

## Pacific Islands - Online Climate Outlook Forum (OCOF) No. 117

**Country Name:** Republic of the Marshall Islands (RMI)

### TABLE 1: Monthly Rainfall

| Station (include data period) |                  |                  | May 2017 |                       |                       |                      |         |
|-------------------------------|------------------|------------------|----------|-----------------------|-----------------------|----------------------|---------|
|                               | March 2017 Total | April 2017 Total | Total    | 33%tile Rainfall (mm) | 67%tile Rainfall (mm) | Median Rainfall (mm) | Ranking |
| MAJURO                        | 332.0            | 263.1            | 125.2    | 213.5                 | 314.0                 | 269.2                | 5/63    |
| KWAJALEIN                     | 27.2             | 87.4             | 132.1    | 163.9                 | 271.1                 | 205.8                | 21/73   |

### TABLE 2: Three-monthly Rainfall March to May 2017

[Please note that the data used in this verification should be sourced from table 3 of OCOF #113]

| 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?) |
|-----------|-------------------|-----------------------|-----------------------|----------------------|---------|---------------------------------|--|
| MAJURO    | 720.3             | 619.5                 | 881.8                 | 748.1                | 30/63   | 29%/34%/37% (1.4%)              | Near Consistent  |
| KWAJALEIN | 246.7             | 375.5                 | 612.8                 | 493.3                | 15/73   | 24%/38%/38% (5.1%)              | Near Consistent  |

Period: \*below normal/normal/above normal

Predictors and Period used for March to May 2017 Outlooks (refer to OCOF #113):

2-Month NINO3.4SSTA (December 2016 to January 2017)

\* 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 July to September 2017**

Predictors and Period used: 2-Month NINO3.4SSTA (April to May 2017)

| Station   | Below Median (prob) | Median Rainfall (mm) | Above Median (prob) |  | LEPS  | Hit-rate |
|-----------|---------------------|----------------------|---------------------|--|-------|----------|
| MAJURO    | 53%                 | 901.9                | 47%                 |  | -1.2% | 54.0%    |
| KWAJALEIN | 47%                 | 774.5                | 53%                 |  | -1.3% | 52.2%    |

| Station   | Below Normal (prob) | 33%ile rainfall (mm) | Normal (prob) | 66%ile rainfall (mm) | Above Normal (prob) | LEPS  | Hit-rate |
|-----------|---------------------|----------------------|---------------|----------------------|---------------------|-------|----------|
| MAJURO    | 38%                 | 830.1                | 32%           | 977.7                | 30%                 | -1.0% | 36.5%    |
| KWAJALEIN | 28%                 | 722.7                | 34%           | 848.1                | 38%                 | -0.8% | 41.8%    |

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for July to September 2017**

| Station   | Lower Tercile (prob) | 33%ile rainfall (mm) | Middle Tercile (prob) | 66%ile rainfall (mm) | Upper Tercile (prob) |  |  |
|-----------|----------------------|----------------------|-----------------------|----------------------|----------------------|--|--|
| MAJURO    | 67%                  | 826.0                | 12%                   | 968.0                | 21%                  |  |  |
| KWAJALEIN | 42%                  | 747.0                | 46%                   | 852.0                | 12%                  |  |  |

## **Summary Statements**

### **Rainfall for May 2017:**

Below normal rainfall was recorded at the two stations in the Marshall Islands (Majuro and Kwajalein) for the month of May 2017.

### **Accumulated rainfall for March to May 2017, including outlook verification**

Normal rainfall was recorded at Majuro and below normal rainfall was recorded at Kwajalein during the March to May 2017 period.

Seasonal rainfall outlook verification was NEAR CONSISTENT for both stations.

### **Outlooks for July to September 2017:**

#### **1. SCOPIC:**

The outlooks offers little guidance for the coming season as the chances of below-normal, normal, and above-normal rainfall are similar at both stations.

The forecast skill is very low at both stations.

#### **2. POAMA:**

The seasonal rainfall outlook for July to September at Majuro favours below-normal, with above-normal the next most likely. The least likely category is normal.

The seasonal rainfall outlook for July to September at Kwajalein shows the most likely outcome is normal, with below-normal the next most likely. The least likely category is above normal.

**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:  $X \geq 35$