

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 128

Country Name: Papua New Guinea

**TABLE 1: Monthly Rainfall**

Station (include data period)	April 2018						
	February 2018 Total	March 2018 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
<b>Momase Region</b>							
Madang (1944-2018)	-	-	-	329.1	459.3	401.2	
Nadzab(1973-2018)	101.2	177.0	-	87.4	137.0	103.8	
Wewak (1894-2018)	61.0	123.2	-	164.2	233.9	187.9	
Vanimo (1918-2018)	418.0	331.4	-	182.4	278.2	219.5	
<b>Highlands Region</b>							
Goroka (1948-2018)	261.8	262.0	-	163.6	223.7	200.0	
<b>NGI Region</b>							
Momote (1949-2018)	326.8	341.8	-	251.2	305.5	282.5	
Kavieng (1916-2018)	323.2	428.0	-	265.9	320.9	288.5	
<b>Southern region</b>							
Misima (1917-2018)	146.0	-	-	216.5	348.0	269.5	
Port Moresby (1875-2018)	131.0	326.4	-	74.0	128.1	102.5	

**TABLE 2: Three-monthly Rainfall  
February 2018 to April 2018**

[Please note that the data used in this verification should be sourced from table 3 of OCOF #124]

Station	Three-month Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking	Forecast probs.* (include LEPS)	Verification* (Consistent, Near-consistent Inconsistent)?
<b>Momase Region</b>							
Madang (1944-2018)	-	931.7	1145.8	1036.2		37/30/33(-1.1)	
Nadzab(1973-2018)	-	381.6	505.3	457.7		40/30/30(0.8)	
Wewak (1894-2018)	-	438.4	519.8	480.4		28/38/34(-1.1)	
Vanimo (1918-2018)	-	696.4	909.3	783.5		38/36/26(1.5)	
<b>Highlands Region</b>							
Goroka (1948-2018)	-	610.0	746.6	673.4		40/33/27(2.8)	
<b>NGI Region</b>							
Momote (1949-2018)	-	761.1	935.8	801.6		30/35/35(-1.5)	
Kavieng (1916-2018)	-	806.7	977.9	899.9		41/29/30(1.3)	
<b>Southern Region</b>							
Misima (1917-2018)	-	761.0	959.0	847.8		15/33/52(23)	
Port Moresby (1875-2018)	-	433.7	589.3	517.2		18/37/45(11.1)	

Period:\*below normal/normal/above normal

Predictors and Period used for February 2018 to April 2018 Outlooks (refer to OCOF #124):  
NINO3.4 SST anomalies for November-December 2017

\* 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 using SCOPIC for  
June to August 2018**

**Predictors and Period used: NINO3.4 SST anomalies for March-April 2018**

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
<b>Mamose Region</b>						
Madang (1944-2018)	23	466.2	77		35.7	77.3
Nadzab(1973-2018)	50	329.0	50		-2.2	51.2
Wewak (1894-2018)	32	560.1	68		14.5	67.7
Vanimo (1918-2018)	55	559.4	45		0.1	53.8
<b>Highlands Region</b>						
Goroka (1948-2018)	47	191.0	53		-1.4	44.9
<b>NGI Region</b>						
Momote (1949-2018)	56	967.0	44		0.2	56.6
Kavieng (1916-2018)	55	711.4	45		-0.3	54.1
<b>Southern Region</b>						
Misima (1917-2018)	27	510.6	73		31.4	75.4
Port Moresby (1875-2018)	36	81.8	64		11.3	64.6

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	67%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
<b>Momase region</b>							
Madang (1944-2018)	10	402.0	37	528.0	53	31.1	57.6
Nadzab (1973-2018)	34	294.8	29	404.6	37	-2.6	25.6
Wewak (1894-2018)	20	481.8	34	620.5	46	11.9	45.2
Vanimo (1918-2018)	39	513.2	31	632.3	30	0.2	30.8
<b>Highlands Region</b>							
Goroka (1948-2018)	30	170.6	36	240.0	34	-1.6	32.7
<b>NGI Region</b>							
Momote (1949-2018)	41	812.0	30	1064.7	29	2.3	35.5
Kavieng (1916-2018)	34	581.3	34	801.0	32	-1.8	19.7
<b>Southern Region</b>							
Misima (1917-2018)	14	362.0	37	681.3	49	26.2	53.8
Port Moresby (1875-2018)	23	53.0	32	103.7	45	10.2	53.8

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for  
June to August 2018**

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	67%ile rainfall (mm)	Upper Tercile (prob)		
<b>Momase Region</b>							
Madang	52	368	27	505	21		
Nadzab	49	259	24	350	27		
Wewak	36	514	46	619	18		
<b>New Guinea Islands Region</b>							
Momote	36	813	5	1036	59		
Kavieng	36	522	15	809	49		
<b>Southern Region</b>							
Misima	94	310	5	517	1		
Port Moresby	64	50	12	101	24		
Daru	5	125	77	208	18		

## **Summary Statements**

### **Rainfall for April 2018:**

### **Accumulated rainfall for February to April 2018, including outlook verification:**

### **Outlooks for June to August 2018:**

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

Madang, Wewak and the Southern Region: above-normal is the most likely or favoured outcome, with normal the next most likely. Below-normal is the least likely.

NGI Region: Below-normal is the most likely outcome at Momote, with normal the next most likely.

Nadzab, Vanimo, Goroka and Kavieng: The outlook offers little guidance as the chances of below-normal, normal and above-normal rainfall are similar.

Confidence ranges from very low to very high skill.

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

Madang, Nadzab, Misima and Port Moresby: POAMA favours below-normal rainfall.

New Guinea Islands: The outlook favours above-normal rainfall.

Wewak and Daru: Normal is the favoured or most likely outcome.

**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:  $X \geq 35$