

Pacific Islands - Online Climate Outlook Forum No 69

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)			May				
	March Total	April Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2013)	458.8	619.6	316.8	299.7	420.0	334.5	26/64
Nadzab(1973-2013)	139.2	273.0	198.2	63.5	103.2	75.4	38/39
Wewak (1894-2013)	202.0	304.8	433.6	186.7	271.6	220.2	57/58
Vanimo (1918-2013)	642.8	291.8	204.2	166.3	273.2	212.8	27/60
New Guinea Islands							
Momote (1949-2013)	323.8	569.0	240.8	196.4	260.6	233.1	35/65
Kavieng (1916-2013)	295.0	302.0	120.2	207.1	306.5	249.7	6/83
Southern Region							
Misima (1917-2013)	296.2	357.2	307.4	181.7	325.4	247.0	57/88
PortMoresby(1875-2013)	303.0	190.8	18.0	30.8	73.6	51.0	30/122

TABLE 2: Three-monthly Rainfall (March–May 2013)

Predictors: SSTa's 1 & 9–Period: November 2012-January 2013

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)	1395.2	1001.0	1205.6	1149.0	57/64	36/36/28 (-2.7)	Near-consistent
Nadzab (1973-2013)	610.4	340.1	429.9	356.8	37/37	35/37/28(-1.3)	Near-consistent
Wewak (1894-2013)	940.4	516.8	651.6	608.3	55/57	31/29/40(-2.2)	Consistent
Vanimo (1918-2013)	1138.8	583.2	839.5	683.2	53/58	24/33/43(2.8)	Consistent
New Guinea Islands							
Momote (1949-2013)	1133.6	728.0	884.6	821.0	59/63	26/30/44(0.0)	Consistent
Kavieng (1916-2013)	717.2	766.3	947.9	834.0	22/80	27/39/34(-0.7)	Near-consistent
Southern Region							
Misima (1917-2013)	960.8	680.5	995.3	781.8	58/88	47/34/19(21.1)	Near-consistent
Port Moresby (1875-2013)	511.8	305.8	450.4	381.3	94/119	25/43/32(1.1)	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).

TABLE 3: Seasonal Climate Outlooks for July- September 2013

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

Period:Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2013)	34	409.5	66		16.0	66.7
Nadzab(1973-2013)	43	362.0	57		-2.2	47.2
Wewak (1894-2013)	40	558.2	60		38.0	77.2
Vanimo (1918-2013)	43	505.8	57		3.8	63.8
NewGuinea Islands						
Momote (1949-2013)	31	885.7	69		11.1	71.4
Kavieng (1916-2013)	43	611.3	57		-1.1	63.0
Southern Region						
Misima(1917-2013)	37	477.8	63		37.3	73.3
PortMoresby(1875-2013)	42	66.6	58		2.1	57.8

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)	21	325.8	44	481.8	35	12.4	47.6
Nadzab(1973-2013)	18	251.2	44	462.7	38	1.4	38.9
Wewak (1894-2013)	21	469.5	41	592.0	38	23.3	49.1
Vanimo (1918-2013)	27	431.9	30	546.3	43	3.4	29.8
NewGuinea Islands							
Momote (1949-2013)	19	746.4	38	1040.3	43	5.3	34.9
Kavieng (1916-2013)	21	496.8	40	723.4	39	2.5	42.6
Southern Region							
Misima(1917-2013)	23	339.8	48	634.0	29	41.7	53.3
PortMoresby(1875-2013)	32	41.4	24	86.2	44	-0.6	40.6

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

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Wewak	23.33	432	40.0	590	36.67
Southern Region					
PortMoresby	23.33	37	30.0	70	46.67

Summary Statement:

Rainfall for May:

Normal rainfall received across the country whilst for Kavieng and Port Moresby receiving Below Normal Rainfall and Nadzab and Wewak receiving Above Normal rainfall.

Accumulated rainfall March to May, including outlook verification

During these three months the rainfall received was Above Normal except for Misima receiving Normal rainfall and Kavieng receiving Below Normal rainfall.

The outlook verification was consistent to near consistent for all regions.

Outlook for July- September:

1. SCOPIC:

Momase Region: *NORMAL* rainfall except for Vanimo forecasted *ABOVE NORMAL* (low to high skills).

New Guinea Islands: *NORMAL* to *ABOVE NORMAL* with low to moderate skills.

Southern region: *NORMAL* for Misima with exceptional skills whilst *ABOVE NORMAL* for Port Moresby with very low skills.

2. POAMA Model

The model favours *NORMAL* rainfall for Wewak & *ABOVE NORMAL* for 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: $X \geq 35$