

Pacific Islands - Online Climate Outlook Forum No: 77

Country Name: SOLOMON ISLANDS

TABLE 1: Monthly Rainfall

| Station (include data period) | JANUARY 2014 | | | | | | |
|-------------------------------------|---------------------------|---------------------------|---------------|-----------------------------|-----------------------------|-------------------------|------------------|
| | November 2013 Total | December 2013 Total | Total (mm) | 33%tile Rainfall (mm) | 67%tile Rainfall (mm) | Median Rainfall (mm) | Ranking |
| Auki (1962 – 2014) | 195 | 107 | 568 | 293 | 419 | 347 | 44 of 53 |
| Henderson (1975 – 2014) | 22 | 126 | 663 | 170 | 259 | 210 | 39 of 40 |
| Honiara (1954 – 2014) | 34 | 99 | 646 | 188 | 289 | 238 | 57 of 59 |
| Kirakira 1965 – 2014) | 76 | 127 | 504 | 229 | 416 | 308 | 39 of 47 |
| Lata (1975 – 2014) | 186 | 279 | 359 | 345 | 490 | 383 | 16 of 40 |
| Munda (1962 – 2014) | 187 | 313 | 575 | 285 | 413 | 361 | 43 of 53 |
| Taro (1975 – 2014) | 229 | 300 | 502 | 212 | 253 | 234 | Highest Of 37 |

**TABLE 2: Three-monthly Rainfall
November 2013 to January 2014**

| Stations | Three-month Total | 33%tile Rainfall (mm) | 67%tile Rainfall (mm) | Median Rainfall (mm) | Ranking | Forecasted probs. * (Include LEPS) | Verification (Consistent, Near-consistent Inconsistent?) |
|---------------------------|----------------------|-----------------------------|-----------------------------|----------------------------|----------|---------------------------------------|---|
| Auki (1962 – 2014) | 870 | 778 | 969 | 879 | 25 of 50 | 8/29/63 (34.4) | Near consistent |
| Henderson (1975 – 201) | 811 | 440 | 660 | 574 | 32 of 39 | 15/9/76 (29.9) | Consistent |
| Honiara (1954 – 2014) | 779 | 511 | 639 | 576 | 42 of 57 | 9/33/58 (27.1) | Consistent |
| Kirakira 1965 – 2014) | 707 | 708 | 936 | 816 | 16 of 45 | 5/28/67 (30.9) | Inconsistent |
| Lata (1975 – 2014) | 824 | 1046 | 1274 | 1119 | 8 of 39 | 9/34/57 (14.6) | Inconsistent |
| Munda (1962 – 2014) | 1075 | 810 | 977 | 855 | 39 of 52 | 27/26/47 (0.0) | Consistent |
| Taro (1975 – 2014) | 1031 | 575 | 772 | 688 | 33 of 34 | 12/35/53 (12.5) | Consistent |

Predictor: SST 1&9

* 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 for March to May 2014

Predictors and Period used: January SST 1 & 9 – one month

| Station | Below Median (prob) | Median Rainfall (mm) | Above Median (prob) | | LEPS | Hit-rate |
|-----------|---------------------|----------------------|---------------------|--|------|----------|
| Auki | 50 | 826 | 50 | | -0.2 | 58.8 |
| Henderson | 48 | 524 | 52 | | 1.7 | 55.3 |
| Honiara | 54 | 613 | 46 | | 5.4 | 61.0 |
| Kirakira | 53 | 900 | 47 | | -2.6 | 50.0 |
| Lata | 71 | 1120 | 29 | | 21.5 | 71.1 |
| Munda | 43 | 920 | 57 | | -2.6 | 48.1 |
| Taro | 65 | 870 | 35 | | 2.7 | 61.1 |

| Station | Below Normal (prob) | 33%ile Rainfall (mm) | Normal (prob) | 66%ile Rainfall (mm) | Above Normal (prob) | LEPS | Hit-rate |
|-----------|---------------------|----------------------|---------------|----------------------|---------------------|------|----------|
| Auki | 41 | 736 | 27 | 937 | 32 | -3.1 | 33.3 |
| Henderson | 35 | 440 | 26 | 594 | 39 | 13.0 | 47.4 |
| Honiara | 32 | 544 | 32 | 685 | 36 | 1.0 | 18.6 |
| Kirakira | 31 | 854 | 42 | 1000 | 27 | 0.4 | 50.0 |
| Lata | 44 | 999 | 43 | 1183 | 13 | 16.9 | 47.4 |
| Munda | 29 | 807 | 35 | 1010 | 36 | -2.1 | 28.8 |
| Taro | 40 | 795 | 30 | 924 | 30 | -1.4 | 27.8 |

TABLE 4: Seasonal Climate Outlooks using POAMA2 for March – May 2014

| Station | Lower Tercile (prob) | 33%ile rainfall (mm) | Middle Tercile (prob) | 66%ile rainfall (mm) | Upper Tercile (prob) |
|---------|----------------------|----------------------|-----------------------|----------------------|----------------------|
| Honiara | 12 | 460 | 27 | 625 | 61 |
| Munda | 22 | 852 | 39 | 965 | 39 |
| Taro | 24 | 706 | 49 | 931 | 27 |

Summary Statement:

January 2014 rainfall:

Rainfall was mostly above normal across the country in January 2014.

Central, western and west parts of eastern region were above normal rainfall while an eastern part of eastern region was normal. All stations throughout the country except for Lata recorded rainfall above 500mm which are much higher than the previous month's records. Taro in the western region recorded the highest monthly total rainfall for the month since 1975.

Enhanced South Pacific Convergence Zone (SPCZ) activity coupled with active MJO which moved through the Western Pacific Ocean, associated with Tropical Cyclone Ian resulted in positive rainfall anomalies during the month.

November 2013 to January 2014 rainfall: (Include a summary statement on verification)

The Climate outlook for the period was above normal across the country with generally high skills.

As a result of forecast verification, Western region – Munda and Taro and; central region – Henderson and Honiara were consistent to their forecast while Auki was near consistent. Eastern region – Kirakira and Lata were inconsistent to their forecast during period.

Therefore, Henderson, Honiara, Munda and Taro recorded above normal rainfall while Kirakira and Taro recorded below rainfall and; Auki normal rainfall.

Climate Outlooks for March - May 2014:

1. SCOPIC:

Mix climate outlook is likely for Solomon Islands for the period – March to May 2014.

Below normal rainfall is favoured for Auki in the central and Taro in the western region; there are similar chances of normal to below normal for Lata in the eastern region, with below normal rainfall as the most likely and normal rainfall the next most likely.

Kirakira in the eastern region is most likely to be normal; while little rainfall guidance is likely for Honiara in the central region with similar chances of above normal, normal and below normal rainfall.

There is a mixed outlook for Henderson, with similar chances for below normal and above normal totals; near-normal is the least likely outcome.

2. POAMA:

Using dynamic model POAMA, western region is likely to be normal while central is likely to be above normal for the period.

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: $X \geq 35$