

Pacific Islands - Online Climate Outlook Forum No 74

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)	October 2013						
	Aug Total	Sept Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2013)	144.6	13.6	313.2	209.4	286.3	254.5	47/65
Nadzab(1973-2013)	82.6	223.2	150.0	76.6	111.7	98.0	34/39
Wewak (1894-2013)	161.2	42.8	216.6	196.7	271.1	223.5	28/58
Vanimo (1918-2013)	166.0	239.2	206.4	143.5	226.9	173.3	34/55
New Guinea Islands							
Momote (1949-2013)	632.2	530.4	259.6	194.8	266.0	234.5	40/65
Kavieng (1916-2013)	287.6	169.2	371.0	159.4	263.8	211.7	74/86
Southern Region							
Misima (1917-2013)	32.4	20.4	190.8	127.1	319.6	235.8	39/88
PortMoresby(1875-2013)	4.8	44.4	25.4	10.1	34.4	18.5	66/118

TABLE 2: Three-monthly Rainfall (August - October 2013)

Predictors: SSTa's 1 & 9—Period: April –June 2013

[Please note that the data used in this verification should be sourced from table 3 of OCOF #70]

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)	471.4	403.2	641.7	500.3	31/65	11/ 46 /43(20.8)	Consistent
Nadzab (1973-2013)	455.8	242.1	388.2	319.4	29/37	19/29/ 52 (1.6)	Consistent
Wewak (1894-2013)	420.6	503.6	666.8	576.4	12/58	10/39/ 51 (19.8)	Inconsistent
Vanimo (1918-2013)	611.6	484.5	543.3	513.2	44/52	34/29/ 37 (-4.5)	Consistent
New Guinea Islands							
Momote (1949-2013)	1,422.2	643.5	896.7	758.0	63/64	21/ 41 /38(1.2)	Near Consistent
Kavieng (1916-2013)	827.8	506.2	710.5	624.5	62/80	27/ 45 /28(-3.7)	Near Consistent
Southern Region							
Misima (1917-2013)	243.6	456.9	788.7	628.9	18/87	12/37/ 51 (32.3)	Inconsistent
Port Moresby (1875-2013)	74.6	58.7	96.2	75.2	52/107	32/19/ 49 (-0.2)	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 November to January 2014

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

Period:Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2013)	53	1,014.7	47		1.4	61.9
Nadzab(1973-2013)	54	48.6	46		-2.1	51.4
Wewak (1894-2013)	38	412.2	62		1.3	51.8
Vanimo (1918-2013)	50	807.8	50		-4.6	26.7
New Guinea Islands						
Momote (1949-2013)	66	813.6	34		2.4	55.6
Kavieng (1916-2013)	73	907.6	27		8.1	58.6
Southern Region						
Misima(1917-2013)	33	769.0	67		8.3	65.6
PortMoresby(1875-2013)	42	469.2	58		5.0	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)	40	931.6	33	1,127.8	27	4.3	47.6
Nadzab(1973-2013)	48	418.2	26	507.4	26	-0.8	37.8
Wewak (1894-2013)	21	367.5	38	469.5	41	-1.0	26.8
Vanimo (1918-2013)	32	724.3	32	918.0	36	-5.5	22.2
New Guinea Islands							
Momote (1949-2013)	46	756.5	27	879.6	27	-1.1	30.2
Kavieng (1916-2013)	45	839.1	30	990.0	25	2.4	41.4
Southern Region							
Misima(1917-2013)	19	682.5	21	886.2	60	7.2	42.6
PortMoresby(1875-2013)	34	420.0	33	568.6	33	5.9	39.1

TABLE 4: Seasonal Climate Outlooks using POAMA2 for November –January 2014

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Madang	26	940	37	1110	37
Wewak	33	381	37	461	30
New Guinea Islands					
Momote	20	753	37	872	43
Kavieng	30	846	40	956	30
Southern Region					
Misima	27	646	27	881	46
PortMoresby	33	423	30	508	37

Summary Statements:

Rainfall for October 2013:

Normal to above normal rainfall received across the country.

Accumulated rainfall for August–October 2013, including outlook verification

Rainfall received was **normal to above normal** except Wewak & Misima received **below normal** rainfall.

The forecasts were near consistent for New Guinea Islands whilst Southern & Momase forecasts were consistent & inconsistent. The skills ranged from very low to very high.

Outlook for December – February 2014:

1. SCOPIC:

The model favours **Below Normal** to **Above Normal** rainfall for the three regions with very low to moderate skills.

2. POAMA Model

The model favours *Normal* to *Above Normal* rainfall for the rest of 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: $X \geq 35$