Pacific Islands - Online Climate Outlook Forum (OCOF) No. 87

Country Name: Fiji

TABLE 1: Monthly Rainfall

Station (include data period)			November 2014				
	September 2014 Total	October 2014 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Western Division							
Penang Mill (1910- 2014)	0.4	98.5	64.8	93.6	188.9	129.6	27/103
Lautoka Mill (1900- 2014)	22.6	29.6	88.4	63.3	143.1	103.0	51/115
Nadi Airport (1942- 2014)	7.6	36.8	90.3	90.9	150.9	122.9	25/72
Yasawa-i-rara (1950-2014)	7.7	101.5	25.7	87.3	159.6	109.3	8/63
Central Division				_			
Laucala Bay (Suva) (1942-2014)	39.3	219.4	63.5	156.0	263.4	205.6	7/73
Nausori Airport (1957-2014)	92.4	225.9	96.9	196.3	300.5	235.4	9/59
Tokotoko (Navua) (1945-2014)	38.4	505.0	292.3	224.6	348.7	278.6	26/69
Eastern Division							
Lakeba (1950-2014)	58.0	70.6	159.8	73	177.4	114.0	42/66
Vunisea (Kadavu) (1931-2014)	85.8	345.0	85.6	87.3	159.6	109.3	27/79
Ono-i-lau (1943- 2014)	20.8	51.9	108.2	53.7	127.0	92.8	43/69
Northern Division	 						
Labasa Airport (1956-2014)	8.7	135.8	60.2	119.1	216.4	157.0	7/56
Nabouwalu (1918- 2014)	Missing	Missing	79.5	126.7	235.4	174.1	19/96
Rotuma (1912- 2014)	93.5	244.6	248.1	249.6	348	298.1	34/101

Period:*below normal/normal/above normal

TABLE 2: Three-monthly Rainfall September to November 2014

Predictors and Period used: NINO 3.4 (May to July 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)
Western Division		1	I				-
Penang Mill (1910- 2014)	163.7	249	365.9	294.6	17/102	44:38:18 (16)	Consistent
Lautoka Mill (1900- 2014)	140.6	186.1	324.9	265.4	23/115	45:38:17 (16.4)	Consistent
Nadi Airport (1942- 2014)	134.7	242.4	344.1	297.5	7/72	50:37:13 (25.7)	Consistent
Yasawa-i-rara (1950- 2014)	134.9	195.9	353.8	276.9	11/61	43:41:16 (11.7)	Consistent
Central Division							
Laucala Bay (Suva) (1942-2014)	322.2	468.4	754.6	637.7	11/73	43:33:24 (6.7)	Consistent
Nausori Airport (1957-2014)	415.2	453.5	721.5	600.3	17/58	42:35:23 (8.7)	consistent
Tokotoko (Navua) (1945-2014)	835.7	648.4	937.2	786.3	36/69	48:39:13 (22.1)	Near- consistent
Factors Division							
Eastern Division Lakeba, Lau (1950-						1	
2014)	288.4	298.4	404.4	333.4	22/66	45:33:22 (53.1)	Consistent
Vunisea (Kadavu) (1931-2014)	516.4	309.3	433.7	384.9	62/78	46:32:21 (15.3)	Inconsistent
Ono-i-lau (1943- 2014)	180.9	213	370.9	293.8	16/67	46:33:21 (12.3)	Consistent
Northern Division		1	ı	T	T		
Labasa Airport (1956-2014)	204.7	263.1	386.8	314.3	10/55	45:38:17 (18.3)	Consistent
Nabouwalu (1918- 2014)	М	352.3	541	424		51:31:18(20.6)	Missing
Rotuma (1912-2014)	586.2	726	945.8	848.2	11/99	35:26:39 (-0.6)	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 3: Seasonal Climate Outlooks using SCOPIC for January 2015 to March 2015

Predictors and Period used: NINO 3.4 (September to November 2014)

