

Pacific Islands - Online Climate Outlook Forum No 96

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)	August 2015						
	June 2015 Total	July 2015 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2015)	-	-	-	62.5	141.5	98.3	
Nadzab(1973-2015)	160.0	24.6	41.4	80.0	167.0	106.0	8/42
Wewak (1894-2015)	243.6	248.2	147.2	116.3	207.6	146.7	31/60
Vanimo (1918-2015)	182.8	-	203.2	132.4	196.2	164.8	45/60
New Guinea Islands							
Momote (1949-2015)	282.2	82.8	70.4	214.2	333.7	275.1	3/66
Kavieng (1916-2015)	-	-	2.6	162.4	254.7	205.1	2/85
Southern Region							
Misima (1917-2015)	15.6	84.8	18.0	82.3	188.3	131.3	10/90
PortMoresby(1875-2015)	4.0	45.4	0.0	6.8	23.6	13.1	1/118

TABLE 2: Three-monthly Rainfall (June-August 2015)

Predictor [NINO3.4 SST Anomalies](#) :-Period: [March-April 2015](#)

[Please note that the data used in this verification should be sourced from table 3 of OCOF #92]

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 (1944-2015)	-	403.5	532.9	471.8		77/19/4 (33.7)	
Nadzab (1973-2015)	226.0	294.9	405.9	329.0	7/40	33/36/31 (-3.4)	Near-consistent
Wewak (1894-2015)	639.0	467.1	616.5	537.4	43/60	75/18/7 (27.3)	Inconsistent
Vanimo (1918-2015)	-	506.9	632.3	558.5		24/32/44 (0.6)	
New Guinea Islands							
Momote (1949-2015)	435.4	754.9	1062.5	950.9	1/66	22/39/39 (1.6)	Near-consistent
Kavieng (1916-2015)	-	560.7	802.9	700.0		31/31/38 (-1.7)	
Southern Region							
Misima (1917-2015)	118.4	365.1	692.7	513.0	2/87	76/21/3 (30.5)	Consistent
Port Moresby (1875-2015)	49.4	55.5	102.2	81.5	30/105	46/43/11 (10.2)	Consistent

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 for October to December 2015

Predictors: [NINO3.4 SST Anomalies](#)-Period: [July – Aug 2015](#)

Period:Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2014)						
Nadzab(1973-2014)	80	337.0	20		7.1	61.5
Wewak (1894-2014)	87	573.8	13		12.8	60.3
Vanimo (1918-2014)						
New Guinea Islands						
Momote (1949-2014)	48	782.4	52		-1.6	17.2
Kavieng (1916-2014)						
Southern Region						
Misima(1917-2014)	78	643.8	22		5.2	62.9
Port Moresby(1875-2014)	95	214.2	5		24.6	69.2

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)							
Nadzab(1973-2014)	92	310.6	1	385.0	7	15.7	56.4
Wewak (1894-2014)	54	540.5	41	647.4	5	9.5	43.1
Vanimo (1918-2014)							
New Guinea Islands							
Momote (1949-2014)	25	692.0	57	866.3	18	-1	43.8
Kavieng (1916-2014)							
Southern Region							
Misima(1917-2014)	68	562.9	21	777.2	11	6.7	43.5
Port Moresby(1875-2014)	73	176.7	25	268.4	2	21.7	58.5

TABLE 4: Seasonal Climate Outlooks using POAMA2 for Oct to Dec 2015

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Madang					
Wewak	18	505.0	5	610.0	77
Nadzab	58	252.0	21	347.0	21
New Guinea Islands					
Momote	27	688.0	46	827.0	27
Kavieng					
Southern Region					
Misima	82	506.0	13	649.0	5
Port Moresby	79	119.0	6	245.0	15

Summary Statements:

Rainfall for August 2015

Below normal rainfall was received at the four monitoring stations in the Southern PNG and Islands region. In the Momase region, rainfall ranged from below normal at Nadzab to above normal at Vanimo. Momote recorded its 3rd August monthly rainfall while Port Moresby recorded its driest August.

Accumulated rainfall for June to August 2015, including outlook verification

Below normal rainfall was received at all the PNG monitoring stations except at Wewak which received above normal rainfall. The forecasts were consistent in the Southern region and near consistent at Momote and Nadzab. The Wewak outlook was inconsistent.

Outlook for – October to December 2015:

1. SCOPIC:

The SCOPIC seasonal rainfall outlook for October to December 2015 shows:

- **Momase Region:** Below normal rainfall is favoured for Nadzab. At Wewak, below normal is also favoured with normal the next most likely.
- **New Guinea Islands:** Normal rainfall is favoured at Momote with below normal the next most likely.
- **Southern Region:** Below normal rainfall is favoured in the Southern region.
- Confidence is moderate to high at all the monitoring stations throughout the country except very low skill at Momote.

2. POAMA:

The POAMA model favours Below Normal for the three regions, Momase, New Guinea Islands and 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: $X \geq 35$