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

**Country Name: Samoa** 

**TABLE 1: Monthly Rainfall** 

| Station (include data period) |                          |                           | March 2017 |                             |                             |                         |         |  |  |
|-------------------------------|--------------------------|---------------------------|------------|-----------------------------|-----------------------------|-------------------------|---------|--|--|
|                               | January<br>2017<br>Total | February<br>2017<br>Total | Total      | 33%tile<br>Rainfall<br>(mm) | 67%tile<br>Rainfall<br>(mm) | Median<br>Rainfall (mm) | Ranking |  |  |
| Afiamalu                      | 497.5                    | 971.9                     | 219.5      | 397.0                       | 587.9                       | 501.5                   | 8/65    |  |  |
| Nafanua                       | 338.8                    | 641.0                     | 135.1      | 318.5                       | 400.3                       | 355.2                   | 3/45    |  |  |
| Apia                          | 270.4                    | 543.3                     | 91.9       | 272.9                       | 368.0                       | 309.2                   | 3/128   |  |  |
| Faleolo                       | 226.5                    | 275.7                     | 213.3      | 184.9                       | 246.8                       | 218.2                   | 27/56   |  |  |

# TABLE 2: Three-monthly Rainfall January 2017 to March 2017

[Please note that the data used in this verification should be sourced from table 3 of OCOF #111]

| Station  | Three-month<br>Total | 33%tile<br>Rainfall<br>(mm) | 67%tile<br>Rainfall<br>(mm) | Median<br>Rainfall<br>(mm) | Ranking | Forecast probs.*<br>(include LEPS) | Verification*<br>(Consistent,<br>Near-consistent<br>Inconsistent? |
|----------|----------------------|-----------------------------|-----------------------------|----------------------------|---------|------------------------------------|---|
| Afiamalu | 1688.9               | 1533.1                      | 1981.8                      | 1767.1                     | 27/63   | 32/28/ <b>40</b><br>(0.9)          | Near<br>consistent  |
| Nafanua  | 1114.9               | 1086.0                      | 1611.0                      | 1270.2                     | 17/43   | 13/ <b>46</b> /41<br>(14.4)        | Consistent  |
| Apia     | 905.6                | 1003.8                      | 1253.5                      | 1124.3                     | 29/128  | 22/36/ <b>42</b><br>(9.0)          | Inconsistent  |
| Faleolo  | 715.5                | 682.4                       | 884.2                       | 780.2                      | 22/56   | 29/34/ <b>37</b><br>(0.9)          | Near<br>consistent  |

Period:\*below normal/normal/above normal

Predictors and Period used for January 2017 to March 2017 Outlooks (refer to OCOF

#111): Nino 3.4 values from August to October 2016

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 for May to July 2017** 

**Predictors and Period used: NINO 3.4 indices from February to March 2017** 

| Station  | Below<br>Median<br>(prob) | Median<br>Rainfall<br>(mm) | Above<br>Median<br>(prob) | LEPS | Hit-rate |
|----------|---------------------------|----------------------------|---------------------------|------|----------|
| Afiamalu | 46                        | 732.4                      | 54                        | 3.8% | 60.0%    |
| Nafanua  | 49                        | 523.6                      | 51                        | -2.0 | 47.7%    |
| Apia     | 47                        | 410.2                      | 53                        | 1.3% | 56.1%    |
| Faleolo  | 46                        | 311.3                      | 54                        | 1.9% | 59.3%    |
|          |                           |                            |                           |      |          |

| Station  | Below<br>Normal<br>(prob) | 33%ile<br>rainfall<br>(mm) | Normal<br>(prob) | 66%ile<br>rainfall<br>(mm) | Above<br>Normal<br>(prob) | LEPS  | Hit-rate |
|----------|---------------------------|----------------------------|------------------|----------------------------|---------------------------|-------|----------|
| Afiamalu | 29                        | 625.1                      | 36               | 832.5                      | 35                        | 1.0%  | 29.7%    |
| Nafanua  | 32                        | 437.9                      | 34               | 594.1                      | 34                        | -2.6% | 23.8%    |
| Apia     | 33                        | 333.0                      | 34               | 481.2                      | 33                        | -2.3% | 37.5%    |
| Faleolo  | 32                        | 273.1                      | 31               | 374.3                      | 37                        | 0.9%  | 37.5%    |
|          |                           |                            |                  |                            |                           |       |          |
|          |                           |                            |                  |                            |                           |       |          |
|          |                           |                            |                  |                            |                           |       |          |
|          |                           |                            |                  |                            |                           |       |          |
|          |                           |                            |                  |                            |                           |       |          |

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

| Station | Lower<br>Tercile<br>(prob) | 33%ile<br>rainfall<br>(mm) | Middle<br>Tercile<br>(prob) | 66%ile<br>rainfall<br>(mm) | Upper<br>Tercile<br>(prob) |  |
|---------|----------------------------|----------------------------|-----------------------------|----------------------------|----------------------------|--|
| Apia    | 52                         | 388                        | 27                          | 530                        | 21                         |  |

## **Summary Statements**

#### Rainfall for March 2017:

"Normal rainfall was recorded for Afiamalu and Faleolo whereas "below normal" observed for Apia and Nafanua.

#### Accumulated rainfall for January 2017 to March 2017, including outlook verification:

"Normal" rainfall was registered for Afiamalu, Nafanua and Faleolo with an exception of Apia received "below normal".

The outlook verification was "near consistent" for Afiamalu and Faleolo. Inconsistent was issue for Apia station. The outlook for Nafanua is consistent.

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

#### 1. SCOPIC:

• The outlook for all stations offers little guidance for the coming season as the chances of "above normal", "normal" and "below normal" rainfall are similar.

The confidence of the model is "low" to "very low".

## 2. POAMA:

POAMA favours below normal at Apia, with normal the next most likely category.

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

 $\mbox{Very Low: } X < 0.0 \qquad \qquad \mbox{Low: } 0 \le X < 5 \qquad \qquad \mbox{Moderate } 5 \le X < 10 \qquad \qquad \mbox{Good: } 10 \le X < 15 \qquad \mbox{High: } 15 \le X < 25$ 

Very High:  $25 \le X < 35$  Exceptional:  $X \ge 35$