

Country Name: Fiji

TABLE 1: Monthly Rainfall

| Station (include data period)  | APRIL 2017          |                  |       |                       |                       |                      |         |
|--------------------------------|---------------------|------------------|-------|-----------------------|-----------------------|----------------------|---------|
|                                | February 2017 Total | March 2017 Total | Total | 33%tile Rainfall (mm) | 67%tile Rainfall (mm) | Median Rainfall (mm) | Ranking |
| <b>Western Division</b>        |                     |                  |       |                       |                       |                      |         |
| Penang Mill (1910-2017)        | 512.7               | 440.0            | 32.4  | 171.8                 | 277.7                 | 205.2                | 1/107   |
| Lautoka Mill (1900-2017)       | 697.0               | 369.8            | 15.2  | 114.8                 | 201.3                 | 147.1                | 1/118   |
| Nadi Airport (1942-2017)       | 786.6               | 509.8            | 48.7  | 116.8                 | 208.0                 | 152.0                | 6/75    |
| Viwa (1978 -2017)              | 410.1               | 285.5            | 63.2  | 155.4                 | 224.2                 | 184.0                | 5/35    |
| <b>Central Division</b>        |                     |                  |       |                       |                       |                      |         |
| Laucala Bay (Suva) (1942-2017) | 351.3               | 383.0            | 317.9 | 268.2                 | 380.5                 | 324.4                | 35/76   |
| Nausori Airport (1957-2017)    | 433.8               | 312.8            | 175.4 | 262.0                 | 389.2                 | 321.9                | 8/61    |
| Tokotoko (Navua) (1945-2017)   | 562.8               | 623.9            | 187.5 | 304.3                 | 450.2                 | 347.2                | 13/73   |
| <b>Eastern Division</b>        |                     |                  |       |                       |                       |                      |         |
| Lakeba (1950-2017)             | 525.1               | 175.1            | 21.8  | 131.8                 | 221.0                 | 175.2                | 1/67    |
| Vunisea (Kadavu) (1931-2017)   | 474.0               | 302.6            | 273.9 | 149.3                 | 271.9                 | 212.9                | 55/85   |
| Ono-i-Lau (1943-2017)          | 590.9               | 143.4            | 44.4  | 103.7                 | 214.7                 | 170.8                | 7/70    |
| <b>Northern Division</b>       |                     |                  |       |                       |                       |                      |         |
| Udu Point (1946-2017)          | 494.0               | 296.0            | 164.9 | 173.8                 | 286.8                 | 233.1                | 23/69   |
| Nabouwalu (1918-2017)          | 626.4               | 590.6            | 71.8  | 204.2                 | 330.9                 | 245.1                | 5/99    |
| Rotuma (1912-2017)             | 752.1               | 327.8            | 243.9 | 214.7                 | 306.1                 | 257.1                | 48/105  |

