

Pacific Islands - Online Climate Outlook Forum No 82

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)	June 2014						
	April Total	May Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2014)	288.2	-	-				
Nadzab(1973-2014)	160.0	48.0	60.8	62.8	120.6	81.0	12/40
Wewak (1894-2014)	217.8	159.4	140.8	171.6	225.8	191.2	12/59
Vanimo (1918-2014)	439.4	124.4	339.0	163.7	246.3	208.6	56/60
New Guinea Islands							
Momote (1949-2014)	264.8	181.4	639.6	221.7	312.8	273.0	65/66
Kavieng (1916-2014)	449.2	177.2	-				
Southern Region							
Misima (1917-2014)	724.6	201.8	93.0	129.0	283.7	211.1	19/88
PortMoresby(1875-2014)	144.2	0.0	16.2	11.0	43.4	23.9	49/117

TABLE 2: Three-monthly Rainfall (April-June 2014)

Predictor NINO3.4 SST Anomalies :-Period: December 2013 -February 2014

[Please note that the data used in this verification should be sourced from table 3 of OCOF #78]

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)	-	901.2	1086.6	1017.7		29/31/40 (6.4)	
Nadzab (1973-2014)	268.8	268.8	352.0	319.0	13/38	28/37/35 (-0.8)	Consistent
Wewak (1894-2014)	518.0	577.9	671.6	642.5	16/59	30/35/35 (-0.9)	Near Consistent
Vanimo (1918-2014)	902.8	574.6	728.5	650.4	50/58	36/32/32 (-0.8)	Inconsistent
New Guinea Islands							
Momote (1949-2014)	1085.8	705.4	892.8	806.9	60/65	31/34/35 (-0.6)	Consistent
Kavieng (1916-2014)	-	688.5	883.3	770.0		36/33/31 (-0.5)	
Southern Region							
Misima (1917-2014)	1019.4	618.5	917.3	764.9	67/87	24/33/43 (21.5)	Consistent
Port Moresby (1875-2014)	160.4	176.7	269.8	209.0	36/113	24/35/41 (-9.4)	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 for August to October 2014

Predictors: [NINO3.4 SST Anomalies-Period: May- June 2014](#)

Period:Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2014)						
Nadzab(1973-2014)	63	331.8	37		8.0	59.5
Wewak (1894-2014)	76	574.8	24		25.3	69.0
Vanimo (1918-2014)	59	517.2	41		1.5	55.3
New Guinea Islands						
Momote (1949-2014)	41	772.5	59		2.4	62.5
Kavieng (1916-2014)						
Southern Region						
Misima(1917-2014)	81	625.8	19		25.4	65.6
Port Moresby(1875-2014)	49	74.8	51		-1.5	48.4

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)	44	246.2	26	392.6	30	1.9	40.5
Wewak (1894-2014)	59	503.4	27	666.4	14	23.1	46.6
Vanimo (1918-2014)	33	485.6	36	550.8	31	-2.4	21.3
New Guinea Islands							
Momote (1949-2014)	31	646.4	32	901.2	37	-1.0	28.1
Kavieng (1916-2014)							
Southern Region							
Misima(1917-2014)	54	456.0	38	780.3	8	27.3	49.2
Port Moresby(1875-2014)	38	58.8	27	96.0	35	-1.0	35.9

TABLE 4: Seasonal Climate Outlooks using POAMA2 for August to October 2014

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Madang	33	280	30	426	37
Wewak	40	432	27	590	33
New Guinea Islands					
Momote	20	779	40	1011	40
Kavieng	30	489	21	699	49
Southern Region					
Misima	43	265	27	500	30
Port Moresby	58	37	5	70	37

Summary Statements:

Rainfall for June 2014

Below normal or Above normal rainfall was received across the country except Port Moresby received Normal rainfall.

Accumulated rainfall for April to June 2014, including outlook verification

Rainfall over period April-June 2014 was below normal or above normal across the country whilst Nadzab received Normal rainfall.

The SCOPIC forecasts for the 3 months period were Consistent at majority of the stations and Inconsistent at Vanimo and Port Moresby and Near Consistent at Wewak. The skills ranged from very low to high.

Outlook for – August to October 2014:

1. SCOPIC:

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

- The most likely outcome for Nadzab, Wewak and Misima is Below *Normal*.
- There was little guidance for Vanimo, Momote and Port Moresby as the chances of Below Normal, Normal and Above Normal are similar.

2. POAMA:

The POAMA model favours Above Normal for Kavieng. There is little guidance for Madang as the chances of Below Normal, Normal and Above Normal are similar. The rainfall outlook shows the most likely outcome for Wewak, Misima and Port Moresby is Below Normal. The outlook shows equal chance of Above Normal and Normal for Momote.

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: $X \geq 35$