

Pacific Islands - Online Climate Outlook Forum No 68

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)	April						
	February Total	March Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2013)	265.6	458.8	619.6 AN	336.5	462.2	405.9	58/64
Nadzab(1973-2013)	162.4	139.2	273.0 AN	85.4	119.1	102.9	39/39 *
Wewak (1894-2013)	121.6	202.0	304.8 AN	155.0	232.2	185.0	51/58
Vanimo (1918-2013)	308.4	642.8	291.8 AN	178.9	276.6	210.9	41/60
New Guinea Islands							
Momote (1949-2013)	231.0	323.8	569.0 AN	248.6	297.3	273.8	64/64 *
Kavieng (1916-2013)	296.8	295.0	302.0 N	259.9	315.3	285.9	50/84
Southern Region							
Misima (1917-2013)	139.6	296.2	357.2 AN	207.9	334.1	266.0	64/88
PortMoresby(1875-2013)	117.0	303.0	190.8 AN	76.2	128.1	104.5	98/123

TABLE 2: Three-monthly Rainfall (February – April)

Predictors: [SSTa's 1 & 9](#) – Period: [October-December 2012](#)

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)	1344.0 AN	943.1	1142.1	1036.8	54/64	35/44/21 (1.9)	Near consistent
Nadzab (1973-2013)	574.6 AN	357.0	492.2	454.0	32/38	34/31/35(-4.2)	Consistent
Wewak (1894-2013)	628.4 AN	433.9	525.3	484.4	47/57	26/18/56 (1.6)	Consistent
Vanimo (1918-2013)	1243.0 AN	676.7	906.9	789.6	53/58	28/23/49 (1.7)	Consistent
New Guinea Islands							
Momote (1949-2013)	1123.8 AN	755.9	922.9	797.7	60/63	29/27/44(-0.9)	Consistent
Kavieng (1916-2013)	893.8 N	791.2	976.1	879.6	44/81	32/16/52 (4.2)	Near consistent
Southern Region							
Misima (1917-2013)	793.0 N	757.3	959.0	846.1	38/87	62/30/8 (27.3)	Near consistent
PortMoresby (1875-2013)	610.8 AN	433.1	590.1	513.8	88/122	37/35/28 (2.8)	Inconsistent

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 June- August 2013

Predictors: [SSTa's 1 & 9](#) - Period: [February 2013 - April 2013](#)

Period: Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2013)	45	469	55		33.2	73
Nadzab(1973-2013)	48	329.0	52		-5.3	32.4
Wewak (1894-2013)	50	537.4	50		14.6	64.9
Vanimo (1918-2013)	37	556.0	63		8	63.8
New Guinea Islands						
Momote (1949-2013)	37	943.6	63		7.4	60.3
Kavieng (1916-2013)	44	690.7	56		2.9	57.1
Southern Region						
Misima(1917-2013)	58	522.6	42		40.8	75
PortMoresby(1875-2013)	49	81.9	51		7.2	59.4

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	Leps (%)	Hit-rate (%)
Momase Region							
Madang (1944-2013)	29	402.4	44	527.4	27	30	58.7
Nadzab(1973-2013)	33	294.8	30	404.6	37	-5.2	24.3
Wewak (1894-2013)	28	467.1	39	614.3	33	14.3	43.9
Vanimo (1918-2013)	26	506.8	33	632.0	41	1	34
New Guinea Islands							
Momote (1949-2013)	21	742.3	43	1048.0	36	5.9	42.9
Kavieng (1916-2013)	29	557.5	34	792.7	37	-0.3	37.5
Southern Region							
Misima(1917-2013)	31	367.5	50	699.8	19	31.3	48.3
PortMoresby(1875-2013)	30	55.1	41	103.1	29	8.5	43.8

TABLE 4: Seasonal Climate Outlooks using POAMA2 for June - August 2013

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Wewak	13.33	514.0	50.0	619.0	36.67
Southern Region					
PortMoresby	13.33	50.0	50.0	101.0	36.67

Summary Statement:

Rainfall for April:

Above Normal rainfall received across the country except for Kavieng province receiving Normal rainfall. Note that Momote & Nadzab recording highest rainfall.

Accumulated rainfall February to April, including outlook verification

During these three months the rainfall received was Above Normal except for Kavieng (NGI region) and Misima (Southern region) receiving Normal rainfall.

The outlook verification was near consistent to consistent for most of the regions except for Port Moresby which was Inconsistent.

Outlook for June – August:

1. SCOPIC:

Momase Region: Madang/Wewak Normal whilst Vanimo/Nadzab Above Normal with Nadzab showing climatology (very low skills).

New Guinea Islands: Momote Normal whilst Kavieng Above Normal with very low skills indicating climatology.

Southern region: Normal Rainfall with very high skills for Port Moresby and moderate skills for Misima.

2. POAMA Model

The model favours Normal rainfall both stations Wewak & 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: $X \geq 35$