Pacific Islands - Online Climate Outlook Forum (OCOF) No. 115

Country Name: Fiji

TABLE 1: Monthly Rainfall

Station (include data period)			MARCH 2017				
	January 2017 Total	February 2017 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Western Division							
Penang Mill (1910-2017)	170.9	512.7	**440.0**	265	441	362	70/108
Lautoka Mill (1900-2017)	182.4	697.0	**369.8**	209	382	284	75/117
Nadi Airport (1942-2017)	314.1	786.6	**509.8**	238	396	317	63/74
Viwa (1978 -2017)	208.8	410.1	**285.5**	167	288	222	23/35
Central Division							
Laucala Bay (Suva) (1942-2017)	305.1	351.3	**383.0**	297	434	343	45/76
Nausori Airport (1957-2017)	296.4	433.8	**312.8**	297	443	363	22/61
Tokotoko (Navua) (1945-2017)	343.7	562.8	**623.9**	317	439	380	64/73
Eastern Division							
Lakeba (1950-2017)	228.8	525.1	**175.1**	212	332	260	10/67
Vunisea (Kadavu) (1931-2017)	392.8	474.0	**302.6**	213	303	270	54/81
Ono-i-Lau (1943-2017)	148.9	590.9	**143.4**	166	294	206	19/70
Northern Division							
Udu Point (1946-2017)	217.9	494.0	**296.0**	252	368	301	35/70
Nabouwalu (1918-2017)	292.2	626.4	**590.6**	243	370	296	95/100
Rotuma (1912-2017)	Missing	Missing	**327.8**	251	421	327	54/104

Period: *below normal/normal/above normal

M - Missing

TABLE 2: Three-monthly Rainfall
January to March 2017

Predictors and Period used: NINO3.4 SST Anomalies: September to November 2016

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							
Penang Mill (1910-2017)	**1123.6**	925	1186	1067	62/108	7:40:**53** (31.1)	Near-consistent
Lautoka Mill (1900-2017)	**1249.2**	794	1064	946	96/117	15:35:**50** (23.0)	Consistent
Nadi Airport (1942-2017)	**1610.5**	809	1087	937	70/74	19:34:**47** (19.3)	Consistent
Yasawa-i-rara (1950-2016)	-	619	898	741	-	9:42:**49** (30.6)	-
Central Division							
Laucala Bay (Suva) (1942-2017)	**1039.4**	840	1086	1008	42/76	31:32:**37** (-0.1)	Near-consistent
Nausori Airport (1957-2017)	**1043.0**	877	1077	956	38/61	31:**35**:34 (-1.4)	Consistent
Tokotoko (Navua) (1945-2017)	**1530.4**	922	1246	1084	68/73	30:**39**:31 (-0.9)	Near-consistent
Eastern Division							
Lakeba, Lau (1950-2017)	**929.0**	639	880	753	49/67	19:32:**49** (19.6)	Consistent
Vunisea (Kadavu) (1931-2017)	**1169.4**	615	834	738	78/81	26:**37:37** (0.6)	Near-consistent
Ono-i-lau (1943-2017)	**883.2**	490	684	595	59/69	27:34:**39** (1.5)	Consistent
Northern Division							
Labasa Airport (1956-2016)	**1609.4**	973	1296	1117	55/61	16:41:**43** (14.8)	Consistent
Rotuma (1912-2017)	-	930	1161	1044	-	18:38:**44** (16.7)	-

Period:* below normal/normal/above normal

*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).
M - Missing

TABLE 3: Seasonal Climate Outlooks using SCOPIC for May to July 2017 – Tercile Method

