

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 100

Country Name:

TABLE 1: Monthly Rainfall

| Station (include data period) | December 2015 | | | | | | |
|-------------------------------|--------------------|---------------------|-------|-----------------------|-----------------------|----------------------|---------|
| | October 2015 Total | November 2015 Total | Total | 33%tile Rainfall (mm) | 67%tile Rainfall (mm) | Median Rainfall (mm) | Ranking |
| Nanumea | 366.3 | 318.4 | 648.4 | 205.9 | 337.8 | 294.4 | 74/75 |
| Nui | 421.0 | 271.6 | 504.4 | 312 | 430.3 | 307.6 | 58/70 |
| Funafuti | 287.5 | 460.8 | 520.1 | 265.3 | 417.2 | 354.5 | 69/83 |
| Niulakita | | | | | | | |

TABLE 2: Three-monthly Rainfall October to December 2015

[Please note that the data used in this verification should be sourced from table 3 of OCOF #96]

| 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?) |
|----------|-------------------|-----------------------|-----------------------|----------------------|---------|---------------------------------|---|
| Nanumea | 1329.5 | 532.3 | 751.7 | 627.6 | 74/75 | 1/11/88 [19.8%] | Consistent |
| Nui | 119.7 | 709.7 | 914.4 | 803.4 | 67/70 | 3/44/53 [16.4%] | Consistent |
| Funafuti | 1268.4 | 810.0 | 1007.9 | 895.0 | 77/83 | 7/43/49 [5.3%] | Consistent |

Period: *below normal/normal/above normal

Predictors and Period used for October to December 2015 Outlooks (refer to OCOF #96):

* 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
February to April 2016**

Predictors and Period used:

| Station | Below Median (prob) | Median Rainfall (mm) | Above Median (prob) | | LEPS | Hit-rate |
|----------|---------------------------|----------------------------|---------------------------|--|-------|----------|
| Nanumea | 7.5% | 823.9 | 92.5% | | 18.4% | 63.6% |
| Nui | 24.4% | 820.6 | 75.6% | | 2.4% | 60.6% |
| Funafuti | 1.3% | 928.1 | 98.7% | | 35.3% | 75.8% |

| Station | Below Normal (prob) | 33%ile rainfall (mm) | Normal (prob) | 66%ile rainfall (mm) | Above Normal (prob) | LEPS | Hit-rate |
|----------|---------------------------|----------------------------|------------------|----------------------------|---------------------------|-------|----------|
| Nanumea | 0.1% | 624.5 | 32.1% | 990 | 67.8 | 34.8% | 60.6% |
| Nui | 9% | 712.1 | 44% | 974 | 47% | 6.1% | 33.3% |
| Funafuti | 1% | 812.2 | 59% | 1049.6 | 40% | 17.3% | 36.4% |

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for
February to April 2016**

| Station | Lower Tercile (prob) | 33%ile rainfall (mm) | Middle Tercile (prob) | 66%ile rainfall (mm) | Upper Tercile (prob) | | |
|----------|----------------------------|----------------------------|-----------------------------|----------------------------|----------------------------|--|--|
| Nanumea | 12.12% | 810 | 27.27% | 1106 | 60.61% | | |
| Nui | 6.06% | 798 | 36.36% | 1126 | 57.58% | | |
| Funafuti | 27.27% | 907 | 24.24% | 1086 | 48.48% | | |

Summary Statements

Rainfall for December 2015:

Rainfall in December 2015 was above normal rainfall for 3 stations (Nanumea, Nui and Funafuti)

Accumulated rainfall for October to December 2015, including outlook verification:

Rainfall over the last 3 month was recorded above normal rainfall for Nanumea, Nui and Funafuti with verification of consistent

Outlooks for February to April 2016:

1. SCOPIC:

Seasonal outlook for Tuvalu for Feb – April 2016

For Nanumea and Nui, above normal rainfall is the most likely outcome with normal rainfall the next likely outcome with very high skills for Nanumea and moderate skills for Nui Island.

For Funafuti, normal rainfall is the most likely outcome with above normal rainfall is the next likely outcome with high skills confident.

2. POAMA:

For Nanumea, Nui and Funafuti, above normal rainfall is favoured with normal rainfall is the next most likely outcome.

For the overall: Tuvalu seasonal outlook for Feb – April will be Normal to above normal rainfall.

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: $X \geq 35$