

## Pacific Islands - Online Climate Outlook Forum No 97

**Country:** PAPUA NEW GUINEA

### TABLE 1: Monthly Rainfall

Station (include data period)	September 2015						
	July 2015 Total	August 2015 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
<b>Momase Region</b>							
Madang (1944-2015)	-	-	-				
Nadzab(1973-2015)	24.6	41.4	<b>9.6</b>	55.5	127.2	104.0	1/40
Wewak (1894-2015)	248.2	147.2	<b>69.8</b>	147.2	206.7	180.4	8/60
Vanimo (1918-2015)	-	203.2	<b>30.8</b>	124.1	184.5	149.0	1/60
<b>New Guinea Islands</b>							
Momote (1949-2015)	82.8	70.4	<b>189.2</b>	190.3	274.5	237.8	22/66
Kavieng (1916-2015)	-	2.6	<b>87.8</b>	140.7	196.7	165.8	14/87
<b>Southern Region</b>							
Misima (1917-2015)	84.8	18.0	-				
PortMoresby(1875-2015)	45.4	0.0	<b>2.2</b>	9.2	32.4	17.8	12/121

### TABLE 2: Three-monthly Rainfall (July-September 2015)

Predictor *NINO3.4 SST Anomalies* :-Period: April- May 2015

[Please note that the data used in this verification should be sourced from table 3 of OCOF #93]

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 (1944-2015)	-	329.6	481.4	407.0		<b>62/32/6</b>	
Nadzab (1973-2015)	<b>75.6</b>	264.5	463.3	372.6	<b>2/39</b>	<b>44/29/27</b>	Consistent
Wewak (1894-2015)	<b>465.2</b>	468.7	590.7	558.2	20/60	<b>84/13/3</b>	Consistent
Vanimo (1918-2015)	-	462.4	558.4	516.0		<b>22/33/45</b>	
<b>New Guinea Islands</b>							
Momote (1949-2015)	<b>342.4</b>	748.4	1047.0	893.3	<b>1/65</b>	<b>22/25/53</b>	Inconsistent
Kavieng (1916-2015)	-	504.9	723.0	611.6		<b>35/26/39</b>	
<b>Southern Region</b>							
Misima (1917-2015)	-	337.2	617.5	464.0		<b>83/16/1</b>	
Port Moresby (1875-2015)	<b>47.6</b>	41.6	87.7	66.6	42/105	<b>42/25/33</b>	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 November 2015 to January 2016**

*Predictors: [NINO3.4 SST Anomalies](#)-Period: [August – September 2015](#)*

Period:Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
<b>Momase Region</b>						
Madang (1944-2014)						
Nadzab(1973-2014)	50	403.0	50		-2.7	28.2
Wewak (1894-2014)	80	484.8	20		6.2	58.6
Vanimo (1918-2014)						
<b>New Guinea Islands</b>						
Momote (1949-2014)	32	827.4	68		1.4	54.7
Kavieng (1916-2014)						
<b>Southern Region</b>						
Misima(1917-2014)						
Port Moresby(1875-2014)	93	365.0	7		20.2	69.2

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	Leps (%)	Hit-rate (%)
<b>Momase Region</b>							
Madang (1944-2014)							
Nadzab(1973-2014)	27	371.5	46	435.9	27	-2.9	17.9
Wewak (1894-2014)	62	439.8	27	543.4	11	5.3	48.3
Vanimo (1918-2014)							
<b>New Guinea Islands</b>							
Momote (1949-2014)	15	731.8	35	882.1	50	2.8	39.1
Kavieng (1916-2014)							
<b>Southern Region</b>							
Misima(1917-2014)							
Port Moresby(1875-2014)	73	299.6	23	424.6	4	14.3	47.7

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for Nov 2015 to Jan 2016**

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
<b>Momase Region</b>					
Madang	19	960	30	1116	51
Wewak	21	427	9	506	70
Nadzab	33	345	25	416	42
<b>New Guinea Islands</b>					
Momote	33	720	42	888	25
Kavieng	27	767	22	942	51
<b>Southern Region</b>					
Misima	82	553	6	738	12
Port Moresby	51	272	19	411	30

## Summary Statements:

### Rainfall for August 2015

Below normal received at all the monitoring stations in PNG. Nadzab and Vanimo recorded their driest September rainfall on record.

### Accumulated rainfall for July to September 2015, including outlook verification

Below normal rainfall received at all monitoring stations in PNG. Nadzab recorded their 2<sup>nd</sup> lowest three month total and Momote recorded their lowest three month total.

The forecasts were consistent at all stations except at Momote was inconsistent.

### Outlook for – November 2015 to January 2016:

#### 1. SCOPIC:

The SCOPIC seasonal rainfall outlook for November 2015 to January 2016 shows:

- **Momase Region:** Below normal rainfall is favoured for Wewak whilst above normal rainfall is favoured for Nadzab. Above normal rainfall is favoured for Madang.
- **New Guinea Islands:** Above normal rainfall is favoured for Momote with normal the next most likely outcome. Normal rainfall is favoured for Kavieng.
- **Southern Region:** Below normal rainfall is favoured for Port Moresby and Misima.
- Confidence the outlooks is good at Port Moresby, moderate at Wewak, and very low to low in the Momoase and New Guinea Islands regions as well as at Misima.

#### • 2. POAMA:

The POAMA model favours Below normal rainfall for Southern region, Above normal for Momase and New Guinea Islands except Momote with normal rainfall.

**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:  $X \geq 35$