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS (%)	Hit-rate (%)	
Western Division								
Penang Mill (1910-2014)	47	934.6	37	1188.3	16	29.4	56.3	
Lautoka Mill (1900-2014)	47	798.9	34	1068.9	19	22.6	51.6	
Nadi Airport (1942-2014)	48	818.6	33	1092.3	19	20.4	48.4	
Yasawa-i-rara (1950-2014)	53	649.6	30	905	17	26.0	50.8	
Central Division	Central Division							
Laucala Bay (Suva) (1942-2014)	35	858.6	35	1106.6	29	-1.2	18.8	
Nausori Airport (1957-2014)	35	892.5	30	1079.7	35	-2.1	19.0	
Tokotoko (Navua) (1945- 2014)	33	927.5	30	1247.2	36	-1.0	42.2	
Eastern Division								
Lakeba (1950-2014)	44	658.3	37	884.4	19	13.8	46.0	
Vunisea (Kadavu) (1931- 2014)	38	618.1	30	836.3	32	-0.3	39.7	
Ono-i-lau (1943-2014)	37	506.8	32	709.7	31	-0.4	39.0	
Northern Division								
Labasa Airport (1956- 2014)	46	982.5	27	1302.8	26	14	41.4	
Nabouwalu (1918-2014)	49	826.3	26	1065.9	25	16.6	48.4	
Rotuma (1912 -2014)	48	933.7	32	1162.9	20	15.4	45.3	

Seasonal Climate Outlook:

January 2015-March 2015 - Median Table:

Predictors and Period used: NINO 3.4 (September to November 2014)

Station	Below Median (prob)	Median rainfall (mm)	Above Median (prob)	LEPS	Hit-rate		
Western Division							
Penang Mill (1910-2014)	65	1070.6	35	18.7	71.9		
Lautoka Mill (1900-2014)	64	945.7	36	17.7	71.9		
NadiAirport (1942-2014)	71	937.2	29	24.6	71.9		
Yasawa-i-rara (1950-2014)	69	753.6	31	24.2	75.4		
Central Division							
Laucala Bay (Suva) (1942-2014)	52	1016.7	48	-1.1	30.0		
Nausori Airport(1957-2014)	49	958.6	51	-1.7	48.3		
Tokotoko (Navua) (1945-2014)	45	1100.5	55	0.1	60.9		
Eastern Division							
Lakeba (1950-2014)	59	764.2	41	7.4	60.3		
Vunisea (Kadavu) (1931-2014)	56	753.5	44	1.7	63.5		
Ono-i-lau (1943-2014)	54	618.1	46	-0.5	54.2		
Northern Division							
Labasa Airport (1956-2014)	62	1126.8	38	10.2	67.2		
Nabouwalu (1918-2014)	63	941	37	10.7	62.5		
Rotuma (1912 -2014)	70	1054.2	30	23.4	71.9		

TABLE 4: Seasonal Climate Outlooks using POAMA2 for January to March 2015

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Nadi Airport	49	597	21	860	30
Suva	49	739	21	956	30
Udu Point	52	680	21	927	27
Rotuma	30	817	40	1018	24

Summary Statements

Rainfall for November 2014:

Rainfall during November was below *normal* at the Central, western Division Northern Division including Rotuma as well. The East Division received generally normal rainfall.

Accumulated rainfall September to November 2014, including outlook verification:

Rainfall over the last three months was *below normal* at all stations except Navua and Vunisea, which received *normal* rainfall and above normal rainfall respectively.

The SCOPIC outlooks for the last three months were consistent at 9 stations, 1 near-consistent, 2 inconsistent and outlook for Nabouwalu could not be verified due to missing records.

20 of the 26 stations in Fiji's National Climate Monitoring Network are currently in drought on a 3 month timescale and majority in the same condition on a 6 month timescale.

Outlooks for January 2015 to March 2015:

1. SCOPIC:

The seasonal rainfall outlook for January 2015 to March 2015 shows:

- Below normal is the most likely outcome for the Western Division, Northern Division, Lakeba and Rotuma with normal rainfall the next most likely;
- Near-climatology for the Central Division, Vunisea and Lakeba;

The historical accuracy of outlooks is generally *good* to *very high* over most of the places at this time of the year. The exception to this is Central Division where accuracy is *very low*.

2. POAMA:

POAMA model favours *above normal* rainfall at Nadi Airport, Udu Point and at Laucala Bay (Suva), and normal rainfall for Rotuma.

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: $X \ge 35$