Pacific Islands - Online Climate Outlook Forum No 84

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)			August 2014				
	June Total	July Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2014)	-	184.2	61.6	65.3	142.1	99.2	22/66
Nadzab(1973-2014)	60.8	240.2	-				
Wewak (1894-2014)	140.8	105.4	111.8	117.6	215.8	153.7	19/59
Vanimo (1918-2014)	334.2	62.0	-				
New Guinea Islands							
Momote (1949-2014)	639.6	690.8	276.4	221.4	439.2	276.9	33/65
Kavieng (1916-2014)	347.4	424.6	119.2	170.9	256.0	206.2	17/84
Southern Region							
Misima (1917-2014)	93.0	11.0	122.2	83.0	191.0	136.4	43/89
PortMoresby(1875-2014)	16.2	7.6	38.4	6.8	23.5	13.1	93/117

TABLE 2: Three-monthly Rainfall (June-August 2014)

Predictors: SSTa's 1-9 –Period: February-April 2014

[Please note that the data used in this verification should be sourced from table 3 of OCOF #79]

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 (1944-2014)	-						
Nadzab (1973-2014)	-						
Wewak (1894-2014)	358.0	560.6	659.2	547.2	8/59	20/37/**43**(8.0)	Inconsistent
Vanimo (1918-2014)	-						
New Guinea Islands							
Momote (1949-2014)	1,606.8	792.7	1,015.0	947.3	62/65	**41**/26/33(0.2)	Inconsistent
Kavieng (1916-2014)	891.2	631.5	805.8	695.4	72/83	29/**49**/22(0.3)	Near Consistent
Southern Region							
Misima (1917-2014)	226.2	501.1	865.0	515.3	14/86	7/37/**56**(40.6)	Inconsistent
Port Moresby (1875-2014)	62.2	82.1	148.7	81.5	42/104	24/32/**44**(6.3)	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 October – December 2014

Predictors: **NINO3.4 SST Anomalies*-Period:*** **July-August 2014**

Period:Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2014)						
Nadzab(1973-2014)						
Wewak (1894-2014)	53	574.5	47		6.4	56.3
Vanimo (1918-2014)						
New Guinea Islands						
Momote (1949-2014)	51	782.4	49		-3.0	59.4
Kavieng (1916-2014)	52	730.3	48		-1.7	58.1
Southern Region						
Misima(1917-2014)	53	643.8	47		1.6	62.5
Port Moresby(1875-2014)	68	215.5	32		47.3	87.5

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)							
Nadzab(1973-2014)							
Wewak (1894-2014)	36	539.1	35	647.5	29	6.5	43.8
Vanimo (1918-2014)							
New Guinea Islands							
Momote (1949-2014)	34	692.0	35	865.7	31	-1.7	53.1
Kavieng (1916-2014)	37	706.9	37	867.4	27	3.5	48.4
Southern Region							
Misima(1917-2014)	35	562.9	33	777.2	32	3.2	37.5
Port Moresby(1875-2014)	36	176.8	47	268.5	17	35.4	53.1

TABLE 4: Seasonal Climate Outlooks using POAMA2 for Oct-Dec 2014

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Madang	42	551	21	698	37
Wewak	24	524	12	615	64
New Guinea Islands					
Momote	15	632	36	689	49
Kavieng	18	496	40	729	42
Southern Region					
Misima	42	340	33	699	25
Port Moresby	58	54	15	125	27

Summary Statements:

Rainfall for August 2014

Below normal to normal rainfall received across the country except at Port Moresby which received above normal rainfall. *(Madang, Nadzab & Vanimo had missing data).*

Accumulated rainfall for June - August 2014, including outlook verification

Below normal rainfall for Wewak & Misima and above normal rainfall for Momote & Kavieng whilst Port Moresby received normal rainfall.

Forecasts were near consistent to inconsistent across the country with skills very low to exceptional.

Outlook for October to December 2014:

1. SCOPIC:

The SCOPIC seasonal rainfall outlook for October to December 2014 shows:

- For Kavieng there is a near equal likelihood of below normal and normal rainfall.
- The Wewak, Momote and Misima outlooks offer little guidance as the chances of above-normal, normal and below-normal rainfall are similar.
- The most likely outcome for Port Moresby is normal with below normal the next most likely.

2. POAMA:

The POAMA model favours above normal in Wewak & New Guinea Islands whilst below normal in Madang 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: $X \geq 35$