541.0	-	45 :31:24 (11.0)	-	
Ono-i-lau (1943- 2015)	121.1	319.0	463.3	405.5	<mark>5/65</mark>	52 :29:19 (17.9)	Consistent	
Northern Division								
Labasa Airport (1956-2015)	84.4	331.4	447.5	407.4	<mark>2/59</mark>	39 :34:27 (2.8)	Consistent	
Nabouwalu (1918- 2015)	M	485.1	659.4	544.7	-	50 :30:20 (16.6)	-	
Rotuma (1912-2015)	641.9	746.3	922.9	836.0	17/102	34:30:36 (-1.9)	Inconsistent	

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

Forecast is <u>near-consistent</u> 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 <u>inconsistent</u> when observed and predicted (tercile with the highest probability) differ by two categories (i.e. terciles 1 and 3).

TABLE 4: Seasonal Climate Outlooks using SCOPIC for August to October 2015

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

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS (%)	Hit-rate (%)
Western Division							
Penang Mill (1910-2015)	50	181.3	39	276.0	11	7.0	48.4
Lautoka Mill (1900-2015)	61	166.1	22	257.7	17	5.9	44.6
Nadi Airport (1942-2015)	64	174.5	26	289.5	10	8.4	43.1
Yasawa-i-rara (1950-2015)	69	157.1	18	259.1	13	7.1	45.9
Central Division							
Laucala Bay (Suva) (1942-2015)	57	416.6	35	611.5	8	8.8	44.6
Nausori Airport (1957-2015)	40	414.1	41	597.5	19	0.4	24.1
Tokotoko (Navua) (1945- 2015)	49	565.2	45	884.8	6	8.6	29.7
Eastern Division							
Lakeba (1950-2015)	53	253.7	25	347.3	22	1.5	33.8
Vunisea (Kadavu) (1931- 2015)	63	292.4	27	437.9	10	8.6	39.1
Ono-i-lau (1943-2015)	49	235.0	33	346.8	18	2.2	39.3
Northern Division							
Labasa Airport (1956- 2015)	56	171.1	25	242.4	19	3.3	32.1
Nabouwalu (1918-2015)	61	263.0	33	447.5	6	9.6	46.0
Rotuma (1912 -2015)	28	652.7	21	832.8	51	0.4	34.4

Seasonal Climate Outlook:

August to October 2015 - Median Table:

<u>Predictors and Period used</u>: NINO 3.4 (April to June 2015)

Station	Below Median (prob)	Median rainfall (mm)	Above Median (prob)	LEPS	Hit-rate		
Western Division							
Penang Mill (1910-2015)	68	223.7	32	2.1	56.3		
Lautoka Mill (1900-2015)	74	224.5	26	5.3	56.9		
Nadi Airport (1942-2015)	73	225.0	27	3.9	53.8		
Yasawa-i-rara (1950-2015)	77	220.8	23	8.8	55.7		
Central Division							
Laucala Bay (Suva) (1942-2015)	67	509.7	33	2.2	52.3		
Nausori Airport(1957-2015)	68	479.2	32	2.0	56.9		
Tokotoko (Navua) (1945-2015)	79	637.6	21	8.4	56.3		
Eastern Division							
Lakeba (1950-2015)	53	308.9	47	-1.5	46.2		
Vunisea (Kadavu) (1931-2015)	70	362.5	30	4.5	54.7		
Ono-i-lau (1943-2015)	60	303.0	40	-0.5	54.1		
Northern Division							
Labasa Airport (1956-2015)	78	202.7	22	7.8	66.1		
Nabouwalu (1918-2015)	89	351.0	11	18.3	66.7		
Rotuma (1912 -2015)	46	718.7	54	-1.4	50.0		

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

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Lakeba	33	192	62	298	5
Nadi	39	152	52	266	9
Nabouwalu	39	234	52	378	9
Udu Point	36	241	59	364	5
Vunisea	39	302	52	459	9
Suva	39	434	52	590	9
Rotuma	43	650	39	894	18

Summary Statements

Rainfall for June 2015:

During June 2015, rainfall was *below normal* across the Western, Central and Northern Divisions, while *normal* rainfall was recorded at the Eastern Division. Rotuma received normal rainfall.

Accumulated rainfall for April to June 2015 and outlook verification:

Rainfall over the April to June 2015 period was below normal across the country.

The last 3 months was the driest April to June on record at Laucala Bay, 2nd driest for Labasa Airport, 3rd driest for Yasawa-i-Rara, 4th driest at Navua, Nausori and Lautoka and the 5th driest at Ono-lau, Lakeba and Nadi Airport.

SCOPIC forecasts for the April to June 2015 period were consistent at majority of the sites, with the exception of Rotuma, where it was inconsistent.

Majority of the sites are in a state of drought at all three timescales at which Fiji Meteorological Service monitors drought, that is, 3, 6 and 12 months.

Outlooks for July to September 2015:

1. SCOPIC:

The seasonal rainfall outlook for July to September 2015:

- Favours *below normal* rainfall across the Western, Eastern and Northern Divisions, with *normal* the next most likely category;
- The outlook for the Central Division is mixed, with almost equal chances of normal and below normal rainfall at Tokotoko and Nausori Airport, while below normal rainfall is most likely at the Laucala Bay;
- Above normal rainfall favoured for Rotuma; and

• The forecast confidences are generally *low* to *moderate*.

2. POAMA:

Near *normal* rainfall favoured for majority of the sites. The only exception to this is Rotuma, where *below normal* rainfall is most likely.

NB: The X LEPS % score has been categorised as follows:

 $Very \ Low: \ X < 0.0 \\ Low: \ 0 \le X < 5 \\ Moderate \ 5 \le X < 10 \\ Good: \ 10 \le X < 15 \\ High: \ 15 \le X < 25 \\$

Very High: $25 \le X < 35$ Exceptional: $X \ge 35$