

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 71

Country Name: TUVALU

TABLE 1: Monthly Rainfall

| Station (include data period) | July 2013 | | | | | | |
|-------------------------------|----------------|-----------------|-------|-----------------------|-----------------------|----------------------|-------------|
| | May 2013 Total | June 2013 Total | Total | 33%tile Rainfall (mm) | 67%tile Rainfall (mm) | Median Rainfall (mm) | Ranking |
| Nanumea | 66.7 | 85.8 | n/a | 138.0 | 216.5 | 171.4 | Out of date |
| 73 years | | | | | | | |
| Nui | 49.8 | 159.9 | 92.4 | 164.3 | 235.6 | 200.7 | 5/68 |
| 68 years | | | | | | | |
| Funafuti | 113.1 | 210.8 | 288.3 | 187.5 | 269.2 | 220.2 | 56/81 |
| 81 years | | | | | | | |
| Niulakita | 249.1 | 418.1 | 172.6 | 165.7 | 257.0 | 212.5 | 25/61 |
| 61 years | | | | | | | |

TABLE 2: Three-monthly Rainfall

| Station | Three-month Total | 33%tile Rainfall (mm) | 67%tile Rainfall (mm) | Median Rainfall (mm) | Ranking | Forecast probs.* (include LEPS) | Verification ¹ (Consistent, Near-consistent, Inconsistent?) |
|-----------|-------------------|-----------------------|-----------------------|----------------------|---------|---------------------------------|------------------------------------------------------------------------|
| Nanumea | n/a | 484.6 | 704.7 | 608.3 | 5/73 | 35%/37%/28% | n/a |
| | | | | | | [15.9%] | |
| Nui | 302.1 | 519.2 | 675.9 | 578.3 | 4/68 | 36%/41%/23% | Near Consistent |
| | | | | | | [28.1%] | |
| Funafuti | 612.2 | 604.3 | 781.9 | 701.6 | 28/81 | 36%/39%/25% | Consistent |
| | | | | | | [21.0%] | |
| Niulakita | 839.8 | 536.3 | 694.4 | 606.0 | 50/61 | 34%/33%/33% | inconsistent |

¹Forecast 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).

| | | | | | | | |
|--|--|--|--|--|--|---------|--|
| | | | | | | [-2.0%] | |
|--|--|--|--|--|--|---------|--|

May to July 2013

[Please note that the data used in this verification should be sourced from table 3 of OCOF #67]

Period: *below normal/normal/above normal

Note: Two months total rainfall for Nanumea not three months.

Predictors and Period used for May to July 2013 Outlooks (refer to OCOF #67):

Predictors used: SOI values
Period used: Jan-March

TABLE 3: Seasonal Climate Outlooks using SCOPIC for September to November 2013

Predictors and Period used: SOI VALUES

| Station | Below Median (prob) | Median Rainfall (mm) | Above Median (prob) | | LEPS | Hit-rate |
|-----------|---------------------|----------------------|---------------------|--|-------|----------|
| Nanumea | 87.1% | 480.8 | 12.9% | | 28.1% | 76.4% |
| Nui | 69.7% | 620.5 | 30.3% | | 7.6% | 61.2% |
| Funafuti | 61.4% | 732.7 | 38.6% | | 2.4% | 56.3% |
| Niulakita | 61.3% | 708.1 | 38.7% | | 1.4% | 56.7% |

| Station | Below Normal (prob) | 33%ile rainfall (mm) | Normal (prob) | 66%ile rainfall (mm) | Above Normal (prob) | LEPS | Hit-rate |
|-----------|---------------------|----------------------|---------------|----------------------|---------------------|-------|----------|
| Nanumea | 72.4% | 353.6 | 24.5% | 602.8 | 3.1% | 29.0% | 59.7% |
| Nui | 52.0% | 518.0 | 36.5% | 738.3 | 11.5% | 12.6% | 49.3% |
| Funafuti | 47.2% | 620.5 | 32.0% | 834.9 | 20.8% | 4.1% | 47.5% |
| Niulakita | 31.9% | 612.1 | 47.0% | 854.5 | 21.1% | -0.1% | 38.3% |

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for
September to November 2013**

| Station | Lower Tercile (prob) | 33%ile rainfall (mm) | Middle Tercile (prob) | 66%ile rainfall (mm) | Upper Tercile (prob) | | |
|----------------------|----------------------------|----------------------------|-----------------------------|----------------------------|----------------------------|--|--|
| Funafuti [TUVALU] | 56.66% | 632 | 26.67% | 810 | 16.67% | | |

Summary Statements

Rainfall for July 2013: Below normal rainfall collected at Nui in the central division. Normal rainfall received at Niulakita and above normal rainfall for Funafuti, no rainfall data received from Nanumea the most northern island.

Accumulated rainfall for May–July 2013, including outlook verification:

Below normal rainfall received in the central [Nui] divisions.

Normal rainfall received in Funafuti station.

Above normal rainfall collected in Niulakita the most southern station.

Consistent verification at Nanumea and Funafuti, Near consistent for Nui, while Niulakita goes with inconsistent.

Outlooks for September–November 2013:

1. SCOPIC: Below normal rainfall for Nanumea, Nui and Funafuti and normal for Niulakita with very high skills for Nanumea. Good skills for Nui and low skills for Funafuti.

2. POAMA: Below normal rainfall for the next three months with rainfall below 632 mm.

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: $X \geq 35$