

## Pacific Islands - Online Climate Outlook Forum No 71

**Country:** PAPUA NEW GUINEA

### TABLE 1: Monthly Rainfall

Station (include data period)	July 2013						
	May 2013 Total	June 2013 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
<b>Momase Region</b>							
Madang (1944-2013)	316.8	256.6	198.2	110.7	183.6	146.1	48/65
Nadzab(1973-2013)	201.6	100.0	134.6	67.3	126.3	116.7	27/39
Wewak (1894-2013)	434.4	280.6	377.4	153.4	202.3	177.8	55/58
Vanimo (1918-2013)	204.2	267.8	307.6	136.1	218.4	188.3	54/59
<b>New Guinea Islands</b>							
Momote (1949-2013)	210.8	331.4	398.8	305.2	396.2	348.6	44/65
Kavieng (1916-2013)	120.2	315.8	258.6	195.8	275.5	222.9	52/83
<b>Southern Region</b>							
Misima (1917-2013)	307.4	116.2	223.8	89.3	191.3	136.0	66/88
PortMoresby(1875-2013)	18.0	51.8	4.2	4.6	24.4	13.2	35/114

### TABLE 2: Three-monthly Rainfall (May-July 2013)

Predictors: SSTa's 1 & 9—Period: January - March 2013

[Please note that the data used in this verification should be sourced from table 3 of OCOF #67]

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?)
<b>Momase Region</b>							
Madang (1944-2013)	771.6	638.3	825.4	744.8	37/64	25/45/30(19.1)	Consistent
Nadzab (1973-2013)	436.2	257.3	377.7	286.7	32/37	36/32/32(-4.0)	Inconsistent
Wewak (1894-2013)	1092.4	554.1	677.3	631.2	58/58	24/39/37(11.1)	Near-Consistent
Vanimo (1918-2013)	779.6	571.9	685.5	608.4	49/58	27/35/38(-2.3)	Consistent
<b>New Guinea Islands</b>							
Momote (1949-2013)	941.0	791.8	1015.7	871.9	41/65	25/34/41(3.7)	Near-Consistent
Kavieng (1916-2013)	694.6	630.4	812.7	725.2	37/81	37/33/30(2.3)	Near-Consistent
<b>Southern Region</b>							
Misima (1917-2013)	647.4	500.0	873.0	626.8	47/86	41/47/12(35.7)	Consistent
Port Moresby (1875-2013)	74.0	83.2	149.7	118.3	32/105	31/38/31(2.3)	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 September to November 2013**

*Predictors: [SSTa's 1 & 9-Period: May–July 2013](#)*

<b>Period:Station</b>	<b>Below Median (prob)</b>	<b>Median Rainfall (mm)</b>	<b>Above Median (prob)</b>		<b>LEPS (%)</b>	<b>Hit-rate (%)</b>
<b>Momase Region</b>						
Madang (1944-2013)	36	740.5	64		19.4	61.9
Nadzab(1973-2013)	25	271.8	75		9.9	66.7
Wewak (1894-2013)	33	594.4	67		3.3	55.4
Vanimo (1918-2013)	40	532.4	60		-1.8	45.7
<b>NewGuinea Islands</b>						
Momote (1949-2013)	51	706.7	49		-2.7	45.3
Kavieng (1916-2013)	46	653.2	54		-2.9	35.6
<b>Southern Region</b>						
Misima(1917-2013)	21	723.3	79		29.9	74.2
PortMoresby(1875-2013)	14	109.0	86		22.8	67.2

<b>Station</b>	<b>Below Normal (prob)</b>	<b>33%ile rainfall (mm)</b>	<b>Normal (prob)</b>	<b>66%ile rainfall (mm)</b>	<b>Above Normal (prob)</b>	<b>Leps (%)</b>	<b>Hit-rate (%)</b>
<b>Momase Region</b>							
Madang (1944-2013)	11	640.2	43	847.0	46	19.0	46.0
Nadzab(1973-2013)	9	227.6	43	339.8	48	9.8	36.1
Wewak (1894-2013)	14	532.8	45	648.6	41	10.2	48.2
Vanimo (1918-2013)	26	489.2	26	580.6	48	1.1	21.7
<b>NewGuinea Islands</b>							
Momote (1949-2013)	31	633.8	34	777.9	35	-4.2	0.0
Kavieng (1916-2013)	42	553.8	19	763.4	39	0.1	37.3
<b>Southern Region</b>							
Misima(1917-2013)	6	563.4	32	868.3	62	24.9	50.0
PortMoresby(1875-2013)	9	85.0	24	42.2	67	18.1	42.2

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for September - November 2013**

<b>Station</b>	<b>Lower Tercile (prob)</b>	<b>33%ile rainfall (mm)</b>	<b>Middle Tercile (prob)</b>	<b>66%ile rainfall (mm)</b>	<b>Upper Tercile (prob)</b>
<b>Momase Region</b>					
Madang	23	551	47	698	30
Wewak	30	524	20	615	50
<b>NewGuinea Islands</b>					
Momote	5	632	45	783	50
<b>Southern Region</b>					
Misima	47	340	23	699	30
PortMoresby	30	54	30	125	40

## Summary Statements:

### **Rainfall for July 2013:**

Above Normal rainfall was received across the country except for Kavieng receiving Normal rainfall whilst Port Moresby received Below Normal rainfall.

### **Accumulated rainfall May –July 2013, including outlook verification**

Rainfall for the three months was Normal to Above Normal across the country except for Port Moresby receiving Below Normal rainfall.

The forecasts were Near-Consistent to Consistent except for Nadzab, forecasted Inconsistent. The skills ranged from very low to exceptional.

### **Outlook for September – November 2013:**

#### **1. SCOPIC:**

The model favours ***Above Normal*** rainfall for the three regions with very low to high skills, except Wewak, favoured for ***Normal*** rainfall with good skills whilst Kavieng, favoured for ***Below Normal*** rainfall with low skills.

#### **2. POAMA Model**

The model favours ***Below Normal*** for Misima, ***Normal*** for Madang and ***Above Normal*** for Wewak, Momote and Port Moresby.

**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:  $X \geq 35$