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

Station (include data period)			October 2017						
	August 2017 Total	September 2017 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking		
Western Division									
Penang Mill (1910-2017)	48.7	28.6	7.1	45.6	112.0	73.7	<mark>4/108</mark>		
Lautoka Mill (1900- 2017)	28.7	2.1	24.5	37.5	107.7	64.3	24/118		
Nadi Airport (1942-2017)	60.6	4.3	28.2	39.8	105.6	61.9	17/76		
Viwa (1978 -2017)	93.5	12.2	40.7	33.7	95.5	56.1	16/37		
		C	entral Divis	ion					
Laucala Bay (Suva) (1942-2017)	149.8	118.4	150.2	126.6	217.8	167.8	36/76		
Nausori Airport (1957-2017)	169.4	122.5	125.5	128.7	224.8	149.6	20/61		
Tokotoko (Navua) (1945-2017)	149.6	184.1	235.0	194.0	324.2	250.2	34/73		
		Ec	astern Divis	ion					
Lakeba (1950-2017)									
Vunisea (Kadavu) (1931-2017)	122.9	-	-						
Ono-i-Lau (1943-2017)	214.4	91.4	131.8	40.5	107.6	73.0	54/72		
Northern Division									
Labasa Airport (1946-2017)	80.2	40.8	47.0	70.8	133.4	96.7	15/60		
Savusavu Airfield (1956-2017)	86.8	35.7	80.7	97.1	180.8	127.8	16/61		
Rotuma (1912-2017)	220.8	175.6	625.1	243.7	342.8	285.6	<mark>100/103</mark>		

Period: \*below normal/normal/above normal M - Missing

# TABLE 2: Three-monthly Rainfall August to October 2017

Predictors and Period used: NINO3.4 SST Anomalies: May to June 2017

Station	Three- month Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking	Forecast probs.* (include LEPS)	Verification <sup>*</sup> (Consistent, Near- consistent or Inconsistent)	
		I	Weste	rn Division	1			
Penang Mill (1910-2017)	84.4	178	275	224	8/107	<b>43</b> :41:16 (6.1)	Consistent	
Lautoka Mill (1900-2017)	55.3	165	259	225	8/118	<b>48</b> :28:24 (3.8)	Consistent	
Nadi Airport (1942-2017)	93.1	173	291	225	9/76	<b>50</b> :30:20 (6.2)	Consistent	
Viwa (1978 -2017)	146.4	134	267	223	14/35	<b>39</b> :28:33 (-2.0)	Near- consistent	
			Centr	al Division				
Laucala Bay (Suva) (1942- 2017)	418.4	410	616	510	27/76	<b>47</b> :37:16 (7.2)	Near- consistent	
Nausori Airport (1957-2017)	417.4	427	600	479	21/61	31: <b>46</b> :23 (0)	Near- consistent	
Tokotoko (Navua) (1945- 2017)	568.7	560	891	638	25/72	<b>43</b> : <b>43</b> :14 (8.5)	Near- consistent	
	Eastern Division							
Lakeba, Lau (1950-2017)	212.3	252	344	309	20/69	<b>44</b> :30:26 (1.3)	Consistent	
Vunisea (Kadavu) (1931-2017)	-	294	437	363	-	<b>47</b> :34:19 (4.8)	Unverified	
Ono-i-lau (1943-2017)	437.6	234	348	303	57/70	<b>45</b> :29:26 (1.5)	Inconsistent	
Northern Division								
Labasa Airport (1956-2017)	168.0	167	243	203	21/59	<b>45</b> :31:24 (1.4)	Near- consistent	
Savusavu Airfield (1956-2017)	203.2	301	414	353	7/60	<b>43</b> :37:20 (3.7)	Consistent	
Rotuma (1912-2017)	1021.5	652	840	719	87/102	32:23: <b>46</b> (0.4)	Consistent	

#### Period:\* below normal/normal/above normal

<sup>&</sup>lt;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).

