

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 80

Country Name: Tuvalu

TABLE 1: Monthly Rainfall

| Station (include data period) | April 2014 | | | | | | |
|-------------------------------|---------------------|------------------|-------|-----------------------|-----------------------|----------------------|----------|
| | February 2014 Total | March 2014 Total | Total | 33%tile Rainfall (mm) | 67%tile Rainfall (mm) | Median Rainfall (mm) | Ranking |
| Nui | 154.4 | 168.7 | 52.4 | 154.8 | 269.9 | 200.1 | 5 of 69 |
| Funafuti | 439.8 | 367.8 | 133.6 | 185.4 | 296.2 | 236.7 | 14 of 82 |
| Niulakita | 338.0 | 221.1 | 58.5 | 167.6 | 255.0 | 213.4 | 2 of 62 |

TABLE 2: Three-monthly Rainfall February to April 2014

[Please note that the data used in this verification should be sourced from table 3 of OCOF #76]

| 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?) |
|-----------|-------------------|-----------------------|-----------------------|----------------------|----------|---------------------------------|--|
| Nui | 375.5 | 713.1 | 978.0 | 821.3 | 4 of 69 | 34/35/31 [21.0%] | Near consistent |
| Funafuti | 941.2 | 807.0 | 1047.7 | 926.1 | 45 of 82 | 36/31/33 [8.5%] | Near consistent |
| Niulakita | 617.6 | 851.0 | 1013.4 | 924.0 | 8 of 62 | 34/33/33 [-1.7] | Near Consistent |

Period: *below normal/normal/above normal

Predictors and Period used for February to April 2014 Outlooks (refer to OCOF #76):

SOI VALUES FOR OCT-DEC 2013

* 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
June to August 2014**

Predictors and Period used: SOI values

| Station | Below Median (prob) | Median Rainfall (mm) | Above Median (prob) | | LEPS | Hit-rate |
|-----------|------------------------------------|-------------------------------------|------------------------------------|--|-------------|-----------------|
| Nui | 43% | 637.5 | 57% | | 30.5% | 76.5% |
| Funafuti | 44% | 716.6 | 56% | | 17.1% | 71.6% |
| Niulakita | 49% | 581.0 | 51% | | 2.4% | 63.9% |

| Station | Below Normal (prob) | 33%ile rainfall (mm) | Normal (prob) | 66%ile rainfall (mm) | Above Normal (prob) | LEPS | Hit-rate |
|-----------|------------------------------------|-------------------------------------|--------------------------|-------------------------------------|------------------------------------|-------------|-----------------|
| Nui | 23% | 492.9 | 41% | 718.7 | 36% | 25.4% | 47.1% |
| Funafuti | 23% | 582.2 | 39% | 826.7 | 38% | 15.1% | 45.7% |
| Niulakita | 32% | 531.4 | 34% | 737.5 | 34% | 1.0% | 41.0% |

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for
June to August 2014**

| Station | Lower Tercile (prob) | 33%ile rainfall (mm) | Middle Tercile (prob) | 66%ile rainfall (mm) | Upper Tercile (prob) | | |
|----------|----------------------|----------------------|-----------------------|----------------------|----------------------|--|--|
| Nui | 15 | 576 | 64 | 753 | 21 | | |
| Funafuti | 27 | 699 | 67 | 808 | 6 | | |

Summary Statements

Rainfall for April 2014: All stations collected below normal rainfall. But SCOPIC predicted above normal rainfall at Funafuti during April.

Accumulated rainfall for February to April 2014, including outlook verification:

Nui and Niulakita are below normal rainfall with verification of near consistent.

Funafuti is normal rainfall with verification of near consistent

Outlooks for June-August 2014:

- 1 The SCOPIC seasonal rainfall outlook for June to August 2014 shows the most likely outcome is Normal rainfall for Nui and Funafuti with above normal the next likely. The outlook offers little guidance for the coming season at Niulakita as the chances of Above normal, normal and below normal rainfall are equal.
 - 2 Skills range from moderate to very high skill through central and southern stations. Overall skill is moderate.
- 2.** The POAMA seasonal outlook for June to August period shows that normal rainfall for all stations.

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: $X \geq 35$