Period: \*below normal/normal/above normal

M - Missing

**TABLE 2: Three-monthly Rainfall  
February to April 2017**

**Predictors and Period used: NINO3.4 SST Anomalies: October to December 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) |
|--------------------------------|-------------------|-----------------------|-----------------------|----------------------|---------|----------------------------------|---|
| <i>Western Division</i>        |                   |                       |                       |                      |         |                                  |   |
| Penang Mill (1910-2017)        | <b>985.1</b>      | 827.4                 | 1102.7                | 992.8                | 53/107  | 23/37/ <b>40</b> (6.5)           | Near-consistent   |
| Lautoka Mill (1900-2017)       | <b>1082.0</b>     | 677.2                 | 926.3                 | 809.0                | 94/117  | 23/37/ <b>40</b> (5.8)           | Consistent  |
| Nadi Airport (1942-2017)       | <b>1345.1</b>     | 658.9                 | 910.1                 | 792.5                | 68/74   | 20/36/ <b>44</b> (14.3)          | Consistent  |
| Yasawa-i-rara (1950-2016)      | Missing           | 542.9                 | 818.5                 | 656.4                |         | 20/37/ <b>43</b> (12.6)          | Unverified  |
| <i>Central Division</i>        |                   |                       |                       |                      |         |                                  |   |
| Laucala Bay (Suva) (1942-2017) | <b>1052.2</b>     | 869.4                 | 1080.7                | 944.8                | 48/76   | 32/ <b>37</b> /31 (-1.3)         | Consistent  |
| Nausori Airport (1957-2017)    | <b>922.0</b>      | 892.5                 | 1045.3                | 966.3                | 26/61   | <b>36</b> / <b>35</b> /29 (-0.4) | Near-consistent   |
| Tokotoko (Navua) (1945-2017)   | <b>1374.2</b>     | 999.0                 | 1210.9                | 1106.5               | 60/73   | 33/ <b>38</b> /29 (-1.0)         | Near-consistent   |
| <i>Eastern Division</i>        |                   |                       |                       |                      |         |                                  |   |
| Lakeba, Lau (1950-2017)        | <b>722.0</b>      | 628.5                 | 819.3                 | 696.0                | 38/67   | 20/ <b>40</b> /41 (9.6)          | Consistent  |
| Vunisea (Kadavu) (1931-2017)   | <b>1050.5</b>     | 628.2                 | 825.5                 | 733.6                | 74/81   | 21/38/ <b>41</b> (9.2)           | Consistent  |
| Ono-i-lau (1943-2017)          | <b>778.7</b>      | 474.0                 | 698.4                 | 580.9                | 53/68   | 28/32/ <b>40</b> (2.0)           | Consistent  |
| <i>Northern Division</i>       |                   |                       |                       |                      |         |                                  |   |
| Labasa Airport (1956-2016)     | <b>1362.5</b>     | 781.0                 | 1118.6                | 1019.2               | 35/62   | 27/33/ <b>40</b> (4.6)           | Consistent  |
| Savusavu Airfield (1956-2016)  | <b>751.3</b>      | 632.9                 | 842.6                 | 694.9                |         | 26/37/ <b>40</b> (2.5)           | Near-consistent   |
|                                |                   |                       |                       |                      |         |                                  |   |
| Rotuma (1912-2017)             | <b>1323.8</b>     | 896.2                 | 1083.1                | 1001.0               | 97/104  | 30/34/ <b>36</b> (-0.4)          | 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  
June to August 2017 – Tercile Method**

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

| Station                         | Below Normal (prob) | 33%ile rainfall (mm) | Normal (prob) | 66%ile rainfall (mm) | Above Normal (prob) | LEPS (%) | Hit-rate (%) |
|---------------------------------|---------------------|----------------------|---------------|----------------------|---------------------|----------|--------------|
| <b><i>Western Division</i></b>  |                     |                      |               |                      |                     |          |              |
| Penang Mill (1910-2017)         | <b>39</b>           | 159.5                | 30            | 226.3                | 31                  | 0.6      | 38.8         |
| Lautoka Mill (1900-2017)        | <b>39</b>           | 119.7                | 31            | 223.7                | 30                  | 0.9      | 34.3         |
| Nadi Airport (1942-2017)        | <b>40</b>           | 121.0                | 32            | 208.2                | 28                  | 2.9      | 35.8         |
| Viwa (1978 -2017)               | <b>40</b>           | 113.4                | 24            | 229.0                | 37                  | 2.9      | 51.4         |
| <b><i>Central Division</i></b>  |                     |                      |               |                      |                     |          |              |
| Laucala Bay (Suva) (1942-2017)  | <b>38</b>           | 366.4                | 33            | 513.9                | 29                  | 1.2      | 38.8         |
| Nausori Airport (1957-2017)     | <b>41</b>           | 343.2                | 31            | 498.9                | 28                  | 4.4      | 40.0         |
| Tokotoko (Navua) (1945-2017)    | <b>39</b>           | 491.6                | 35            | 682.7                | 26                  | 2.8      | 42.4         |
| <b><i>Eastern Division</i></b>  |                     |                      |               |                      |                     |          |              |
| Lakeba (1950-2017)              | <b>41</b>           | 202.2                | 37            | 303.6                | 22                  | 4.5      | 24.2         |
| Vunisea (Kadavu) (1931-2017)    | <b>39</b>           | 255.0                | 30            | 397.8                | 31                  | 0.8      | 42.4         |
| Ono-i-Lau (1943-2017)           | <b>37</b>           | 249.6                | 36            | 344.2                | 27                  | 1.8      | 41.3         |
| <b><i>Northern Division</i></b> |                     |                      |               |                      |                     |          |              |
| Udu Point (1946-2017)           | <b>40</b>           | 245.7                | 36            | 393.7                | 24                  | 5.1      | 42.2         |
| Nabouwalu (1918-2017)           | <b>47</b>           | 231.7                | 35            | 336.0                | 18                  | 15.4     | 55.4         |
| <b><i>Rotuma</i></b>            |                     |                      |               |                      |                     |          |              |
| Rotuma (1912 -2017)             | 25                  | 598.5                | <b>38</b>     | 778.5                | 37                  | 2.3      | 41.5         |

