

Pacific Islands - Online Climate Outlook Forum No 86

Country Name: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)	October 2014						
	August Total	September Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2014)	61.6	75.4	54.8	210.1	289.7	255.2	3/66
Nadzab(1973-2014)	-	151.8	-				
Wewak (1894-2014)	111.8	-	-				
Vanimo (1918-2014)	214.2	438.2	188.2	144.6	225.8	174.0	32/56
New Guinea Islands							
Momote (1949-2014)	276.4	-	229.6				
Kavieng (1916-2014)	119.2	-	331.8				
Southern Region							
Misima (1917-2014)	122.2	271.8	124.6	128.2	316.0	234.9	29/89
PortMoresby(1875-2014)	38.4	92.4	6.0	10.2	33	18.7	27/119

**TABLE 2: Three-monthly Rainfall
August-October 2014**

[Please note that the data used in this verification should be sourced from table 3 of OCOF #82]

Station	Three-month Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking	Forecasted probs.* (include LEPS)	Verification (Consistent, Near-consistent Inconsistent?)
Momase Region							
Madang (1944-2014)	191.8	-	-	-	6/66		
Nadzab (1973-2014)							
Wewak (1894-2014)							
Vanimo (1918-2014)	840.8	485.6	550.8	517.2	52/53	33/33/31	Near consistent
New Guinea Islands							
Momote (1949-2014)							
Kavieng (1916-2014)							
Southern Region							
Misima (1917-2014)	518.6	456.0	780.3	625.8	37/88	54/38/8	Near consistent
Port Moresby (1875-2014)	136.8	58.8	96.0	74.8	92/108	38/27/35	Inconsistent

Period: *below normal/normal/above normal

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 December 2014 to February 2015.

Predictors and Period used: August- October, NINO3.4

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2014)	41	1018.4	59		9.3	57.8
Nadzab(1973-2014)						
Wewak (1894-2014)						
Vanimo (1918-2014)	48	809.9	52		-1.4	58.7
New Guinea Islands						
Momote (1949-2014)						
Kavieng (1916-2014)						
Southern Region						
Misima(1917-2014)	56	771.5	44		3.4	58.1
Port Moresby(1875-2014)	57	472.2	43		7.9	62.5

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	Leps (%)	Hit-rate (%)
Momase Region							
Madang (1944-2014)	18	936.8	41	1126.4	41	13.4	29.7
Nadzab(1973-2014)							
Wewak (1894-2014)							
Vanimo (1918-2014)	30	730.1	35	918.0	35	-1.2	13
New Guinea Islands							
Momote (1949-2014)							
Kavieng (1916-2014)							
Southern Region							
Misima(1917-2014)	37	686	37	887.7	26	1.7	27.4
Port Moresby(1875-2014)	39	420.3	36	566.4	25	8.7	45.3

TABLE 4: Seasonal Climate Outlooks using POAMA2 for December 2014 to February 2015.

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Madang	39	940	31	1110	30
Wewak	33	381	15	461	52
New Guinea Islands					
Momote	36	753	22	872	42
Kavieng	22	846	42	956	36
Southern Region					
Misima	31	646	33	881	36
Port Moresby	33	423	33	508	34

Summary Statements:

Rainfall for October 2014:

- Below normal for Madang, Port Moresby and Misima except Vanimo received Normal rainfall.

Accumulated rainfall for August to October 2014, including outlook verification

Rainfall over period August-October 2014 was normal for Misima and above normal Port Moresby and Vanimo.

Confidence was Near consistent at Vanimo and Misima and Inconsistent at Port Moresby.

Outlook for – December 2014 to February 2015:

1. SCOPIC:

The SCOPIC seasonal rainfall outlook for August to October 2014 shows:

- The most likely outcome for Madang is Normal- Above Normal.
- There is little guidance for Misima and Vanimo as the chances of Below Normal, Normal and Above Normal are similar.
- The rainfall outlook shows the most likely for Port Moresby is Below Normal
- Confidence is very low at Vanimo, low at Misima , moderate at Port Moresby and good at Madang

2. POAMA:

- The POAMA model favours Normal for Kavieng and Above Normal for Wewak and Momote.
- There is little guidance for Port Moresby and Misima as the chances of Below Normal, Normal and Above Normal are similar. The rainfall outlook shows the most likely outcome for Madang is Below 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: $X \geq 35$