Pacific Islands - Online Climate Outlook Forum No 80

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)			April 2014				
	February Total	March Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2014)	240.0	418.2	**288.2**	339.6	464.6	406.2	15/65
Nadzab(1973-2014)	237.6	153.8	**160.0**	86.4	124.8	103.8	29/40
Wewak (1894-2014)	166.2	135.8	**217.8**	157.2	235.5	185.7	36/59
Vanimo (1918-2014)	131.4	168.4	**439.4**	180.7	282.5	213.6	59/61
New Guinea Islands							
Momote (1949-2014)	306.6	154.0	**264.8**	249.7	304.6	277.1	30/65
Kavieng (1916-2014)	242.0	286.2	**449.2**	262.9	312.4	288.6	76/85
Southern Region							
Misima (1917-2014)	367.0	241.0	**724.6**	208.0	344.4	267.0	88/89
PortMoresby(1875-2014)	131.4	220.2	**144.2**	78.1	129.5	105.4	88/124

TABLE 2: Three-monthly Rainfall (February-April 2014)

Predictors: SSTa's 1-9 –Period: October -December 2013

[Please note that the data used in this verification should be sourced from table 3 of OCOF #76]

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)	**946.4**	946.6	1,149.4	1,046.8	22/65	42/**43**/15(1.0)	Near Consistent
Nadzab (1973-2014)	**551.4**	358.0	493.7	457.1	30/39	32/28/**40**(-4.4)	Consistent
Wewak (1894-2014)	**519.8**	436.1	530.8	486.4	38/58	17/19/**64**(2.4)	Near Consistent
Vanimo (1918-2014)	**739.2**	677.8	911.8	812.1	23/59	26/22/**52**(1.7)	Near Consistent
New Guinea Islands							
Momote (1949-2014)	**725.4**	756.9	926.3	801.2	/64	23/25/**52**(-0.9)	Inconsistent
Kavieng (1916-2014)	**977.4**	793.7	973.6	881.7	55/82	42/9/**49**(4.0)	Consistent
Southern Region							
Misima (1917-2014)	**1,332.6**	759.2	959.0	844.0	82/88	**48**/33/19(22.2)	Inconsistent
Port Moresby (1875-2014)	**495.8**	433.7	593.1	571.0	57/123	24/37/**39**(2.4)	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 June to August 2014

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

Period:Station	**Below Median (prob)**	**Median Rainfall (mm)**	**Above Median (prob)**		**LEPS (%)**	**Hit-rate (%)**
Momase Region						
Madang (1944-2014)	45	471.8	**55**		31.5	75
Nadzab(1973-2014)	**51**	328.5	49		-2.2	51.6
Wewak (1894-2014)	41	547.2	**59**		31.2	78.1
Vanimo (1918-2014)	**50**	557.3	**50**		-3.7	43.3
New Guinea Islands						
Momote (1949-2014)	49	947.3	**51**		-1.8	53.1
Kavieng (1916-2014)	**50**	695.4	**50**		-3.1	51.6
Southern Region						
Misima(1917-2014)	48	515.3	**52**		35.9	78.1
Port Moresby(1875-2014)	43	81.5	**57**		21.4	65.6

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)	22	403.5	**48**	532.9	30	42.2	65.6
Nadzab(1973-2014)	**34**	294.9	**32**	402.7	**34**	-3.3	29
Wewak (1894-2014)	20	467.2	**43**	618.6	37	22.1	46.9
Vanimo (1918-2014)	**34**	506.8	**34**	632.5	**32**	-3.5	30
New Guinea Islands				-2.8			
Momote (1949-2014)	**33**	745.2	**33**	1,051.2	**34**	-2.8	21.9
Kavieng (1916-2014)	**32**	560.4	**34**	800.0	**34**	-2.2	29
Southern Region							
Misima(1917-2014)	24	369.8	**46**	697.2	30	33.7	59.4
Port Moresby(1875-2014)	29	55.4	34	102.6	**37**	20.6	50

TABLE 4: Seasonal Climate Outlooks using POAMA2 for June to August 2014

Station	**Lower Tercile (prob)**	**33%ile rainfall (mm)**	**Middle Tercile (prob)**	**66%ile rainfall (mm)**	**Upper Tercile (prob)**
Momase Region					
Madang	27	626	33	787	**40**
Wewak	21	575	**49**	667	30
New Guinea Islands					
Momote	33	796	24	1046	**43**
Kavieng	39	636	5	805	**56**
Southern Region					
Misima	**76**	453	12	622	12
Port Moresby	**52**	90	18	151	30

Summary Statements:

Rainfall for April 2014

During April, the three regions received above normal to normal rainfall except Madang received below normal rainfall.

Accumulated rainfall for February - April 2014, including outlook verification

Rainfall over period Feb – Apr 2014 was above normal to normal except Madang & Momote received below normal rainfall.

The SCOPIC forecasts for the 3 months period were near consistent at majority of the stations, consistent at Nadzab & Kavieng whilst Momote & Misima were inconsistent. The skills range from very low to high.

Outlook for –June- August 2014:

1. SCOPIC:

The SCOPIC seasonal rainfall outlook for June to August 2014 shows:

- The most likely outcome for Madang, Wewak and Misima is normal with the next most likely is above normal.
- The most likely outcome for Port Moresby is above normal with normal the next most likely.
- There is little guidance for Nadzab, Vanimo, Momote & Kavieng as the chances of above normal, normal and below normal rainfall are similar.

2. POAMA:

The POAMA model favours normal to above normal for the Momase region and the New Guinea Islands.

Below normal is favoured for the 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