Predictors and Period used: NINO3.4 SST Anomalies: February to March 2017

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS (%)	Hit-rate (%)
Western Division							
Penang Mill (1910-2017)	31	179	36	297	33	11.6	52.2
Lautoka Mill (1900-2017)	30	152	37	235	33	18.0	62.1
Nadi Airport (1942-2017)	31	141	36	245	33	11.3	58.3
Viwa (1978 -2017)	23	174	**39**	255	**38**	17.9	63.6
Central Division							
Laucala Bay (Suva) (1942-2017)	30	437	37	612	33	14.6	50.0
Nausori Airport (1957-2017)	26	427	**40**	583	34	21.4	58.3
Tokotoko (Navua) (1945-2017)	31	557	39	753	30	18.3	56.0
Eastern Division							
Lakeba (1950-2017)	25	252	**39**	364	**36**	21.0	59.3
Vunisea (Kadavu) (1931-2017)	33	322	34	429	33	4.7	42.9
Ono-i-Lau (1943-2017)	28	223	38	371	34	17.3	62.5
Northern Division							
Udu Point (1946-2017)	31	302	35	468	34	5.9	43.3
Nabouwalu (1918-2017)	28	320	38	444	34	21.7	59.3
Rotuma (1912 -2017)	33	689	34	872	33	-1.6	38.7

Seasonal Climate Outlook:

May to July 2017 - Median Table:

Predictors and Period used: NINO3.4 SST Anomalies: February to March 2017

Station	Below Median (prob)	Median rainfall (mm)	Above Median (prob)	LEPS	Hit-rate
Western Division					
Penang Mill (1910-2017)	50	251	50	10.1	61.2
Lautoka Mill (1900-2017)	51	196	49	16.1	68.7
Nadi Airport (1942-2017)	50	184	50	18.0	68.7
Viwa (1978 -2017)	45	200	55	14.1	67.6
Central Division					
Laucala Bay (Suva) (1942-2017)	49	506	51	17.5	61.2
Nausori Airport (1957-2017)	47	509	53	29.5	71.7
Tokotoko (Navua) (1945-2017)	50	649	50	14.2	62.7
Eastern Division					
Lakeba (1950-2017)	49	319	51	9.1	54.5
Vunisea (Kadavu) (1931-2017)	50	377	50	0.4	54.5
Ono-i-Lau (1943-2017)	49	303	51	12.1	67.7
Northern Division					
Udu Point (1946-2017)	49	362	51	8.4	57.8
Nabouwalu (1918-2017)	51	366	49	16.2	69.7
Rotuma (1912 -2017)	50	786	50	-0.2	52.3

TABLE 4: Seasonal Climate Outlooks using POAMA2 for May to July 2017

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Lakeba	**52**	214	42	368	6
Nadi	**67**	149	28	206	5
Nabouwalu	**67**	240	21	393	12
Udu Point	**58**	215	30	355	12
Vunisea	**67**	358	28	422	5
Suva	**67**	415	28	560	5
Rotuma	**70**	758	9	863	21

Summary Statements

Rainfall for March 2017:

Below normal to *normal* rainfall was recorded in the Eastern Division while the rest of the stations recorded *normal* to *above normal* rainfall.

Accumulated rainfall for January to March 2017 & outlook verification:
The accumulated rainfall over January to March 2017 ranged from *normal* to *above normal* across the country.

Verification of the 3-month rainfall
For the January to March 2017 period, the rainfall outlooks were consistent at six of the twelve sites, near-consistent at four sites, while the outlook for two stations could not be verified due to missing records.

Outlooks for May to July 2017:

1. **SCOPIC:**
   The SCOPIC rainfall outlook for May to July 2017:
   - There is no clear guidance for most parts of the country as the chances of *below normal*, *normal* and *above normal* rainfall are quite close.
   - The exception to the above is Nausori Airport, where *normal* rainfall is most likely, followed by *above normal* rainfall.

2. **POAMA**
   POAMA model favours below-normal rainfall across the country through the May to July 2017 period.

NB: The X LEPS % score has been categorised as follows:
Very Low: X < 0.0 Low: 0 ≤ X < 5 Moderate 5 ≤ X < 10 Good: 10 ≤ X< 15 High: 15≤ X < 25

Very High : 25 ≤X < 35 Exceptional: X ≥ 35