## Pacific Islands - Online Climate Outlook Forum (OCOF) No. 114

## <u>Country Name</u>: Fiji TABLE 1: Monthly Rainfall

Station (include data period)			February 2017						
	December 2016 Total	January 2017 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking		
Western Division									
Penang Mill (1910-2017)	713.2	170.9	512.7	276	402	343			
Lautoka Mill (1900-2017)	217.6	182.4	697.0	219	370	275			
Nadi Airport (1942-2017)	269.9	314.1	786.6	219	345	278			
Viwa (1978 -2017)	561.6	208.8	410.1	163	275	221			
			Central Divi	sion					
Laucala Bay (Suva) (1942-2017)	761.8	305.1	351.3	243	331	290			
Nausori Airport (1957-2017)	924.2	296.4	433.8	219	318	287			
Tokotoko (Navua) (1945- 2017)	927.6	343.7	562.8	266	365	300			
		E	astern Div	ision					
Lakeba (1950-2017)	453.5	228.8	525.1	155	275	190			
Vunisea (Kadavu) (1931-2017)	299.4	392.8	470.0	153	262	225			
Ono-i-Lau (1943-2017)	273.5	148.9	590.9	125	210	174			
Northern Division									
Udu Point (1946-2017)	460.1	217.9	494.0	214	354	270			
Nabouwalu (1918-2017)	723.0	292.2	626.4	255	347	304			
Rotuma (1912-2017)	Missing	Missing	752.1	288	380	323			

Period: \*below normal/normal/above normal

M - Missing

## TABLE 2: Three-monthly Rainfall December 2016 to February 2017

<u>Predictors and Period used</u>: NINO3.4 SST Anomalies: August to October 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)	1396.8	782	1068	888		24/29/ <b>47</b> (16.5)	Consistent		
Lautoka Mill (1900- 2017)	1097.0	607	923	782		13/36/ <b>51</b> (26.4)	Consistent		
Nadi Airport (1942- 2017)	1370.6	645	906	840		17/35/ <b>48</b> (22.3)	Consistent		
Yasawa-i-rara (1950-2016)	М	491	779	665		13/33/ <b>54</b> (40.2)	Unverified		
			Centra	Division					
Laucala Bay (Suva) (1942-2017)	1418.2	782	1020	869		29/33/ <b>38</b> (-0.3)	Consistent		
Nausori Airport (1957-2017)	1654.4	784	1002	831		32/ <b>34/34</b> (-1.4)	Near Consistent		
Tokotoko (Navua) (1945-2017)	1834.1	884	1131	993		<b>36</b> /30/34 (-0.2)	In consistent		
Eastern Division									
Lakeba, Lau (1950- 2017)	1207.4	566	745	645		13/38/ <b>49</b> (21.5)	Consistent		
Vunisea (Kadavu) (1931-2017)	1162.2	498	716	615		21/38/ <b>41</b> (12.8)	Consistent		
Ono-i-lau (1943-2017)	1013.3	439	586	502		23/37/ <b>40</b> (9.0)	Consistent		
Northern Division									
Labasa Airport (1956- 2016)	М	787	1106	900		13/34/ <b>53</b> (29.1)	Unverified		
Rotuma (1912-2017)	M	901	1099	997		22/34/ <b>44</b> (22.6)	Unverified		

Period:\* below normal/normal/above normal

<sup>\*</sup>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).

M - Missing

# TABLE 3: Seasonal Climate Outlooks using SCOPIC for April to June 2017 – Tercile Method

<u>Predictors and Period used</u>: NINO3.4 SST Anomalies: December 2016 to February 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)	30	352	35	532	35	0.9	36.4		
Lautoka Mill (1900-2017)	28	264	36	390	36	11.5	56.7		
Nadi Airport (1942-2017)	28	257	36	376	36	9.1	53.7		
Viwa (1978 -2017)	26	274	35	450	39	18.3	55.9		
	Central Division								
Laucala Bay (Suva) (1942-2017)	31	676	34	821	35	5.5	43.3		
Nausori Airport (1957-2017)	27	646	36	778	37	8.7	45.0		
Tokotoko (Navua) (1945-2017)	31	755	34	985	35	7.7	46.3		
		East	ern Divisio	n					
Lakeba (1950-2017)	29	342	35	500	36	6.1	43.9		
Vunisea (Kadavu) (1931- 2017)	28	457	36	605	36	7.4	53.0		
Ono-i-Lau (1943-2017)	23	317	39	466	38	14.0	32.3		
Northern Division									
Udu Point (1946-2017)	29	426	36	620	35	2.4	43.1		
Nabouwalu (1918-2017)	25	485	38	659	37	17.2	50.8		
Rotuma (1912 -2017)	34	744	33	919	33	-1.7	1.5		

## **Seasonal Climate Outlook:**

## **April to June 2017 - Median Table:**

**Predictors and Period used: NINO3.4 SST Anomalies: December 2016 to February 2017** 

Station	Below Median (prob)	Median rainfall (mm)	Above Median (prob)	LEPS	Hit-rate			
Western Division								
Penang Mill (1910-2017)	49	423	51	-0.5	56.1			
Lautoka Mill (1900-2017)	46	324	54	8.5	65.7			
Nadi Airport (1942-2017)	47	314	53	6.7	64.2			
Viwa (1978 -2017)	40	391	60	22.2	76.5			
	Cent	ral Division						
Laucala Bay (Suva) (1942-2017)	47	732	53	4.6	56.7			
Nausori Airport (1957-2017)	46	706	54	6.5	61.7			
Tokotoko (Navua) (1945-2017)	47	869	53	6.2	61.2			
Eastern Division								
Lakeba (1950-2017)	47	424	53	4.3	62.1			
Vunisea (Kadavu) (1931-2017)	47	540	53	4.7	66.7			
Ono-i-Lau (1943-2017)	47	406	54	5.1	64.5			
Northern Division								
Udu Point (1946-2017)	49	517	52	0.1	56.9			
Nabouwalu (1918-2017)	47	545	53	154	72.3			
	•							
Rotuma (1912 -2017)	51	836	49	-1.1	47.0			

### **Summary Statements**

#### Rainfall for February 2017:

Majority of the stations in Fiji received *above normal* to *well above normal* rainfall during February 2017.

#### Accumulated rainfall for December 2016 to February 2017 & outlook verification:

Due to a number of tropical depression affecting Fiji during the December to February period, the accumulated rainfall over the last three months was *above normal* at most of the stations.

#### Verification of the 3-month rainfall

For the December 2016 to February 2017 period, the rainfall outlooks were consistent at seven of the twelve sites and near- consistent at one site, inconsistent at one site while the outlook for three stations could not be verified due to missing record.

#### **Outlooks for April to June 2017:**

#### SCOPIC:

**Western Division**: near equal likelihood of normal and above normal rainfall, moderate to good skill;

**Central Division:** The outlook offers little guidance as the chances of *above normal*, *normal* and *below normal* are similar. moderate skill;

**Eastern Division**: near equal likelihood of normal and above normal rainfall. Skill range from moderate to good;

**Northern Division**: near equal likelihood of normal and above normal rainfall. Low to

Rotuma: climatological outlook favoured; Very low skill.

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:  $X \ge 35$