Pacific Islands - Online Climate Outlook Forum No 76

Country: PAPUA NEW GUINEA

TABLE 1: Monthly Rainfall

Station (include data period)			December 2013				
	October Total	November Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Momase Region							
Madang (1944-2013)	313.2	166.0	**509.4**	341.5	439.0	382.0	53/66
Nadzab(1973-2013)	150.0	80.4	**217.6**	109.1	187.7	151.0	30/39
Wewak (1894-2013)	216.6	228.2	**126.8**	121.1	179.5	142.8	22/58
Vanimo (1918-2013)	206.4	223.8	**403.2**	179.4	280.2	228.6	54/60
New Guinea Islands							
Momote (1949-2013)	259.6	328.2	**347.6**	247.4	322.8	282.4	49/65
Kavieng (1916-2013)	371.0	165.4	**276.4**	251.5	336.3	301.8	39/86
Southern Region							
Misima (1917-2013)	190.8	124.2	**244.4**	160.7	258.3	215.0	54/88
PortMoresby(1875-2013)	25.4	120.6	**133.6**	75.6	152.1	116.0	73/123

TABLE 2: Three-monthly Rainfall (October-December 2013)

Predictors: SSTa's 1 & 9–Period: June - August 2013

[Please note that the data used in this verification should be sourced from table 3 of OCOF #72]

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 (1944-2013)	**988.6**	865.6	1100.2	981.6	33/65	11/**60**/29 (18.6)	**Consistent**
Nadzab (1973-2013)	**448.0**	305.4	369.0	336.8	32/38	19/37/**44** (4.7)	**Consistent**
Wewak (1894-2013)	**571.6**	537.6	645.8	573.8	27/57	27/27/**46** (2.8)	**Near Consistent**
Vanimo (1918-2013)	**833.4**	555.0	686.2	611.4	48/53	16/30/**54** (24.3)	**Consistent**
New Guinea Islands							
Momote (1949-2013)	**935.4**	688.0	866.2	773.0	55/65	30/**53**/17 (3.2)	**Near Consistent**
Kavieng (1916-2013)	**812.8**	705.4	867.7	773.2	49/84	**50**/27/23 (3.5)	**Near Consistent**
Southern Region							
Misima (1917-2013)	**559.4**	565.6	784.3	650.0	28/86	2/33/**65** (29.0)	**Inconsistent**
Port Moresby (1875-2013)	**279.6**	176.8	268.3	214.2	79/112	13/26/**61** (19.2)	**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 February to April 2014

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

Period:Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
Momase Region						
Madang (1944-2013)	**60**	1046.8	40		-0.7	58.7
Nadzab(1973-2013)	26	457.1	**74**		0.0	60.5
Wewak (1894-2013)	42	486.4	**58**		-2.8	40.4
Vanimo (1918-2013)	**51**	812.1	49		-2.5	46.0
New Guinea Islands						
Momote (1949-2013)	35	801.2	**65**		-0.3	54.0
Kavieng (1916-2013)	47	881.7	**53**		3.8	52.6
Southern Region						
Misima(1917-2013)	47	844.0	**53**		15.4	65.0
PortMoresby(1875-2013)	**58**	517.0	42		5.3	56.3

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	Leps (%)	Hit-rate (%)
Momase Region							
Madang (1944-2013)	42	946.6	**43**	1149.4	15	1.0	41.3
Nadzab(1973-2013)	32	358.0	28	493.7	**40**	-4.4	28.9
Wewak (1894-2013)	17	436.1	19	530.8	**64**	2.4	42.1
Vanimo (1918-2013)	26	677.8	22	911.8	**52**	1.7	28.0
New Guinea Islands							
Momote (1949-2013)	23	756.9	25	926.3	**52**	-0.9	33.3
Kavieng (1916-2013)	42	793.7	9	973.6	**49**	4.0	36.8
Southern Region							
Misima(1917-2013)	**48**	759.2	33	959.0	19	22.2	65.0
PortMoresby(1875-2013)	24	433.7	37	593.1	**39**	2.4	29.7

TABLE 4: Seasonal Climate Outlooks using POAMA2 for February to April 2014

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Momase Region					
Madang	**42**	904	22	1154	36
Wewak	**42**	428	25	575	33
New Guinea Islands					
Momote	33	720	**37**	844	30
Kavieng	36	774	**37**	989	27
Southern Region					
Misima	39	708	**49**	930	12
PortMoresby	**42**	465	25	593	33

Summary Statements:

Rainfall for December 2013:

Normal to ***Above Normal*** received across the country.

Accumulated rainfall for October–December 2013, including outlook verification

Normal to ***Above Normal*** rainfall was received across the country except Misima received ***Below Normal***.

The forecasts were ***Near-Consistent*** to ***Consistent*** across the country whilst Misima being ***Inconsistent***. The skills ranged from low to very high.

Outlook for February - April 2014:

1. SCOPIC:

The SCOPIC Model favours ***Above Normal*** across the country with very low to low skills whilst ***Normal*** for Madang with low skill and ***Below Normal*** for Misima with high skill.

2. POAMA:

The POAMA Model favours ***Below Normal*** to ***Normal*** across the country.

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: $X \geq 35$