## Seasonal Climate Outlook:

### June to August 2017 - Median Table:

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

| Station                         | Below<br>Median<br>(prob) | Median<br>rainfall<br>(mm) | Above<br>Median<br>(prob) | LEPS | Hit-rate |
|---------------------------------|---------------------------|----------------------------|---------------------------|------|----------|
| <b><i>Western Division</i></b>  |                           |                            |                           |      |          |
| Penang Mill (1910-2017)         | <b>52</b>                 | 185.4                      | 48                        | -1.3 | 53.7     |
| Lautoka Mill (1900-2017)        | <b>55</b>                 | 169.2                      | 45                        | 0.5  | 56.7     |
| Nadi Airport (1942-2017)        | <b>55</b>                 | 167.9                      | 45                        | 0.9  | 53.7     |
| Viwa (1978 -2017)               | <b>53</b>                 | 171.2                      | 47                        | 2.1  | 57.1     |
| <b><i>Central Division</i></b>  |                           |                            |                           |      |          |
| Laucala Bay (Suva) (1942-2017)  | <b>56</b>                 | 436.2                      | 44                        | 0.7  | 53.7     |
| Nausori Airport (1957-2017)     | <b>60</b>                 | 428.0                      | 40                        | 6.8  | 60.0     |
| Tokotoko (Navua) (1945-2017)    | <b>59</b>                 | 576.5                      | 41                        | 5.1  | 56.1     |
| <b><i>Eastern Division</i></b>  |                           |                            |                           |      |          |
| Lakeba (1950-2017)              | <b>55</b>                 | 270.4                      | 45                        | 0.7  | 50.0     |
| Vunisea (Kadavu) (1931-2017)    | <b>56</b>                 | 316.4                      | 44                        | 2.5  | 56.1     |
| Ono-i-Lau (1943-2017)           | <b>55</b>                 | 289.2                      | 45                        | 0.6  | 57.1     |
| <b><i>Northern Division</i></b> |                           |                            |                           |      |          |
| Udu Point (1946-2017)           | <b>63</b>                 | 305.3                      | 37                        | 10.2 | 60.9     |
| Nabouwalu (1918-2017)           | <b>65</b>                 | 281.1                      | 35                        | 11.5 | 60.0     |
| <b><i>Rotuma</i></b>            |                           |                            |                           |      |          |
| Rotuma (1912 -2017)             | 44                        | 709.4                      | <b>56</b>                 | 1.6  | 58.5     |

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for  
June to August 2017**

| Station   | Lower Tercile (prob) | 33%ile rainfall (mm) | Middle Tercile (prob) | 66%ile rainfall (mm) | Upper Tercile (prob) |
|-----------|----------------------|----------------------|-----------------------|----------------------|----------------------|
| Lakeba    | <b>42</b>            | 184.0                | 39                    | 299.0                | 19                   |
| Nadi      | <b>46</b>            | 126.0                | 42                    | 215.0                | 12                   |
| Nabouwalu | <b>42</b>            | 212.0                | <b>42</b>             | 316.0                | 16                   |
| Udu Point | <b>46</b>            | 159.0                | 30                    | 295.0                | 24                   |
| Vunisea   | <b>46</b>            | 294.0                | 42                    | 448.0                | 12                   |
| Suva      | <b>46</b>            | 359.0                | 42                    | 501.0                | 12                   |
| Rotuma    | 36                   | 587.0                | 21                    | 843.0                | <b>43</b>            |

### **Summary Statements**

#### **Rainfall for April 2017:**

Majority of the stations recorded *below normal* rainfall, while *above normal* rainfall was recorded at Vunisea and *normal* rainfall at Laucala Bay (Suva) and Rotuma.

Penang (107 years of record), Lautoka (118 years) and Lakeba (67 years) recorded their lowest ever April monthly rainfall.

#### **Accumulated rainfall for February to April 2017 & outlook verification:**

*Normal to above normal* rainfall was recorded across country during February to April 2017 period.

For the February to April 2017 period, the rainfall outlooks were consistent at seven of the thirteen sites, near-consistent at four sites, inconsistent at Rotuma, while the outlook for Yasawa-i-Rara could not be verified due to missing records.

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

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

The SCOPIC rainfall outlook for June to August 2017:

- *Below normal* rainfall is most likely followed by *normal* rainfall;
- Rotuma is the lone exception, where there is equal likelihood of *normal* and *above normal* rainfall.

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

POAMA model is almost identical to SCOPIC in that *below normal* rainfall is the most likely, with *normal* the next most likely. Once again the exception is Rotuma where *above normal* rainfall is the most likely.

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

Very Low:  $X < 0.0$     Low:  $0 \leq X < 5$     Moderate  $5 \leq X < 10$     Good:  $10 \leq X < 15$     High:  $15 \leq X < 25$

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