Pacific Islands - Online Climate Outlook Forum No 115

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)			March 2017				
	Jan 2017 Total	Feb 2017 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2017)	248.8	-	-	296.8	398.9	336.9	
Nadzab(1973-2017)	222.0	46.0	203.2	141.7	206.8	156.3	28/42
Wewak (1894-2017)	208.4	104.2	140.6	132.8	184.8	159.8	25/61
Vanimo (1918-2017)	-	346.0	147.0	214.7	256.7	271.0	
Highlands Region							
Goroka (1948-2017)	346.0	228.0	239.0	200.7	285.8	234.5	29/56
New Guinea Islands							
Momote (1949-2017)	280.8	211.8	457.2	261.8	333.6	295.1	62/67
Kavieng (1916-2017)	374.6	467.0	-	253.9	366.3	311.1	
Southern Region							
Misima (1917-2016)	-	-	-	213.8	320.0	253.8	
Port Moresby(1875-2017)	233.2	122.0	324.1	137.0	242.8	184.0	115/129

TABLE 2: Three-monthly Rainfall (Jan - Mar 2017)

Predictor NINO3.4 SST Anomalies*:—*Period: Oct – Nov 2016

[Please note that the data used in this verification should be sourced from table 3 of OCOF #111]

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 (1944-2017)		895.7	1064.7	959.6		**46**/25/29 (11.3)	
Nadzab (1973-2017)	471.2	435.0	625.8	473.3	21/41	**43**/31/26 (6.6)	Near-consistent
Wewak (1894-2017)	453.2	367.8	454.6	428.3	40/61	26/35/**39** (3.1)	Near-consistent
Vanimo (1918-2017)		721.3	964.0	878.7		**38**/37/25 (2.9)	
Highlands Region							
Goroka (1948-2017)	813.0	637.6	783.4	709.2	39/52	**41**/40/19 (9.1)	Inconsistent
New Guinea Islands							
Momote (1949-2017)	949.8	751.7	894.6	806.2	48/67	**39/39**/22 (6.8)	Near-consistent
Kavieng (1916-2017)		841.0	1011.6	942.1		**44**/29/27 (7.2)	
Southern Region							
Misima (1917-2016)		715.4	933.6	785.4		24/34/**42** (8.7)	
PortMoresby (1875-2017)	679.3	505.3	635.5	571.9	96/129	26/35/**39** (2.3)	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 May - July 2017

Predictors: **NINO3.4 SST Anomalies**-***Period:*** **February - March 2017**

Period:Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2017)	49	744.8	**51**		13.7	68.8
Nadzab(1973-2017)	49	287.9	**51**		-1.0	62.5
Wewak (1894-2017)	49	629.6	**51**		6.8	59.0
Vanimo (1918-2017)	**50**	608.2	**50**		-1.8	45.1
Highlands Region						
Goroka (1948-2017)	**50**	225.0	**50**		0.4	52.1
New Guinea Islands						
Momote (1949-2017)	**50**	884.9	**50**		-1.5	41.8
Kavieng (1916-2017)	**50**	730.6	**50**		-1.3	53.4
Southern Region						
Misima(1917-2016)	**55**	625.4	45		3.9	56.7
Port Moresby(1875-2017)	**50**	118.1	**50**		33.7	71.4

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	Leps (%)	Hit-rate (%)
Momase Region							
Madang (1944-2017)	29	635.5	**39**	817.6	32	20.7	57.8
Nadzab(1973-2017)	**34**	259.6	**33**	376.6	**33**	-3.3	30.0
Wewak (1894-2017)	**32**	560.6	**35**	668.4	**33**	5.0	45.9
Vanimo (1918-2017)	**33**	563.2	**33**	683.2	**34**	-2.2	29.4
Highlands Region							
Goroka (1948-2017)	**33**	199.4	**34**	277.8	**33**	3.7	41.7
New Guinea Islands							
Momote (1949-2017)	**33**	792.7	**32**	1015.0	**35**	0.4	38.8
Kavieng (1916-2017)	**35**	633.2	**34**	820.0	**31**	0.3	48.3
Southern Region							
Misima(1917-2016)	32	488.0	**46**	849.0	22	34.2	55.6
Port Moresby(1875-2017)	**33**	78.9	**35**	148.7	**32**	5.6	38.8

TABLE 4: Seasonal Climate Outlooks using POAMA2 for May - July 2017

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Madang					
Nadzab					
Wewak					
New Guinea Islands					
Momote					
Kavieng					
Southern Region					
Misima					
Port Moresby					
Daru					

Summary Statements:

Rainfall for March 2017

Rainfall for the month of March was normal for Wewak, Goroka and Nazab. Momote & Port Moresby received above normal rainfall whilst Vanimo received below normal.

Accumulated rainfall for January to March 2017, including outlook verification

Rainfall for the last three months was normal at Nadzab and Wewak, and above normal at Goroka, Momote and Port Moresby.

Forecasts were consistent at Port Moresby, inconsistent at Highlands region and near consistent at Momase and New Guinea Islands region.

The skills range from low to good.

Outlook for May to July 2017:

1. **SCOPIC:**

The SCOPIC seasonal rainfall outlook for May to July 2017 shows:

- **Momase Region**: Little guidance as all four monitoring stations have roughly equal chances of below-normal, normal or above-normal rainfall occurring.
- **Highlands Region:** There is an equal chance of below normal to normal to above normal rainfall for Goroka.
- **New Guinea Islands**: The two monitoring stations have equal chances of below normal to normal to above normal occurring respectively.
- **Southern Region:** For Misima normal rainfall is favoured followed with below normal the next most likely. Port Moresby has an equal chance of below normal to normal to above normal rainfall occurring.

Confidence range from very low to very high.

2. **POAMA:**

The POAMA model favours

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