Pacific Islands - Online Climate Outlook Forum No 91

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)			March 2015				
	January 2015 Total	February 2015 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2015)	251.4	226.2					
Nadzab(1973-2015)	155.6	268.8	**237.0**	141.7	205.9	153.8	35/40
Wewak (1894-2015)	102.0	112.4	**143.2**	132.8	186.6	162.7	25/59
Vanimo (1918-2015)	202.6	217.0					
New Guinea Islands							
Momote (1949-2015)	352.6	162.0	**88.4**	261.8	333.2	293.3	2/65
Kavieng (1916-2015)	356.6	173.8					
Southern Region							
Misima (1917-2015)	292.6	286.0	**498.4**	214.2	317.3	253.8	81/90
PortMoresby(1875-2015)	153.6	221.4	**342.0**	137.0	240.4	182.7	115/127

TABLE 2: Three-monthly Rainfall (January - March 2015)

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

[Please note that the data used in this verification should be sourced from table 3 of OCOF #87]

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)							
Nadzab (1973-2015)	**661.4**	434.3	522.7	469.7	34/39	23/33/**44**(7)	Consistent
Wewak (1894-2015)	**357.6**	378.0	456.7	429.6	16/59	**39**/33/28 (2.3)	Consistent
Vanimo (1918-2015)							
New Guinea Islands							
Momote (1949-2015)	**603**	752.2	888.6	806.2	9/65	27/29/**44** (4.5)	Inconsistent
Kavieng (1916-2015)							
Southern Region							
Misima (1917-2015)	**1,077**	715.6	933.0	785.4	71/86	**44**/36/21 (8.9)	Inconsistent
Port Moresby (1875-2015)	**717**	507.7	635.3	571.9	103/127	**39**/35/27 (1.2)	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 May to July 2015

Predictors: **NINO3.4 SST Anomalies*-Period:*** **February - March 2015**

Period:Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2015)						
Nadzab(1973-2015)	53	292.6	47		-2.2	60.5
Wewak (1894-2015)	58	631.2	42		4.3	57.6
Vanimo (1918-2015)						
New Guinea Islands						
Momote (1949-2015)	51	885	49		-1.6	49.2
Kavieng (1916-2015)						
Southern Region						
Misima(1917-2015)	84	626.8	16		37.6	75.8
Port Moresby(1875-2015)	58	118.1	42		3.2	56.9

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	Leps (%)	Hit-rate (%)
Momase Region							
Madang (1944-2015)							
Nadzab(1973-2015)	33	264.4	36	378.9	31	-3.6	23.7
Wewak (1894-2015)	43	547.1	33	686.3	24	7.1	44.1
Vanimo (1918-2015)							
New Guinea Islands							
Momote (1949-2015)	27	793.7	41	1,018.6	32	0	40
Kavieng (1916-2015)							
Southern Region							
Misima(1917-2015)	58	496	36	857	6	36.5	54.8
Port Moresby(1875-2015)	41	80.7	36	147.6	23	5.5	44.6

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

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Madang	73	626	9	787	18
Wewak	76	575	12	667	12
Nadzab	70	241	18	300	12
New Guinea Islands					
Momote	40	796	33	1,046	27
Kavieng	42	636	36	805	21
Southern Region					
Misima	82	453	13	622	5
Port Moresby	79	90	12	151	9

Summary Statements:

Rainfall for March 2015

Above Normal rainfall received for most parts of the country except in the Momase region, Wewak recorded Normal rainfall whilst Momote in NGI region received Below Normal rainfall.

Accumulated rainfall for January to March 2015, including outlook verification

Above to Below Normal rainfall was received in the Momase and New Guinea Islands Regions whilst Above Normal rainfall recorded throughout the Southern Region. Forecast was consistent with low to moderate skills for Momase Region however; inconsistent for NGI and Southern Regions with skills also ranging from low to moderate.

Outlook for – May - July 2015:

1. **SCOPIC:**

The SCOPIC seasonal rainfall outlook for May to July 2015 shows:

- **Momase Region**: The most likely outcome for Wewak is below normal. At Nadzab, there is a near equal chance of below normal, normal or above normal.
- **New Guinea Islands**: The most likely outcome is normal rainfall.
- **Southern Region**: The most likely outcome for Southern region is below normal.
- Confidence is very low across the NGI region and at Nadzab in the Momase whilst moderate for Wewak and Port Moresby with exceptional skills for 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: $0 \leq X < 5$ Moderate $5 \leq X < 10$ Good: $10 \leq X < 15$ High: $15 \leq X < 25$

Very High: $25 \leq X < 35$ Exceptional: $X \geq 35$