Pacific Islands - Online Climate Outlook Forum (OCOF) No. 105

Country Name: KIRIBATI

TABLE 1: Monthly Rainfall

| Station (include data period) | | | May 2016 | | | | | | |
|-------------------------------|------------------------|------------------------|----------|-----------------------------|-----------------------------|-------------------------|---------|--|--|
| | March 2016 Total | April 2016 Total | Total | 33%tile Rainfall (mm) | 67%tile Rainfall (mm) | Median Rainfall (mm) | Ranking | | |
| Butaritari | 163.1 | 160.7 | 155.6 | 226 | 332 | 304.5 | 11/77 | | |
| Tarawa | 652.4 | 409.9 | 152.1 | 96.7 | 173.6 | 141.3 | 38/67 | | |
| Beru | 470.6 | 597.9 | 229.8 | 38.8 | 96.5 | 65.2 | 56/63 | | |
| Kanton | 338.3 | 273.1 | 140 | 49 | 92.8 | 63 | 52/59 | | |
| Kiritimati | 327.2 | 448.2 | 123 | 35 | 106.4 | 62.9 | 70/92 | | |
| | | | | | | | | | |

TABLE 2: Three-monthly Rainfall March to May 2016

[Please note that the data used in this verification should be sourced from table 3 of OCOF #101]

| 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? |
|------------|----------------------|-----------------------------|-----------------------------|----------------------------|---------|------------------------------------|--|
| Butaritari | 479.4 | 793 | 1100 | 947.1 | 10/77 | 8/ 52 /40(7.3) | Near Consistent |
| Tarawa | 1214.4 | 339.3 | 646 | 503.3 | 66/67 | 5/47/ 48 (7.8) | Consistent |
| Beru | 1298.3 | 149.6 | 380 | 264 | 60/60 | 1/4/ 96 (23.9) | Consistent |
| Kanton | 751.4 | 128.6 | 224.8 | 167.5 | 55/58 | 8/10/ 82 (8.6) | Consistent |
| Kiritimati | 898.4 | 287.8 | 407.3 | 319.6 | 87/91 | 7/7/ 87 (11.1) | Consistent |
| | | | | | | | |
| | | | | | | | |

<u>Period</u>:*below normal/normal/above normal

Predictors and Period used for March to May 2016 Outlooks (refer to OCOF #101):

SSTa's 1 and 9 (3mths)

*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 July to September 2016

Predictors and Period used: NINO 3.4 SST ANOMALIES 2MTH AVG

| Station | Below Median (prob) | Median Rainfall (mm) | Above Median (prob) | LEPS | Hit-rate |
|------------|---------------------------|----------------------------|---------------------------|------|----------|
| Butaritari | 17.9 | 628 | 82.1 | 12.9 | 70.5 |
| Tarawa | 11.0 | 336.2 | 89 | 22.1 | 71.2 |
| Beru | 10.3 | 173 | 89.7 | 19.1 | 64 |
| Kanton | 36.7 | 171.8 | 63.3 | 0 | 57.8 |
| Kiritimati | 47.7 | 72.5 | 52.3 | -1.6 | 39.1 |
| | | | | | |

| Station | Below Normal (prob) | 33%ile rainfall (mm) | Normal (prob) | 66%ile rainfall (mm) | Above Normal (prob) | LEPS | Hit-rate |
|------------|---------------------------|----------------------------|------------------|----------------------------|---------------------------|------|----------|
| | | | | | | | |
| Butaritari | 10 | 501 | 34 | 740 | 56 | 10.4 | 49.2 |
| Tarawa | 5 | 198.5 | 12 | 547.1 | 83 | 20.1 | 51.5 |
| Beru | 2 | 130.7 | 10 | 292.5 | 88 | 24.6 | 56 |
| Kanton | 17 | 141.4 | 36 | 224.1 | 47 | 1.1 | 24.4 |
| Kiritimati | 26 | 42.9 | 26 | 102 | 48 | 0.1 | 31.2 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

TABLE 4: Seasonal Climate Outlooks using POAMA2 for July to September 2016

| Station | Lower Tercile (prob) | 33%ile rainfall (mm) | Middle Tercile (prob) | 66%ile rainfall (mm) | Upper Tercile (prob) | |
|------------------|----------------------------|----------------------------|-----------------------------|----------------------------|----------------------------|--|
| Butaritari | 95 | 464 | 5 | 730 | 0 | |
| Tarawa | 82 | 270 | 13 | 636 | 5 | |
| Kanton Arorae | 5 5 | 111 191 | 90 90 | 226 574 | 5 5 | |
| Kiritimati | 5 | 75 | 90 | 131 | 5 | |
| Tabuaeran | 70 | 83 | 25 | 317 | 5 | |
| | | | | | | |
| | | | | | | |

Summary Statements

Rainfall for May 2016:

Tarawa recorded normal rainfall, Butaritari was below normal and the rest 3 stations was recorded above rainfall. Kanton and Beru were both ranks on 7th - highest value of 59 and 63 respectively.

Accumulated rainfall for March to May 2016, including outlook verification:

Butaritari recorded below normal rainfall and the rest of Kiribati station was recorded above normal. The outlook verification was near consistent for Butaritari and Consistent for other stations.

Outlooks for July to September 2016:

1. SCOPIC:

Kiritimati outlook shows the most likely above normal rainfall with a similar chance of normal and below normal.

Kanton outlook shows the most likely above normal with a normal the next most likely. Butaritari, Tarawa and Beru favour above normal, with normal the next most likely.

2. POAMA:

Butaritari, Tarawa and Tabuaeran favour below normal rainfall for this coming season which normal the next most likely.

Kanton ,Arorae and Kiritimati favour normal rainfall with below normal the next most likely.

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

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

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