

## Pacific Islands - Online Climate Outlook Forum (OCOF) No. 117

Country Name: Fiji

TABLE 1: Monthly Rainfall

Station (include data period)			MAY 2017				
	March 2017 Total	April 2017 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
<b>Western Division</b>							
Penang Mill (1910-2017)	440.0	32.4	<b>162.5</b>	65	165	101	70/108
Lautoka Mill (1900-2017)	369.8	15.2	<b>65.8</b>	45	117	78	56/118
Nadi Airport (1942-2017)	509.8	48.7	<b>55.2</b>	43	101	76	33/75
Viwa (1978 -2017)	285.5	63.2	<b>137.0</b>	43	119	82	26/35
<b>Central Division</b>							
Laucala Bay (Suva) (1942-2017)	383.0	317.9	<b>285.2</b>	169	258	197	57/76
Nausori Airport (1957-2017)	312.8	175.4	<b>248.9</b>	159	244	197	41/61
Tokotoko (Navua) (1945-2017)	623.9	187.5	<b>262.8</b>	186	347	255	39/73
<b>Eastern Division</b>							
Lakeba (1950-2017)	175.1	21.8	<b>183.3</b>	82	165	108	49/68
Vunisea (Kadavu) (1931-2017)	302.6	273.9	<b>246.4</b>	102	201	137	61/81
Ono-i-Lau (1943-2017)	143.4	44.4	<b>142.3</b>	60	143	82	47/70
<b>Northern Division</b>							
Labasa Airport (1946-2017)	436.9	54.0	<b>148.1</b>	58	117	85	48/62
Savusavu Airfield (1956-2017)	270.0	83.6	<b>114.2</b>	119	201	156	19/61
Rotuma (1912-2017)	327.8	243.9	<b>216.2</b>	227	340	281	33/104

Period: \*below normal/normal/above normal

M - Missing

**TABLE 2: Three-monthly Rainfall  
March to May 2017**

**Predictors and Period used: NINO3.4 SST Anomalies: November 2016 to January 2017**

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)
<i>Western Division</i>							
Penang Mill (1910-2017)	<b>634.9</b>	596	873	694	43/107	21/38/ <b>41</b> (8.4)	Near-consistent
Lautoka Mill (1900-2017)	<b>450.8</b>	480	682	574	32/117	20/ <b>40/40</b> (8.3)	Near-consistent
Nadi Airport (1942-2017)	<b>613.7</b>	509	676	584	41/74	23/37/ <b>40</b> (9.1)	Near-consistent
Yasawa-i-rara (1950-2016)	M	454	643	539	-	21/37/ <b>42</b> (9.1)	Unverified
<i>Central Division</i>							
Laucala Bay (Suva) (1942-2017)	<b>986.1</b>	815	1046	906	46/76	30/33/ <b>37</b> (1)	Near-consistent
Nausori Airport (1957-2017)	<b>737.1</b>	803	1028	908	12/61	30/34/ <b>36</b> (-0.2)	Inconsistent
Tokotoko (Navua) (1945-2017)	<b>1074.2</b>	928	1164	1045	40/73	28/ <b>37</b> /35 (0.5)	Consistent
<i>Eastern Division</i>							
Lakeba, Lau (1950-2017)	<b>380.2</b>	536	718	624	8/67	22/ <b>39/39</b> (6.4)	Near-consistent
Vunisea (Kadavu) (1931-2017)	<b>822.9</b>	607	761	697	63/80	23/38/ <b>39</b> (6.1)	Consistent
Ono-i-lau (1943-2017)	<b>330.1</b>	449	644	513	11/68	28/32/ <b>40</b> (3.9)	Inconsistent
<i>Northern Division</i>							
Labasa Airport (1956-2017)	<b>639.0</b>	561	836	722	29/62	30/32/ <b>38</b> (2.0)	Near-consistent
Savusavu Airfield (1956-2017)	<b>467.8</b>	566	749	664	10/60	23/37/ <b>40</b> (7.0)	Inconsistent
Rotuma (1912-2017)	<b>787.9</b>	824	1041	957	30/103	<b>34/33/33</b> (-1.6)	Near-consistent

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  
July to September 2017 – Tercile Method**

