

Pacific Islands - Online Climate Outlook Forum No 92

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)	April 2015						
	February 2015 Total	March 2015 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2015)	226.2	243.0	203.0	333.3	463.4	405.9	6/66
Nadzab(1973-2015)	268.8	237.0	50.2	87.4	134.0	103.8	5/41
Wewak (1894-2015)	112.4	143.2	170.6	159.1	233.9	186.4	24/60
Vanimo (1918-2015)	217.0	-	-	182.4	291.8	216.2	-
New Guinea Islands							
Momote (1949-2015)	162.0	88.4	119.6	250.0	301.0	273.8	5/66
Kavieng (1916-2015)	173.8	-	76.8	76.8	318.3	291.2	-
Southern Region							
Misima (1917-2015)	286.0	498.4	252.2	210.8	348.0	268.0	41/90
PortMoresby(1875-2015)	221.4	342.0	244.8	80.0	132.0	105.4	114/125

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

Predictor NINO3.4 SST Anomalies :—Period: November-December 2014

[Please note that the data used in this verification should be sourced from table 3 of OCOF #88]

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)	672.2	939.5	1145.8	1036.8	3/66	24/42/34 (0.7)	Near-consistent
Nadzab (1973-2015)	556.0	359.0	495.5	460.2	31/40	25/40/35 (-0.7)	Near-consistent
Wewak (1894-2015)	426.2	438.4	528.2	487.1	17/59	40/26/34 (-1.3)	Consistent
Vanimo (1918-2015)	-	679.2	909.3	789.6	-	29/29/42 (1.6)	-
New Guinea Islands							
Momote (1949-2015)	370.0	754.8	923.2	797.8	2/65	34/31/35 (-1.9)	Inconsistent
Kavieng (1916-2015)	-	796.2	977.4	884.3	-	23/38/39 (4.0)	-
Southern Region							
Misima (1917-2015)	1036.6	761.0	959.0	846.1	64/89	58/35/7 (29.0)	Inconsistent
Port Moresby (1875-2015)	808.2	434.2	591.6	513.8	118/124	46/32/22 (9.2)	Inconsistent

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 June to August 2015

Predictors: [NINO3.4 SST Anomalies](#)-Period: [March-April 2015](#)

Period:Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2014)	89	471.8	11		32.2	75.0
Nadzab(1973-2014)	46	329.0	54		-2.1	46.2
Wewak (1894-2014)	84	537.4	16		22.4	71.2
Vanimo (1918-2014)	39	558.5	61		-0.1	51.0
New Guinea Islands						
Momote (1949-2014)	39	950.9	61		1.8	55.4
Kavieng (1916-2014)	48	700.0	52		-1.4	51.7
Southern Region						
Misima(1917-2014)	92	513.0	8		37.1	77.4
Port Moresby(1875-2014)	71	81.5	29		8.9	61.5

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)	77	403.5	19	532.9	4	33.7	53.1
Nadzab(1973-2014)	33	294.9	36	405.9	31	-3.4	15.4
Wewak (1894-2014)	75	467.1	18	616.5	7	27.3	50.8
Vanimo (1918-2014)	24	506.9	32	632.3	44	0.6	34.7
New Guinea Islands							
Momote (1949-2014)	22	754.9	39	1062.5	39	1.6	21.5
Kavieng (1916-2014)	31	560.7	31	802.9	38	-1.7	32.8
Southern Region							
Misima(1917-2014)	76	365.1	21	692.7	3	30.5	51.6
Port Moresby(1875-2014)	46	53.5	43	102.2	11	10.2	40.0

TABLE 4: Seasonal Climate Outlooks using POAMA2 for June to August 2015

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Madang	64	368	21	505	15
Wewak	24	514	55	619	21
Nadzab	76	259	9	350	15
New Guinea Islands					
Momote	33	813	27	1036	40
Kavieng	43	522	27	809	30
Southern Region					
Misima	61	310	30	517	9
Port Moresby	73	50	9	101	18

Summary Statements:

Rainfall for April 2015

Below normal to Normal rainfall was received across the country whilst Port Moresby received Above Normal.

Accumulated rainfall for February to April 2015, including outlook verification

Rainfall received in the Momase Region was Below Normal whilst Nadzab was Above Normal, Below Normal in the New Guinea Islands Region and Above Normal in the Southern Region.

The forecasts were Inconsistent for New Guinea Islands and the Southern Region except for Momase Region was Near-consistent to Consistent. The skills ranged from very low to very high.

Outlook for – June - August 2015:

1. SCOPIC:

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

- **Momase Region:** The most likely outcome for Madang and Wewak is below normal. At Nadzab there is little guidance as the chances of below normal, normal and above normal are similar and at Vanimo the most likely outcome is above normal with normal the next most likely.
- **New Guinea Islands:** There is an equal chance of normal and above normal rainfall for Momote. At Kavieng the most likely outcome is above normal with below normal and normal the next most likely.
- **Southern Region:** The most likely outcome for Misima is below normal and for Port Moresby the most likely outcome is below normal with normal the next most likely.
- Confidence is very low at Nadzab, Vanimo and Kavieng. Low at Momote and good at Port Moresby. Very high at Madang, Wewak and Misima.

2. POAMA:

The POAMA model favours Normal for Wewak and Above Normal for Momote whilst Below Normal is favoured for the rest of the stations.

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: $X \geq 35$