

## Pacific Islands - Online Climate Outlook Forum No 93

**Country:** PAPUA NEW GUINEA

### TABLE 1: Monthly Rainfall

Station (include data period)	May 2015						
	March 2015 Total	April 2015 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
<b>Momase Region</b>							
Madang (1944-2015)	243.0	203.0	486.2	300.4	419.6	334.4	54/65
Nadzab(1973-2015)	237.0	50.2	103.2	62.2	103.4	75.4	27/41
Wewak (1894-2015)	143.2	170.6	113.4	183.3	272.2	220.2	11/60
Vanimo (1918-2015)	476.4	259.0	179.4	165.6	270.0	205.8	26/62
<b>New Guinea Islands</b>							
Momote (1949-2015)	88.4	119.6	236.4	196.3	258.2	229.1	36/67
Kavieng (1916-2015)	125.0	76.8	242.0	202.0	302.8	247.5	40/85
<b>Southern Region</b>							
Misima (1917-2015)	498.4	244.8	326.2	184.0	319.4	247.0	61/90
PortMoresby(1875-2015)	342.0	73.2	157.2	29.0	73.6	50.5	114/124

### TABLE 2: Three-monthly Rainfall (March - May 2015)

Predictor *NINO3.4 SST Anomalies* :-Period: December 2014 – January 2015

[Please note that the data used in this verification should be sourced from table 3 of OCOF #89]

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)	932.2	1001.9	1209.6	1151.9	13/65	32/35/33 (-1.9)	Near-consistent
Nadzab (1973-2015)	390.4	356.7	431.1	385.8	21/39	39/32/39 (0.5)	Near-consistent
Wewak (1894-2015)	427.2	513.0	654.4	608.3	11/59	40/23/37 (-0.9)	Consistent
Vanimo (1918-2015)	914.8	590.8	839.9	708.4	46/60	36/27/37 (-2.0)	Consistent
<b>New Guinea Islands</b>							
Momote (1949-2015)	444.4	719.8	884.8	821.0	2/65	33/34/34 (-1.6)	Near-consistent
Kavieng (1916-2015)	443.8	761.2	947.2	834.0	3/82	23/41/36 (2.7)	Near-consistent
<b>Southern Region</b>							
Misima (1917-2015)	1069.4	683.6	998.7	787.0	67/90	49/35/16 (22.1)	Inconsistent
Port Moresby (1875-2015)	572.4	307.3	450.4	381.3	109/121	39/37/24 (3.0)	Inconsistent

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 July to September 2015**

*Predictors: [NINO3.4 SST Anomalies](#)-Period: [April - May 2015](#)*

Period:Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%)	Hit-rate (%)
<b>Momase Region</b>						
Madang (1944-2014)	79	407.0	21		8.6	60.9
Nadzab(1973-2014)	53	372.6	47		-2.5	50.0
Wewak (1894-2014)	97	558.2	3		36.5	76.3
Vanimo (1918-2014)	34	516.0	66		0.9	63.3
<b>New Guinea Islands</b>						
Momote (1949-2014)	30	893.3	70		4.1	59.4
Kavieng (1916-2014)	44	611.6	56		-1.5	53.6
<b>Southern Region</b>						
Misima(1917-2014)	93	464.0	7		26.1	71.0
Port Moresby(1875-2014)	61	66.6	39		0.1	49.2

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)	62	329.6	32	481.4	6	13.8	46.9
Nadzab(1973-2014)	44	264.5	29	463.3	27	-2.0	39.5
Wewak (1894-2014)	84	468.7	13	590.7	3	26.3	55.9
Vanimo (1918-2014)	22	462.4	33	558.4	45	0.2	38.8
<b>New Guinea Islands</b>							
Momote (1949-2014)	22	748.4	25	1047.0	53	1.6	25.0
Kavieng (1916-2014)	35	504.9	26	723.0	39	-2.0	32.1
<b>Southern Region</b>							
Misima(1917-2014)	83	337.2	16	617.5	1	28.9	61.3
Port Moresby(1875-2014)	42	41.6	25	87.7	33	-1.1	36.9

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for July to September 2015**

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
<b>Momase Region</b>					
Madang	12	280	39	426	49
Nadzab	18	204	27	384	55
Wewak	9	432	67	590	24
<b>New Guinea Islands</b>					
Momote	49	779	18	1011	33
Kavieng	46	489	24	699	30
<b>Southern Region</b>					
Misima	30	265	55	500	15
Port Moresby	39	37	15	70	46

## Summary Statements:

### Rainfall for May 2015

Rainfall in May was above normal in the Southern Region and at Madang in the Momase Region. Normal rainfall was recorded in the New Guinea Islands Region and at 2 stations in the Momase Region, whilst Wewak received below normal rainfall.

### Accumulated rainfall for March to May 2015, including outlook verification

Rainfall over the last three months was above normal in the Southern Region and at Vanimo in the Momase Region. Nadzab received normal rainfall whilst the rest of the stations recorded below normal rainfall.

The forecasts were consistent at 2 stations with very low skills, 4 were near-consistent with very low to low skills, and 2 inconsistent with low to high skills.

### Outlook for – July - September 2015:

#### 1. SCOPIC:

The SCOPIC seasonal rainfall outlook for July to September 2015 shows:

- **Momase Region:** Above normal is the most likely outcome for Vanimo, whilst at Madang, Nadzab and Wewak the most likely outcome is below normal.
- **New Guinea Islands:** Above normal is the most likely outcome for Momote. And at Kavieng, the most likely outcome is above normal with below normal the next most likely.
- **Southern Region:** Below normal is the most likely outcome for Misima and Port Moresby.
- Confidence is good at Madang, very high at Wewak and Misima, and very low for the rest of the stations.

#### 2. POAMA:

The POAMA model favours above normal for Madang, Nadzab and Port Moresby, normal for Wewak and Misima, and below normal for Momote and Kavieng.

#### **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:  $X \geq 35$