

## Pacific Islands - Online Climate Outlook Forum No 83

**Country:** PAPUA NEW GUINEA

### TABLE 1: Monthly Rainfall

Station (include data period)	July 2014						
	May Total	June Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
<b>Momase Region</b>							
Madang (1944-2014)	-	-	184.2				
Nadzab(1973-2014)	48.0	60.8	<b>240.2</b>	69.9	129.5	117.0	9/59
Wewak (1894-2014)	159.4	140.8	<b>105.4</b>	155.0	206.4	180.2	35/40
Vanimo (1918-2014)	124.4	339.0	<b>62.0</b>	136.3	219.3	188.6	6/60
<b>New Guinea Islands</b>							
Momote (1949-2014)	181.4	639.6	<b>691.0</b>	307.7	397.9	349.2	*63/66
Kavieng (1916-2014)	177.2	-	424.6				
<b>Southern Region</b>							
Misima (1917-2014)	201.8	93.0	<b>11.0</b>	90.0	191.8	136.5	*1/89
PortMoresby(1875-2014)	0.0	16.2	<b>7.6</b>	4.4	24.0	13.2	48/115

### TABLE 2: Three-monthly Rainfall (May-July 2014)

Predictor ***NINO3.4 SST Anomalies*** :-Period: ***January 2014 -March 2014***

**(Please note that the data used in this verification should be sourced from table 3 of OCOF #79)**

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)	-	641.2	821.4	746.1			
Nadzab (1973-2014)	<b>349.0</b>	259.6	380.0	288.0	23/38	<b>36/28/36</b> [-3.4]	<b>Near consistent</b>
Wewak (1894-2014)	<b>405.6</b>	560.6	659.2	632.6	11/59	<b>20/37/43</b> [8]	<b>Inconsistent</b>
Vanimo (1918-2014)	<b>525.4</b>	576.2	690.0	613.5	16/59	<b>36/32/32</b> [-1.9]	<b>Consistent</b>
<b>New Guinea Islands</b>							
Momote (1949-2014)	<b>1512.0</b>	792.7	1015.0	874.5	*65/66	<b>41/26/33</b> [0.2]	<b>Inconsistent</b>
Kavieng (1916-2014)	-	631.5	805.8	719.8			
<b>Southern Region</b>							
Misima (1917-2014)	<b>305.8</b>	501.1	865.0	634.9	11/87	<b>7/37/56</b> [40.6]	<b>Inconsistent</b>
Port Moresby (1875-2014)	<b>23.8</b>	82.1	148.7	118.2	10/106	<b>24/32/44</b> [6.3]	<b>Inconsistent</b>

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 2014**

*Predictors: [NINO3.4 SST Anomalies](#)-Period: [June- July 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)						
Nadzab(1973-2014)	<b>54</b>	274.6	46		5.8	62.2
Wewak (1894-2014)	<b>54</b>	593.9	46		9.3	59.6
Vanimo (1918-2014)	<b>53</b>	537.2	47		2.3	61.7
<b>New Guinea Islands</b>						
Momote (1949-2014)	48	718.3	<b>52</b>		0.1	60.9
Kavieng (1916-2014)						
<b>Southern Region</b>						
Misima(1917-2014)	<b>59</b>	705.2	41		16.7	67.7
Port Moresby(1875-2014)	<b>59</b>	109.2	41		24.1	73.4

<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)							
Nadzab(1973-2014)	<b>36</b>	229.0	<b>36</b>	340.6	<b>28</b>	11.2	51.4
Wewak (1894-2014)	<b>35</b>	530.0	<b>33</b>	647.4	<b>32</b>	10.5	35.1
Vanimo (1918-2014)	<b>37</b>	491.2	<b>37</b>	602.9	26	8	36.2
<b>New Guinea Islands</b>							
Momote (1949-2014)	<b>33</b>	635.8	<b>34</b>	786.6	<b>33</b>	-1.9	23.4
Kavieng (1916-2014)							
<b>Southern Region</b>							
Misima(1917-2014)	<b>38</b>	559.0	<b>32</b>	868.0	<b>30</b>	13.7	40.3
Port Moresby(1875-2014)	<b>39</b>	85.9	<b>39</b>	150.1	22	20	48.4

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for September to November 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	<b>45</b>	311	22	568	33
Wewak	21	454.0	12	627.0	<b>67</b>
<b>New Guinea Islands</b>					
Momote	24	650.0	<b>49</b>	857.0	27
Kavieng	<b>33</b>	489	<b>28</b>	659	<b>39</b>
<b>Southern Region</b>					
Misima	27	226.0	25	593.0	<b>48</b>
Port Moresby	<b>67</b>	36.0	9	81.0	24

## Summary Statements:

### **Rainfall for July 2014**

Normal to Above Normal rainfall across the country except for Misima station receiving Below Normal rainfall. Kavieng and Madang had some missing data.

### **Accumulated rainfall for May to July 2014, including outlook verification**

Rainfall for the period May to July was Below Normal except for two stations. Nadzab received Normal and Momote received Above Normal, ranking 2<sup>nd</sup> highest (65/66).

Inconsistent forecast at all stations except Vanimo (Consistent) and Nadzab (Near-consistent) with very low skills.

### **Outlook for – September to November 2014:**

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

The SCOPIC seasonal rainfall outlook for Sept to Nov 2014 shows:

- The outlook offers little guidance for Nadzab, Wewak, Momote and Misima for the coming season as the chances of above-normal, normal and below-normal rainfall are similar. For Vanimo and Port Moresby below normal and normal rainfall are equally favoured.

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

The POAMA model favours Below Normal rainfall for Madang and Port Moresby, Normal rainfall for Momote and Above Normal for Wewak and Misima. The outlook offers little guidance for Kavieng for the coming season as the chances of above-normal, normal and below-normal rainfall are similar

**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:  $X \geq 35$