Pacific Islands - Online Climate Outlook Forum No 90

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)			February 2015				
	December 2014 Total	January 2015 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2015)	463.4	251.4	226.2	233.4	345.9	287.7	19/67
Nadzab(1973-2015)	151.8	155.6	268.8	110.0	186.2	155.8	39/41
Wewak (1894-2015)	136.0	102.0	112.4	103.5	145.0	122.1	22/59
Vanimo (1918-2015)	275.6	202.6	217.0	197.0	308.5	267.4	24/61
New Guinea Islands							
Momote (1949-2015)	474.0	352.6	162.0	206.0	299.6	233.2	13/65
Kavieng (1916-2015)	441.0	356.6	173.8	234.9	308.2	264.8	16/85
Southern Region							
Misima (1917-2015)	185.4	292.6	286.0	232.0	363.7	309.2	42/91
PortMoresby(1875-2015)	50	153.6	221.4	140.5	219.3	167.3	89/127

TABLE 2: Three-monthly Rainfall (December 2014-February 2015)

Predictor NINO3.4 SST Anomalies :–Period: September-October 2014

[Please note that the data used in this verification should be sourced from table 3 of OCOF #86]

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)	941.0	936.8	1126.4	1018.4	23/67	18/**41**/**41** (13.4)	Near Consistent
Nadzab (1973-2015)	576.2	421.8	509.1	488.9	31/39	31/33/**36** (1.3)	Consistent
Wewak (1894-2015)	350.4	371.1	465.5	412.4	17/58	**35**/33/32 (0.1)	Near Consistent
Vanimo (1918-2015)	695.2	730.1	918.0	809.9	16/55	30/**35**/**35** (-1.2)	Inconsistent
New Guinea Islands							
Momote (1949-2015)	989.0	757.4	884.1	876.4	54/65	29/35/**36** (1.5)	Consistent
Kavieng (1916-2015)	971.4	839.9	987.7	912.4	52/82	24/**38**/**38** (10.9)	Near Consistent
Southern Region							
Misima (1917-2015)	764.0	686.0	887.7	771.5	41/85	**37**/**37**/26 (1.7)	Near Consistent
Port Moresby (1875-2015)	425.0	420.3	566.4	472.2	44/123	**39**/36/25 (8.7)	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 2015

Predictors: NINO3.4 SST Anomalies-*Period:* January – February 2014

Period:Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2014)	58	1017.7	42		5	60.3
Nadzab(1973-2014)	54	307.0	46		-1.3	57.9
Wewak (1894-2014)	51	641.8	49		-1.4	52.5
Vanimo (1918-2014)	42	651.6	58		2.1	58.0
New Guinea Islands						
Momote (1949-2014)	53	809.8	47		-0.7	53.8
Kavieng (1916-2014)	46	770.0	54		-0.1	57.9
Southern Region						
Misima(1917-2014)	67	766.0	33		16.1	64.5
Port Moresby(1875-2014)	64	207.8	36		14.0	67.7

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)	40	901.2	38	1086.6	22	7.4	46.0
Nadzab(1973-2014)	39	268.8	29	349.5	22	-0.7	47.4
Wewak (1894-2014)	38	570.1	31	670.7	31	-0.1	30.5
Vanimo (1918-2014)	29	576.0	36	738.2	35	-1.7	20.0
New Guinea Islands							
Momote (1949-2014)	37	711.0	32	893.5	31	-0.9	46.2
Kavieng (1916-2014)	30	688.5	34	883.3	36	-0.8	29.8
Southern Region							
Misima(1917-2014)	48	621.9	41	919.6	11	21.6	51.6
Port Moresby(1875-2014)	43	175.1	35	269.3	22	9.6	46.2

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

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Madang	61	878	5	1091	34
Wewak	55	560	18	671	27
Nadzab	67	249	15	342	18
New Guinea Islands					
Momote	39	703	36	860	25
Kavieng	48	689	27	838	25
Southern Region					
Misima	55	612	27	823	18
Port Moresby	58	189	18	294	24

Summary Statements:

Rainfall for February 2015

Normal to Above Normal rainfall received across the country whilst Madang and NGI regions received Below Normal rainfall.

Accumulated rainfall for December 2014 to February 2015, including outlook verification

Normal rainfall was received in the Southern Region, Normal to Above Normal was received in the New Guinea Islands and Momase Region except Vanimo received Below Normal. The forecasts were near consistent to consistent for all the three regions except for Vanimo which was inconsistent. Skill was low to good across all stations.

Outlook for – April - June 2015:

1. **SCOPIC:**

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

   - **Momase Region**: The most likely outcome for Madang and Nadzab is below normal. At Vanimo and Wewak there is a near equal likelihood of below normal, normal or above normal.
   - **New Guinea Islands**: There is near equal chance of below normal, normal and above normal for this region.
   - **Southern Region**: The most likely outcome for Southern region is below normal, with normal being the next likely.
   - Confidence is very low at all the stations throughout the country except moderate in Madang and Port Moresby and high skills at Misima.

2. **POAMA:**

   The POAMA model favours Below Normal for the three regions, Momase, New Guinea Islands and Southern Region.

NB: The X LEPS % score has been categorised as follows:

Very Low: X < 0.0 Low: 0 ≤ X < 5 Moderate 5 ≤ X < 10 Good: 10 ≤ X < 15 High: 15≤ X < 25

Very High: 25 ≤X < 35 Exceptional: X ≥ 35