Pacific Islands - Online Climate Outlook Forum No 81

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)			May 2014				
	March Total	April Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2014)	418.2	288.2	-				
Nadzab(1973-2014)	153.8	160.0	**48.0**	64.7	107.1	76.0	6/40
Wewak (1894-2014)	135.8	217.8	**159.4**	190.2	272.8	223.1	17/59
Vanimo (1918-2014)	168.4	439.4	**124.4**	167.1	271.6	209.3	12/61
New Guinea Islands							
Momote (1949-2014)	154.0	264.8	**181.4**	197.1	259.4	230.4	18/66
Kavieng (1916-2014)	286.2	449.2	**177.2**	205.0	304.7	249.2	22/84
Southern Region							
Misima (1917-2014)	241.0	724.6	**201.8**	183.0	323.2	248.0	37/89
PortMoresby(1875-2014)	220.2	144.2	**0.0**	30.7	73.6	50.8	1/123

TABLE 2: Three-monthly Rainfall (March-May 2014)

Predictors: SSTa's 1-9 –Period: November 2013 -January 2014

[Please note that the data used in this verification should be sourced from table 3 of OCOF #77]

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)	-	1001.9	1209.6	1151.9		**39**/36/25 (-2.7)	
Nadzab (1973-2014)	**361.8**	354.2	432.4	387.0	14/38	**42**/41/17 (-1.3)	**Near-consistent**
Wewak (1894-2014)	**513.0**	522.0	657.1	612.6	19/58	22/36/**42** (-2.2)	**Inconsistent**
Vanimo (1918-2014)	**732.2**	583.4	840.2	695.8	33/59	16/34/**50** (2.8)	**Near-consistent**
New Guinea Islands							
Momote (1949-2014)	**600.2**	736.2	894.3	823.0	6/64	20/30/**50** (0.0)	**Inconsistent**
Kavieng (1916-2014)	**912.6**	756.1	947.5	832.6	50/81	**38**/33/30 (-0.7)	**Near-consistent**
Southern Region							
Misima (1917-2014)	**1167.4**	681.0	992.0	784.4	73/89	32/33/**35** (21.1)	**Consistent**
Port Moresby (1875-2014)	**364.4**	306.6	450.5	381.8	54/120	16/46/**38** (1.1)	**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 July to September 2014

Predictors: **NINO3.4 SST Anomalies**-***Period:*** **March – May 2014**

Period:Station	**Below Median (prob)**	**Median Rainfall (mm)**	**Above Median (prob)**		**LEPS (%)**	**Hit-rate (%)**
Momase Region						
Madang (1944-2014)						
Nadzab(1973-2014)	**50**	367.0	**50**		-2.7	27.0
Wewak (1894-2014)	47	559.5	**53**		36.9	81.0
Vanimo (1918-2014)	**50**	510.9	**50**		0.4	62.5
New Guinea Islands						
Momote (1949-2014)	50	893.3	**50**		3.5	57.8
Kavieng (1916-2014)	**50**	611.5	**50**		-1.8	47.3
Southern Region						
Misima(1917-2014)	**51**	470.9	49		24.8	72.1
Port Moresby(1875-2014)	**50**	65.4	**50**		0.5	51.6

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)							
Nadzab(1973-2014)	**32**	257.8	**34**	462.0	**34**	-3.6	16.2
Wewak (1894-2014)	25	470.2	**40**	591.6	35	24.3	56.9
Vanimo (1918-2014)	**33**	447.1	**34**	552.5	**33**	-0.5	35.4
New Guinea Islands							
Momote (1949-2014)	**33**	748.4	**34**	1047.0	**33**	1.7	21.9
Kavieng (1916-2014)	**34**	500.9	**33**	720.7	**33**	-2.1	3.6
Southern Region							
Misima(1917-2014)	31	334.6	**42**	625.7	27	29.1	54.1
Port Moresby(1875-2014)	**33**	41.5	**33**	84.7	**34**	-1.4	43.8

TABLE 4: Seasonal Climate Outlooks using POAMA2 for July to September 2014

Station	**Lower Tercile (prob)**	**33%ile rainfall (mm)**	**Middle Tercile (prob)**	**66%ile rainfall (mm)**	**Upper Tercile (prob)**
Momase Region					
Madang	33	368	**37**	505	30
Wewak	33	514	30	619	**37**
New Guinea Islands					
Momote	33	813	27	1036	**40**
Kavieng	36	522	15	809	**49**
Southern Region					
Misima	27	310	**49**	517	24
Port Moresby	42	50	5	101	**53**

Summary Statements:

Rainfall for May 2014

Most parts of the country received *Below Normal* rainfall except for Misima received *Normal* rainfall.

Accumulated rainfall for March to May 2014, including outlook verification

Rainfall over period Mar – May 2014 was *Below Normal* to *Normal* across the country except Misima received *Above Normal* rainfall.

The SCOPIC forecasts for the 3 months period were *Near-Consistent* at majority of the stations, *Inconsistent* at Wewak and Momote whilst *Consistent* at Misima. The skills ranged from very low to high.

Outlook for – July to September 2014:

1. **SCOPIC:**

The SCOPIC seasonal rainfall outlook for July to September 2014 shows:

- The most likely outcome for Wewak and Misima is *Normal* with the next most likely is *Above Normal* for Wewak and *Below Normal* for Misima.
- There is little guidance for Nadzab, Vanimo, New Guinea Islands region and Port Moresby as the chances of *Above Normal, Normal* and *Below Normal* are similar.

2. **POAMA:**

The POAMA model favours *Above Normal* across the country except Madang and Misima with *Normal.*

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