

Pacific Islands - Online Climate Outlook Forum No 78

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)	February 2014						
	December Total	January Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2013)	509.4	360.8	240.0	232.1	348.3	290.4	26/66
Nadzab(1973-2013)	217.6	125.0	237.6	107.3	186.1	153.0	35/40
Wewak (1894-2013)	126.8	168.2	166.2	101.2	143.4	121.6	43/56
Vanimo (1918-2013)	403.2	287.6	131.4	200.7	308.5	270.0	6/60
New Guinea Islands							
Momote (1949-2013)	347.6	344.0	306.6	204.1	289.2	231.0	45/64
Kavieng (1916-2013)	276.4	441.8	242.0	233.7	309.8	265.1	32/84
Southern Region							
Misima (1917-2013)	244.4	303.4	367.0	231.0	358.7	304.4	61/90
Port Moresby(1875-2013)	133.6	263.0	131.4	140.9	219.7	167.9	41/126

TABLE 2: Three-monthly Rainfall (December 2013-February 2014)

Predictors: SST1&9—Period: August - October 2013

[Please note that the data used in this verification should be sourced from table 3 of OCOF #74]

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)	1110.2	931.6	1127.8	1014.7	43/66	40/33/27 (4.3)	Near-Consistent
Nadzab (1973-2013)	580.2	418.2	507.4	488.6	33/38	48/26/26 (-0.8)	Inconsistent
Wewak (1894-2013)	461.2	367.5	469.5	412.2	38/57	21/38/41 (-1.0)	Near-Consistent
Vanimo (1918-2013)	822.2	724.3	918.0	807.8	29/54	32/32/36 (-5.5)	Near-Consistent
New Guinea Islands							
Momote (1949-2013)	998.2	756.5	879.6	813.6	54/64	46/27/27 (-1.1)	Inconsistent
Kavieng (1916-2013)	960.2	839.1	990.0	907.6	47/81	45/30/25 (2.4)	Near-Consistent
Southern Region							
Misima (1917-2013)	914.8	682.5	886.2	769.0	61/84	19/21/60 (7.2)	Consistent
Port Moresby (1875-2013)	528.0	420.0	568.6	469.2	76/122	34/33/33 (5.9)	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 April to June 2014

Predictors: [NINO3.4 SST Anomalies-Period: December 2013 – February 2014](#)

Period:Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2013)	44	1017.7	56		3.8	61.9
Nadzab(1973-2013)	47	319.0	53		-0.8	56.8
Wewak (1894-2013)	49	642.5	51		-1.7	48.3
Vanimo (1918-2013)	56	650.4	44		4.0	57.1
New Guinea Islands						
Momote (1949-2013)	47	806.9	53		0.4	52.4
Kavieng (1916-2013)	53	770.0	47		0.2	56.1
Southern Region						
Misima(1917-2013)	40	764.9	60		13.7	61.7
Port Moresby(1875-2013)	38	209.0	62		12.5	65.1

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	901.2	31	1086.6	40	6.4	44.4
Nadzab(1973-2013)	28	268.8	37	352.0	35	-0.8	45.9
Wewak (1894-2013)	30	577.9	35*	671.6	35*	-0.9	31.0
Vanimo (1918-2013)	36	574.6	32	728.5	32	-0.8	28.6
New Guinea Islands							
Momote (1949-2013)	31	705.4	34	892.8	35	-0.6	15.9
Kavieng (1916-2013)	36	688.5	33	883.3	31	-0.5	26.3
Southern Region							
Misima(1917-2013)	24	618.5	33	917.3	43	21.5	46.7
Port Moresby(1875-2013)	24	176.7	35	269.8	41	-9.4	44.4

TABLE 4: Seasonal Climate Outlooks using POAMA2 for April to June 2014

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Madang	58	1002	6	1201	36
Wewak	73	508	21	630	6
New Guinea Islands					
Momote	52	698	18	854	30
Kavieng	49	769	12	998	39
Southern Region					
Misima	76	665	9	941	15
Port Moresby	76	327	15	498	9

Summary Statements:

Rainfall for February 2014:

During February, fifty percent of stations in the 3 regions received ***Above Normal*** rainfall with ***Below Normal*** to ***Normal*** rainfall received in other stations.

Accumulated rainfall for December 2013-February 2014, including outlook verification

Rainfall over period Dec 2013 – Feb 2014 was ***Normal*** across all regions while ***Above Normal*** rainfall was received in Misima, Nadzab and Momote station.

The SCOPIC forecast for the 3 months period were ***Near-Consistent*** at a majority of stations, ***Inconsistent*** at 2 stations and ***Consistent*** at Misima. However Port Moresby shows climatology. The skills ranged from very low to high.

Outlook for -April-June 2014:

1. SCOPIC:

The SCOPIC seasonal rainfall outlook for April to June 2014 shows:

- the most likely outcome for Madang and the Southern Region is above-normal, with normal the next most likely;
- the most likely outcome for Nadzab is normal, with above normal the next most likely;
- there is equal chance of normal and above-normal for Wewak, with below-normal the least likely; and
- there is little guidance for the coming season for Vanimo and the New Guinea Islands as the chances of above-normal, normal and below-normal rainfall are similar.

2. POAMA:

The POAMA Model favours ***Below Normal*** across the country.

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: $X \geq 35$