# TABLE 3: Seasonal Climate Outlooks using SCOPIC forDecember 2017 to February 2018– Tercile Method

# Predictors and Period used: NINO3.4 SST Anomalies: September to October 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)	28	783.6	33	1070.7	39	17.5	50.8	
Lautoka Mill (1900-2017)	21	609.8	38	925.3	41	26.9	59.7	
Nadi Airport (1942-2017)	25	652.8	36	908.4	39	22.0	50.7	
Viwa (1978 -2017)	21	477.4	35	709.5	44	20.2	57.1	
		Cer	ntral Division	า				
Laucala Bay (Suva) (1942-2017)	31	782.9	34	1026.7	35	1.6	38.8	
Nausori Airport (1957-2017)	33	786.4	32	1005.2	35	-1.3	29.5	
Tokotoko (Navua) (1945-2017)	34	885.8	32	1140.1	34	-1.4	18.2	
		Eas	tern Divisio	n				
Lakeba (1950-2017)	20	571.0	41	757.3	39	30.1	58.2	
Vunisea (Kadavu) (1931- 2017)	27	498.3	36	724.0	37	8.1	47.0	
Ono-i-Lau (1943-2017)	27	438.9	36	591.0	37	6.6	50.0	
Northern Division								
Labasa Airport (1956- 2017)	20	798.2	39	1127.0	41	30.0	58.3	
Savusavu Airfield (1956- 2017)	27	572.7	35	849.0	38	11.2	45.6	
Rotuma (1912 -2017)	28	900.7	36	1098.9	36	15.9	37.9	

# Seasonal Climate Outlook:

## December 2017 to February 2018 - Median Table:

# Predictors and Period used: NINO3.4 SST Anomalies: September to October 2017

Station	Below Median (prob)	Median rainfall (mm)	Above Median (prob)	LEPS (%)	Hit-rate (%)			
Western Division								
Penang Mill (1910-2017)	41	889.4	59	16.9	72.3			
Lautoka Mill (1900-2017)	43	789.9	57	10.9	70.1			
Nadi Airport (1942-2017)	41	844.2	59	22.9	76.1			
Viwa (1978 -2017)	39	614.7	614.7 <b>61</b>		71.4			
	Centra	l Division	I	I	1			
Laucala Bay (Suva) (1942-2017)	48	873.6	52	-0.2	56.7			
Nausori Airport (1957-2017)	49	833.7	51	-1.4	55.7			
Tokotoko (Navua) (1945-2017)	48	994.0	52	-0.2	51.5			
	Easteri	n Division			·			
Lakeba (1950-2017)	40	655.6	60	23.0	67.2			
Vunisea (Kadavu) (1931-2017)	43	616.0	57	13.7	71.2			
Ono-i-Lau (1943-2017)	43	505.9	57	9.5	60.9			
Northern Division								
Labasa Airport (1956-2017)	35	918.3	65	31.9	73.3			
Savusavu Airfield (1956-2017)	42	707.8	58	16.4	66.7			
	1	1	1	1	1			
Rotuma (1912 -2017)	42	996.9	58	21.3	65.2			

## **TABLE 4: Seasonal Climate Outlooks using POAMA2 for**

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Lakeba	6	508	5	701	89
Nadi	6	597	6	860	88
Nabouwalu	12	679	5	885	83
Udu Point	15	680	9	927	76
Vunisea	6	496	6	669	88
Suva	6	739	6	956	88
Rotuma	9	817	12	1018	79

## December 2017 to February 2018

## **Summary Statements**

## Rainfall for October 2017:

*Generally, normal* to *below normal* rainfall were recorded across the Fiji Group, with the exception of Ono-i-Lau and Rotuma, which recorded *above normal* rainfall.

This October was fourth driest October on record for Penang Mill and fourth wettest October on record for Rotuma.

## Accumulated rainfall for August to October 2017 & outlook verification:

Apart from Ono-i-Lau and Rotuma, generally *normal* to *below normal* rainfall was recorded during the last three months.

Majority of the stations in the Western Division are still in meteorological drought state, at the 3-month timescale.

The rainfall outlooks for the August to October 2017 period were consistent at six stations, near-consistent at five, inconsistent at Ono-i-Lau, while the forecast for Vunisea could not be verified due to missing observations.

## Outlooks for December 2017 to February 2018:

## 1. SCOPIC:

The SCOPIC rainfall outlook for December 2017 to February 2018 shows:

- Western Division: *above-normal* rainfall is the most likely outcome with normal the next most likely at Viwa, while at Lautoka and Nadi there are near-equal chances of *above-normal* and *normal* rainfall. At Penang Mill there is little guidance as the chances of above- normal, normal and below-normal are similar;
- Central Division: The outlook offers little guidance for the December 2017 to February 2018 period as the chances of above-normal, normal and below-normal rainfall are similar;
- Eastern Division, Northern Division: The rainfall outlook shows a near equal likelihood of above-normal and normal rainfall. Below normal rainfall is the least

likely. At Rotuma there is little guidance as the chances of above- normal, normal and below-normal are similar.

*Very low to low* confidence in the Central Division, while *moderate to very high* confidence for the rest of the country.

## 2. POAMA

The POAMA outlook shows:

• Above-normal rainfall is the favoured outcome across the Fiji Group.

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

Very Low: X < 0.0Low:  $0 \le X < 5$ Moderate  $5 \le X < 10$ Good:  $10 \le X < 15$ High:  $15 \le X < 25$ Very High:  $25 \le X < 35$ Exceptional:  $X \ge 35$