

Pacific Islands - Online Climate Outlook Forum No 94

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)			June 2015				
	April 2015 Total	May 2015 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2015)	203.0	486.2	-	153.1	226.2	205.2	-
Nadzab(1973-2015)	50.2	103.2	160.0	62.0	120.2	78.9	34/41
Wewak (1894-2015)	170.6	113.4	243.6	168.1	223.5	190.2	46/60
Vanimo (1918-2015)	259.0	179.4	-	165.5	248.1	212.5	-
New Guinea Islands							
Momote (1949-2015)	119.6	236.4	-	222.1	315.2	273.3	-
Kavieng (1916-2015)	76.8	242.0	-	191.7	267.1	215.8	-
Southern Region							
Misima (1917-2015)	244.8	326.2	15.6	125.0	283.2	208.1	2/89
PortMoresby(1875-2015)	73.2	157.2	4.0	11.1	43.3	23.8	23/118

TABLE 2: Three-monthly Rainfall (April - June 2015)

Predictor *NINO3.4 SST Anomalies* :—Period: *January – February 2015*

[Please note that the data used in this verification should be sourced from table 3 of OCOF #90]

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 (1944-2015)	-	901.2	1086.6	1017.7	-	40/38/22 (7.4)	-
Nadzab (1973-2015)	313.4	268.8	349.5	307.0	20/39	39/29/22 (-0.7)	Near-consistent
Wewak (1894-2015)	527.6	570.1	670.7	641.8	17/60	38/32/31 (-0.1)	Consistent
Vanimo (1918-2015)	-	576.0	738.2	651.6	-	29/36/35 (-1.7)	-
New Guinea Islands							
Momote (1949-2015)	-	711.0	893.5	809.8	-	37/32/31 (-0.9)	-
Kavieng (1916-2015)	-	688.5	883.3	770.0	-	30/34/36 (-0.8)	-
Southern Region							
Misima (1917-2015)	586.6	621.9	919.6	766.0	24/88	48/41/11 (21.6)	Near-consistent
Port Moresby (1875-2015)	234.4	175.1	269.3	207.8	64/114	43/35/22 (9.6)	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 August to October 2015

Predictors: [NINO3.4 SST Anomalies](#)-Period: [May - June 2015](#)

Period:Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2014)	90	496.6	10		19.8	73.4
Nadzab(1973-2014)	76	335.7	24		6.3	55.3
Wewak (1894-2014)	91	576.5	9		22.8	66.1
Vanimo (1918-2014)	61	521.2	39		0.8	54.2
New Guinea Islands						
Momote (1949-2014)	31	772.5	69		2.4	62.5
Kavieng (1916-2014)	41	625.4	59		-0.8	52.6
Southern Region						
Misima(1917-2014)	95	625.8	5		25.4	65.6
Port Moresby(1875-2014)	46	75.2	54		-1.5	52.3

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	Leps (%)	Hit-rate (%)
Momase Region							
Madang (1944-2014)	85	404.8	12	635.6	3	23.9	54.7
Nadzab(1973-2014)	51	257.1	23	397.5	26	1.0	36.8
Wewak (1894-2014)	83	503.5	13	664.3	4	21.7	45.8
Vanimo (1918-2014)	36	486.3	34	552.8	30	-2.4	31.3
New Guinea Islands							
Momote (1949-2014)	29	646.4	29	901.2	42	-1.0	28.1
Kavieng (1916-2014)	31	508.6	32	716.0	37	-2.0	21.1
Southern Region							
Misima(1917-2014)	73	456.0	25	780.3	2	27.3	49.2
Port Moresby(1875-2014)	43	58.9	21	96.3	36	-1.0	33.8

TABLE 4: Seasonal Climate Outlooks using POAMA2 for July to September 2015

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Madang	52	311	27	568	21
Nadzab	85	199	10	342	5
Wewak	43	454	21	627	36
New Guinea Islands					
Momote	79	650	16	857	5
Kavieng	88	489	6	659	6
Southern Region					
Misima	61	226	30	593	9
Port Moresby	67	36	15	81	18

Summary Statements:

Rainfall for June 2015

Rainfall in June was above normal in the Momase Region and below normal in the Southern Region. New Guinea Island data not available.

Accumulated rainfall for April to June 2015, including outlook verification

Rainfall over the last three months was below normal to normal in the Momase Region and normal in the Southern Region. New Guinea Island data not available.

The forecasts were consistent at 1 station with very low skills and 3 inconsistent with very low to high skills.

Outlook for – August - October 2015:

1. SCOPIC:

The SCOPIC seasonal rainfall outlook for August to October 2015 shows:

- **Momase Region:** Below normal is the most likely outcome for the whole region with normal the next most likely outcome for Vanimo.
- **New Guinea Islands:** Above normal is the most likely outcome for Momote and Kavieng.
- **Southern Region:** Below normal is the most likely outcome for Misima and Port Moresby.
- Confidence is low at Nadzab, high at Madang and Wewak, very high at Misima and very low for the rest of the stations.

2. POAMA:

The POAMA model favours below normal for the three regions.

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: $X \geq 35$