

Pacific Islands - Online Climate Outlook Forum No 71

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)	July 2013						
	May 2013 Total	June 2013 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2013)	316.8	256.6	198.2	110.7	183.6	146.1	48/65
Nadzab(1973-2013)	201.6	100.0	134.6	67.3	126.3	116.7	27/39
Wewak (1894-2013)	434.4	280.6	377.4	153.4	202.3	177.8	55/58
Vanimo (1918-2013)	204.2	267.8	307.6	136.1	218.4	188.3	54/59
New Guinea Islands							
Momote (1949-2013)	210.8	331.4	398.8	305.2	396.2	348.6	44/65
Kavieng (1916-2013)	120.2	315.8	258.6	195.8	275.5	222.9	52/83
Southern Region							
Misima (1917-2013)	307.4	116.2	223.8	89.3	191.3	136.0	66/88
PortMoresby(1875-2013)	18.0	51.8	4.2	4.6	24.4	13.2	35/114

TABLE 2: Three-monthly Rainfall (May-July 2013)

Predictors: SSTa's 1 & 9—Period: January - March 2013

[Please note that the data used in this verification should be sourced from table 3 of OCOF #67]

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 (1944-2013)	771.6	638.3	825.4	744.8	37/64	25/45/30(19.1)	Consistent
Nadzab (1973-2013)	436.2	257.3	377.7	286.7	32/37	36/32/32(-4.0)	Inconsistent
Wewak (1894-2013)	1092.4	554.1	677.3	631.2	58/58	24/39/37(11.1)	Near-Consistent
Vanimo (1918-2013)	779.6	571.9	685.5	608.4	49/58	27/35/38(-2.3)	Consistent
New Guinea Islands							
Momote (1949-2013)	941.0	791.8	1015.7	871.9	41/65	25/34/41(3.7)	Near-Consistent
Kavieng (1916-2013)	694.6	630.4	812.7	725.2	37/81	37/33/30(2.3)	Near-Consistent
Southern Region							
Misima (1917-2013)	647.4	500.0	873.0	626.8	47/86	41/47/12(35.7)	Consistent
Port Moresby (1875-2013)	74.0	83.2	149.7	118.3	32/105	31/38/31(2.3)	Near-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 September to November 2013

Predictors: [SSTa's 1 & 9-Period: May–July 2013](#)

Period:Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2013)	36	740.5	64		19.4	61.9
Nadzab(1973-2013)	25	271.8	75		9.9	66.7
Wewak (1894-2013)	33	594.4	67		3.3	55.4
Vanimo (1918-2013)	40	532.4	60		-1.8	45.7
NewGuinea Islands						
Momote (1949-2013)	51	706.7	49		-2.7	45.3
Kavieng (1916-2013)	46	653.2	54		-2.9	35.6
Southern Region						
Misima(1917-2013)	21	723.3	79		29.9	74.2
PortMoresby(1875-2013)	14	109.0	86		22.8	67.2

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	Leps (%)	Hit-rate (%)
Momase Region							
Madang (1944-2013)	11	640.2	43	847.0	46	19.0	46.0
Nadzab(1973-2013)	9	227.6	43	339.8	48	9.8	36.1
Wewak (1894-2013)	14	532.8	45	648.6	41	10.2	48.2
Vanimo (1918-2013)	26	489.2	26	580.6	48	1.1	21.7
NewGuinea Islands							
Momote (1949-2013)	31	633.8	34	777.9	35	-4.2	0.0
Kavieng (1916-2013)	42	553.8	19	763.4	39	0.1	37.3
Southern Region							
Misima(1917-2013)	6	563.4	32	868.3	62	24.9	50.0
PortMoresby(1875-2013)	9	85.0	24	42.2	67	18.1	42.2

TABLE 4: Seasonal Climate Outlooks using POAMA2 for September - November 2013

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Madang	23	551	47	698	30
Wewak	30	524	20	615	50
NewGuinea Islands					
Momote	5	632	45	783	50
Southern Region					
Misima	47	340	23	699	30
PortMoresby	30	54	30	125	40

Summary Statements:

Rainfall for July 2013:

Above Normal rainfall was received across the country except for Kavieng receiving Normal rainfall whilst Port Moresby received Below Normal rainfall.

Accumulated rainfall May –July 2013, including outlook verification

Rainfall for the three months was Normal to Above Normal across the country except for Port Moresby receiving Below Normal rainfall.

The forecasts were Near-Consistent to Consistent except for Nadzab, forecasted Inconsistent. The skills ranged from very low to exceptional.

Outlook for September – November 2013:

1. SCOPIC:

The model favours ***Above Normal*** rainfall for the three regions with very low to high skills, except Wewak, favoured for ***Normal*** rainfall with good skills whilst Kavieng, favoured for ***Below Normal*** rainfall with low skills.

2. POAMA Model

The model favours ***Below Normal*** for Misima, ***Normal*** for Madang and ***Above Normal*** for Wewak, Momote and Port Moresby.

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: $X \geq 35$