

Pacific Islands - Online Climate Outlook Forum No 88

Country Name: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)	December 2014						
	October Total	November Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2014)	54.8	244.2	463.4	342	442.1	385.7	48/67
Nadzab(1973-2014)	104.0	174.0	151.8	110.5	190.4	154.0	20/40
Wewak (1894-2014)	-	307.4	136.0	121.4	179.2	142.7	26/59
Vanimo (1918-2014)	188.2	133.6	275.6	179.8	282.3	233	39/61
New Guinea Islands							
Momote (1949-2014)	229.6	183.0	-	248.5	330.4	282.8	
Kavieng (1916-2014)	331.8	387.4	441.0	253.2	335.7	301.5	80/87
Southern Region							
Misima (1917-2014)	124.6	85.4	-	161.0	257.0	217.2	
Port Moresby(1875-2014)	6.0	64.8	50	76.5	152.0	116.1	27/124

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

[Please note that the data used in this verification should be sourced from table 3 of OCOF #84]

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)	762.4	867.6	1095.5	988.6	10/66	33/38/29	Near consistent
Nadzab (1973-2014)	429.8	308.0	378.3	336.9	31/39	31/27/42	Consistent
Wewak (1894-2014)		539.1	644.2	573		35/36/29	
Vanimo (1918-2014)	597.4	557.5	709.5	611.6	24/54	30/40/30	Consistent
New Guinea Islands							
Momote (1949-2014)		692.0	866.3	782.4		34/34/32	
Kavieng (1916-2014)	1160.2	706.9	867.4	780.3	81/85	33/34/33	Near consistent
Southern Region							
Misima (1917-2014)		562.9	777.2	643.8		34/34/31	
Port Moresby (1875-2014)	120.8	176.8	268.5	215.5	22/113	33/40/27	Near consistent

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).

Period: *below normal/normal/above normal

TABLE 3: Seasonal Climate Outlooks using SCOPIC for February to April 2015.

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

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2014)	46	1036.8	54		-0.6	53.1
Nadzab(1973-2014)	51	460.2	49		-2.4	35.9
Wewak (1894-2014)	52	487.1	48		-1.6	43.1
Vanimo (1918-2014)	45	789.6	55		0.1	51
New Guinea Islands						
Momote (1949-2014)	52		48		-1.4	45.3
Kavieng (1916-2014)	40	884.3	60		3.6	55.2
Southern Region						
Misima(1917-2014)	70	846.1	30		16.4	65.6
Port Moresby(1875-2014)	63	513.8	37		7.1	60.9

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)	24	939.5	42	1145.8	34	0.7	45.3
Nadzab(1973-2014)	25	359	40	495.5	35	-0.7	43.6
Wewak (1894-2014)	40	438.4	26	528.2	34	-1.3	39.7
Vanimo (1918-2014)	29	679.2	29	909.3	42	1.6	35.3
New Guinea Islands							
Momote (1949-2014)	34	754.8	31	923.2	35	-1.9	20.3
Kavieng (1916-2014)	23	796.2	38	977.4	39	4	25.9
Southern Region							
Misima(1917-2014)	58	761.0	35	959	7	29	52.5
Port Moresby(1875-2014)	46	434.2	32	591.6	22	9.2	46.9

TABLE 4: Seasonal Climate Outlooks using POAMA2 for February- April 2015.

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Madang	45	904	28	1154	27
Wewak	45	428	25	575	30
New Guinea Islands					
Momote	39	720	25	844	36
Kavieng	27	774	28	989	45
Southern Region					
Misima	24	708	60	930	16
Port Moresby	45	465	30	593	25

Summary Statements:

Rainfall for December 2014:

Normal to above normal for the Momase region, above normal for Kavieng and below normal for Port Moresby.

Accumulated rainfall for October to December 2014, including outlook verification

Below normal to above normal for the Momase region, above normal for Kavieng and below normal for Port Moresby. The outlooks were consistent to near consistent in the Momase region and near consistent at Kavieng and Port Moresby.

Outlook for – February to April 2015:

1. SCOPIC:

The SCOPIC seasonal rainfall outlook for February to April 2014 shows:

- Momase region: the most likely outcome for Madang and Nadzab is normal rainfall. For Wewak, the most likely outcome is below normal and Vanimo, above normal rainfall;
- New Guinea Islands: There is a near equal likelihood of normal or above normal rainfall at Kavieng and at Momote there is a near equal chance of below normal, normal and above normal rainfall;
- Southern Region: The most likely outcome for Misima and Port Moresby is below normal rainfall;
- Confidence is very low at Madang, Nadzab, Wewak and Momote, low at Vanimo and Kavieng, moderate at Port Moresby and very high at Misima

2. POAMA

The POAMA model favours below normal for Momase region, above normal for Kavieng and below normal Momote in the NGI, normal for Misima and below normal Port Moresby in the Southern region.

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: $X \geq 35$