

## Pacific Islands - Online Climate Outlook Forum No 80

**Country:** PAPUA NEW GUINEA

### TABLE 1: Monthly Rainfall

Station (include data period)	April 2014						Ranking
	February Total	March Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	
<b>Momase Region</b>							
Madang (1944-2014)	240.0	418.2	288.2	339.6	464.6	406.2	15/65
Nadzab(1973-2014)	237.6	153.8	160.0	86.4	124.8	103.8	29/40
Wewak (1894-2014)	166.2	135.8	217.8	157.2	235.5	185.7	36/59
Vanimo (1918-2014)	131.4	168.4	439.4	180.7	282.5	213.6	59/61
<b>New Guinea Islands</b>							
Momote (1949-2014)	306.6	154.0	264.8	249.7	304.6	277.1	30/65
Kavieng (1916-2014)	242.0	286.2	449.2	262.9	312.4	288.6	76/85
<b>Southern Region</b>							
Misima (1917-2014)	367.0	241.0	724.6	208.0	344.4	267.0	88/89
PortMoresby(1875-2014)	131.4	220.2	144.2	78.1	129.5	105.4	88/124

### TABLE 2: Three-monthly Rainfall (February-April 2014)

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

[Please note that the data used in this verification should be sourced from table 3 of OCOF #76]

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 (1944-2014)	946.4	946.6	1,149.4	1,046.8	22/65	42/43/15(1.0)	Near Consistent
Nadzab (1973-2014)	551.4	358.0	493.7	457.1	30/39	32/28/40(-4.4)	Consistent
Wewak (1894-2014)	519.8	436.1	530.8	486.4	38/58	17/19/64(2.4)	Near Consistent
Vanimo (1918-2014)	739.2	677.8	911.8	812.1	23/59	26/22/52(1.7)	Near Consistent
<b>New Guinea Islands</b>							
Momote (1949-2014)	725.4	756.9	926.3	801.2	/64	23/25/52(-0.9)	Inconsistent
Kavieng (1916-2014)	977.4	793.7	973.6	881.7	55/82	42/9/49(4.0)	Consistent
<b>Southern Region</b>							
Misima (1917-2014)	1,332.6	759.2	959.0	844.0	82/88	48/33/19(22.2)	Inconsistent
Port Moresby (1875-2014)	495.8	433.7	593.1	571.0	57/123	24/37/39(2.4)	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 June to August 2014**

*Predictors: [NINO3.4 SST Anomalies-Period: February – April 2014](#)*

<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 (1944-2014)	45	471.8	<b>55</b>		31.5	75
Nadzab(1973-2014)	<b>51</b>	328.5	49		-2.2	51.6
Wewak (1894-2014)	41	547.2	<b>59</b>		31.2	78.1
Vanimo (1918-2014)	<b>50</b>	557.3	<b>50</b>		-3.7	43.3
<b>New Guinea Islands</b>						
Momote (1949-2014)	49	947.3	<b>51</b>		-1.8	53.1
Kavieng (1916-2014)	<b>50</b>	695.4	<b>50</b>		-3.1	51.6
<b>Southern Region</b>						
Misima(1917-2014)	48	515.3	<b>52</b>		35.9	78.1
Port Moresby(1875-2014)	43	81.5	<b>57</b>		21.4	65.6

<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 (1944-2014)	22	403.5	<b>48</b>	532.9	30	42.2	65.6
Nadzab(1973-2014)	<b>34</b>	294.9	<b>32</b>	402.7	<b>34</b>	-3.3	29
Wewak (1894-2014)	20	467.2	<b>43</b>	618.6	37	22.1	46.9
Vanimo (1918-2014)	<b>34</b>	506.8	<b>34</b>	632.5	<b>32</b>	-3.5	30
<b>New Guinea Islands</b>							
				-2.8			
Momote (1949-2014)	<b>33</b>	745.2	<b>33</b>	1,051.2	<b>34</b>	-2.8	21.9
Kavieng (1916-2014)	<b>32</b>	560.4	<b>34</b>	800.0	<b>34</b>	-2.2	29
<b>Southern Region</b>							
Misima(1917-2014)	24	369.8	<b>46</b>	697.2	30	33.7	59.4
Port Moresby(1875-2014)	29	55.4	34	102.6	<b>37</b>	20.6	50

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for June to August 2014**

<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	27	626	33	787	<b>40</b>
Wewak	21	575	<b>49</b>	667	30
<b>New Guinea Islands</b>					
Momote	33	796	24	1046	<b>43</b>
Kavieng	39	636	5	805	<b>56</b>
<b>Southern Region</b>					
Misima	<b>76</b>	453	12	622	12
Port Moresby	<b>52</b>	90	18	151	30

## Summary Statements:

### **Rainfall for April 2014**

During April, the three regions received above normal to normal rainfall except Madang received below normal rainfall.

### **Accumulated rainfall for February - April 2014, including outlook verification**

Rainfall over period Feb – Apr 2014 was above normal to normal except Madang & Momote received below normal rainfall.

The SCOPIC forecasts for the 3 months period were near consistent at majority of the stations, consistent at Nadzab & Kavieng whilst Momote & Misima were inconsistent. The skills range from very low to high.

### **Outlook for –June- August 2014:**

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

The SCOPIC seasonal rainfall outlook for June to August 2014 shows:

- The most likely outcome for Madang, Wewak and Misima is normal with the next most likely is above normal.
- The most likely outcome for Port Moresby is above normal with normal the next most likely.
- There is little guidance for Nadzab, Vanimo, Momote & Kavieng as the chances of above normal, normal and below normal rainfall are similar.

#### **2. POAMA:**

The POAMA model favours normal to above normal for the Momase region and the New Guinea Islands.

Below normal is favoured for the Southern region.

**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:  $X \geq 35$