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

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS (%)	Hit-rate (%)
<i>Western Division</i>							
Penang Mill (1910-2017)	<b>43</b>	152	38	233	19	3.7	39.4
Lautoka Mill (1900-2017)	<b>46</b>	123	30	220	24	2.7	28.4
Nadi Airport (1942-2017)	<b>48</b>	130	26	214	26	2.7	28.4
Viwa (1978 -2017)	<b>39</b>	110	28	266	33	-1.0	41.2
<i>Central Division</i>							
Laucala Bay (Suva) (1942-2017)	<b>46</b>	384	29	563	25	2.5	35.8
Nausori Airport (1957-2017)	34	370	<b>41</b>	531	25	-0.1	35.0
Tokotoko (Navua) (1945-2017)	<b>45</b>	527	37	684	18	5.2	40.9
<i>Eastern Division</i>							
Lakeba (1950-2017)	36	209	<b>40</b>	316	24	0.1	37.9
Vunisea (Kadavu) (1931-2017)	<b>37</b>	273	<b>36</b>	382	27	-0.3	24.2
Ono-i-Lau (1943-2017)	<b>43</b>	252	30	345	27	0.3	22.2
<i>Northern Division</i>							
Labasa Airport (1956-2017)	<b>41</b>	109	35	204	24	0.9	31.7
Savusavu Airfield (1956-2017)	<b>49</b>	244	19	355	32	1.8	39.0
<i>Rotuma</i>							
Rotuma (1912 -2017)	32	577	30	775	<b>38</b>	-1.7	33.3

## Seasonal Climate Outlook:

### July to September 2017 - Median Table:

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

Station	Below Median (prob)	Median rainfall (mm)	Above Median (prob)	LEPS (%)	Hit-rate (%)
<i>Western Division</i>					
Penang Mill (1910-2017)	<b>61</b>	197	39	1.7	59.1
Lautoka Mill (1900-2017)	<b>54</b>	172	46	-0.9	53.7
Nadi Airport (1942-2017)	<b>59</b>	175	41	2.1	55.2
Viwa (1978 -2017)	<b>56</b>	153	44	-1.3	55.9
<i>Central Division</i>					
Laucala Bay (Suva) (1942-2017)	<b>59</b>	465	41	0.8	50.7
Nausori Airport (1957-2017)	<b>54</b>	442	46	-1.2	46.7
Tokotoko (Navua) (1945-2017)	<b>67</b>	626	33	5.8	59.1
<i>Eastern Division</i>					
Lakeba (1950-2017)	<b>58</b>	237	42	-0.1	47.0
Vunisea (Kadavu) (1931-2017)	<b>60</b>	324	40	1.8	54.5
Ono-i-Lau (1943-2017)	<b>59</b>	292	41	-0.2	60.3
<i>Northern Division</i>					
Labasa Airport (1956-2017)	<b>60</b>	158	40	0.9	56.7
Savusavu Airfield (1956-2017)	<b>63</b>	310	37	3.2	61.0
<i>Rotuma</i>					
Rotuma (1912 -2017)	45	656	<b>55</b>	-0.8	50.0

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

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Lakeba	27	174	40	303	33
Nadi	40	142	30	198	30
Nabouwalu	27	183	33	297	40
Udu Point	27	151	24	295	49
Vunisea	40	298	30	413	30
Suva	40	369	30	602	30
Rotuma	18	573	30	784	52

### **Summary Statements**

#### **Rainfall for May 2017:**

Rainfall during May 2017 was *normal* to *above normal* at most of the stations. The exceptions to this were Savusavu Airfield and Rotuma where *below normal* rainfall was registered.

#### **Accumulated rainfall for March to May 2017 & outlook verification:**

*Normal* to *below normal* rainfall was recorded at majority of the sites, with Vunisea as the only exception, where *above normal* rainfall was recorded.

The rainfall outlooks for the March to May 2017 period were near-consistent at seven out of the thirteen sites, inconsistent at three sites, consistent at two sites and unverified outlook at one site due to missing records.

#### **Outlooks for July to September 2017:**

##### **1. SCOPIC:**

The SCOPIC rainfall outlook for July to September 2017 shows:

- *Below normal* rainfall the most likely outcome at a majority of the sites;
- *Normal* rainfall the most likely outcome at Nausori Airport and Lakeba;
- Mixed outlook for Vunisea as the chances of *below normal* and *normal* rainfall are almost similar; and
- No guidance for Rotuma as the chances for *below normal*, *normal* and *above normal* are close together.

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##### **2. POAMA**

The POAMA outlook shows:

- *Below normal* rainfall the most likely outcome at Nadi, Suva and Vunisea;
- *Above normal* rainfall the most likely outcome at Nabouwalu, Udu Point and Rotuma; and
- *Normal* rainfall the most likely outcome at Lakeba.

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

Very Low:  $X < 0.0$     Low:  $0 \leq X < 5$     Moderate  $5 \leq X < 10$

Very High :  $25 \leq X < 35$     Exceptional:  $X \geq 35$

Good:  $10 \leq X < 15$     High:  $15 \leq X < 25$