

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 90

Country Name: SAMOA

TABLE 1: Monthly Rainfall

| Station (include data period) | February 2015 | | | | | | |
|-------------------------------|---------------------|--------------------|-------|-----------------------|-----------------------|----------------------|---------|
| | December 2014 Total | January 2015 Total | Total | 33%tile Rainfall (mm) | 67%tile Rainfall (mm) | Median Rainfall (mm) | Ranking |
| Afiamalu | 426.4 | 626.4 | 534.7 | 398.8 | 651.3 | 518.2 | 33/62 |
| Nafanua | 171.0 | 437.4 | 382.6 | 308.5 | 466.6 | 396.1 | 21/43 |
| Apia | 190.1 | 370.2 | 348.6 | 269.8 | 401.0 | 339.2 | 69/126 |
| Faleolo | 378.4 | 188.3 | 238.1 | 187.1 | 277.2 | 235.7 | 29/54 |

TABLE 2: Three-monthly Rainfall December 2014 to February 2015

[Please note that the data used in this verification should be sourced from table 3 of OCOF #86]

| Station | Three-month Total | 33%tile Rainfall (mm) | 67%tile Rainfall (mm) | Median Rainfall (mm) | Ranking | Forecast probs.* (include LEPS) | Verification* (Consistent, Near-consistent, Inconsistent?) |
|----------|-------------------|-----------------------|-----------------------|----------------------|---------|---------------------------------|--|
| Afiamalu | 1587.5 | 1621.3 | 2195.6 | 1924.8 | 20/61 | 40/40/20 (11.5) | Near Consistent |
| Nafanua | 991.0 | 1078.3 | 1535.8 | 1257.3 | 14/42 | 40/39/21 (17.5) | Consistent |
| Apia | 908.9 | 898.9 | 1240.3 | 1069.6 | 32/92 | 39/32/29 (10.4) | Near Consistent |
| Faleolo | 804.8 | 713.9 | 960.6 | 869.0 | 24/52 | 36/35/29 (-1.4) | Near Consistent |

Period: *below normal/normal/above normal

Predictors and Period used for December 2014 to February 2015 Outlooks (refer to OCOF #86):

Nino 3.4 values from August to October 2014

* 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).

**TABLE 3: Seasonal Climate Outlooks using SCOPIC for
April to June 2015**

Predictors and Period used: Nino 3.4 values of December 2014 to February 2015

| Station | Below Median (prob) | Median Rainfall (mm) | Above Median (prob) | | LEPS | Hit-rate |
|----------|---------------------------|----------------------------|---------------------------|--|------|----------|
| Afiamalu | 56 | 840.8 | 44 | | 1.6 | 59.4 |
| Nafanua | 54 | 630.8 | 46 | | -0.9 | 53.6 |
| Apia | 55 | 512.0 | 45 | | 0.9 | 59.4 |
| Faleolo | 61 | 397.0 | 40 | | 6.3 | 73.1 |

| Station | Below Normal (prob) | 33%ile rainfall (mm) | Normal (prob) | 66%ile rainfall (mm) | Above Normal (prob) | LEPS | Hit-rate |
|----------|---------------------------|----------------------------|------------------|----------------------------|---------------------------|------|----------|
| Afiamalu | 40 | 747.4 | 26 | 951.0 | 34 | 1.0 | 43.8 |
| Nafanua | 36 | 547.2 | 32 | 729.6 | 32 | -3.1 | 28.6 |
| Apia | 38 | 419.4 | 32 | 613.4 | 30 | 0.5 | 28.1 |
| Faleolo | 38 | 343.6 | 35 | 457.2 | 27 | 1.0 | 50.0 |

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for
April to June 2015**

| Station | Lower Tercile (prob) | 33%ile rainfall (mm) | Middle Tercile (prob) | 66%ile rainfall (mm) | Upper Tercile (prob) | | |
|---------|----------------------------|----------------------------|-----------------------------|----------------------------|----------------------------|--|--|
| Apia | 12 | 486 | 39 | 628 | 49 | | |

Summary Statements

Rainfall for February 2015:

'Normal' rainfall was recorded across all stations.

Accumulated rainfall for December 2014 to February 2015, including outlook verification:

Afiamalu and Nafanua received **'below normal'** rainfall whereas Faleolo and Apia recorded **'normal'** rainfall in December 2014 to February 2015 period.

All stations were **'near consistent'** with the outlook with an exception of Nafanua being **'consistent'**

Outlooks for April to June 2015:

1. SCOPIC:

- The outlook for Afiamalu station shows **'below normal'** rainfall is the most likely outcome with **'above normal'** rainfall the next most likely.
- For Faleolo station there is near equal likelihood of **'below normal'** and **'normal'** rainfall with **'above normal'** the least likely.
- The outlook for Apia and Nafanua stations offers little guidance as the chances of **'above normal'**, **'normal'** and **'below normal'** are similar.
- Outlook confidence ranges from **'low'** to **'very low'**.

2. POAMA:

'Above normal' rainfall is favoured for Apia station in the coming season.

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: $X \geq 35$