

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 140

Country: PNG

TABLE 1: Monthly Rainfall

Station (include data period)	Feb-2019	Mar-2019	Apr-2019				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Momase Region							
Madang (1944-2019)	596.0			328.7	461.0	396.0	
Nadzab (1973-2019)	179.6	169.0	103.0	87.4	137.0	103.8	21/44
Wewak (1894-2019)	126.8	98.0	127.8	164.2	233.9	187.9	8/63
Vanimo (1918-2019)	305.0	407.4	261.6	183.0	291.8	222.8	41/65
Highlands Region							
Goroka (1948-2019)		328.2	103.0	162.8	222.6	196.1	5/55
New Guinea Islands Region							
Momote (1949-2019)	167.6	324.6	238.4	251.2	305.5	282.5	21/63
Kavieng (1916-2019)		270.0		267.8	324.9	290.9	
Southern Region							
Misima (1917-2019)		280.2		213.6	346.2	265.5	
Port Moresby (1875-2019)	64.8	371.4	118.4	83.5	142.3	106.2	78/127

TABLE 2: Three-month Rainfall for February to April 2019

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities* based on NINO3.4 November-December 2018				Verification: Consistent, Near- consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Momase Region											
Madang (1944-2019)			931.7	1145.8	1036.0		27	37	36	-1	
Nadzab (1973-2019)	451.6	Normal	381.6	505.3	457.7	20/43	25	38	37	0	Consistent
Wewak (1894-2019)	352.6	Below normal	438.4	519.8	480.4	5/62	40	26	34	-1	Consistent
Vanimo (1918-2019)	974.0	Above normal	696.4	909.3	783.5	52/63	27	30	43	2	Consistent
Highlands Region											
Goroka (1948-2019)			610.0	746.6	673.4		24	35	41	2	
New Guinea Islands Region											
Momote (1949-2019)	730.6	Below normal	761.1	935.8	801.6	17/62	37	32	31	-2	Consistent
Kavieng (1917-2019)			806.7	977.9	899.9		20	40	40	4	
Southern Region											
Misima (1917-2019)			747.5	959.0	844.9		54	36	10	17	
Port Moresby (1875-2019)	554.6	Normal	433.7	589.3	517.2	77/126	49	29	22	8	Near- consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for June to August 2019

Predictor and Period used: NINO3.4 for March to April 2019

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Momase Region						
Madang (1944-2019)	93	471.0	7		36	76
Nadzab(1973-2019)	52	328.5	48		-2	25
Wewak (1894-2019)	78	557.0	22		14	67
Vanimo (1918-2019)	35	566.8	65		2	59
Highlands Region						
Goroka (1948-2019)	57	191.0	43		-1	46
New Guinea Islands Region						
Momote (1949-2019)	45	973.0	55		-1	54
Kavieng (1916-2019)	43	709.8	57		0	53
Southern Region						
Misima (1917-2019)	87	436.2	13		26	73
Port Moresby (1875-2019)	73	87.1	27		8	62

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)	LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Momase Region							
Madang (1944-2019)	77	402.0	20	535.2	3	31	58
Nadzab (1973-2019)	34	294.9	35	402.7	31	-3	21
Wewak (1894-2019)	58	487.0	29	619.1	13	10	43
Vanimo (1918-2019)	26	518.3	33	632.5	41	-1	36
Highlands Region							
Goroka (1948-2019)	42	170.6	26	245.2	32	-1	32
New Guinea Islands Region							
Momote (1949-2019)	20	813.0	38	1069.0	42	1	25
Kavieng (1916-2019)	32	577.9	25	784.1	43	-1	42
Southern Region							
Misima (1917-2019)	64	331.8	30	548.0	6	23	55
Port Moresby (1875-2019)	56	55.0	29	109.6	15	9	53

TABLE 4: Seasonal Climate Outlooks using POAMA2 for June to August 2019

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Momase Region					
Madang	79	368.0	12	505.0	9
Nadzab	70	259.0	12	350.0	18
Wewak	85	514.0	6	619.0	9
New Guinea Islands Region					
Momote	42	813.0	5	1036.0	53
Kavieng	27	522.0	15	809.0	58
Southern Region					
Misima	94	310.0	5	517.0	1
Port Moresby	79	50.0	6	101.0	15
Daru	55	125.0	35	208.0	10

Summary Statements

Rainfall for April 2019:

Below normal rainfall was received at Wewak, Goroka and Momote. Normal rainfall was received at Nadzab, Vanimo and Port Moresby, while reports were not received from Madang, Kavieng and Misima.

Goroka received its fifth-driest April on record.

Accumulated rainfall for February to April 2019, including outlook verification:

Below normal rainfall was received at Wewak and Momote, normal was received at Nadzab and Port Moresby, whilst Vanimo received above normal rainfall.

The outlooks issued in January were Consistent at all stations, except Port Moresby which was Near-consistent.

Outlooks for June to August 2019:

1. SCOPIC:

Madang/Port Moresby/Wewak: The outlook favours below normal rainfall as the most likely outcome, with Misima normal the next most likely. Above normal is the least likely

Momote/Vanimo : The outlook shows above normal as the most likely outcome, with normal the next most likely. Below normal is the least likely.

Kavieng : The outlook shows above normal as the most likely outcome, with below normal the next most likely. Normal is the least likely.

Goroka: The outlook shows below normal as the most likely outcome, above normal the next most likely. Normal is the least likely.

Nadzab: The outlook offers little guidance as the chances of above normal, normal and below normal are similar

Confidence ranges from very low to very high.

2. POAMA:

Below-normal rainfall is favoured in the Momase and Southern Regions, and above-normal is favoured for the New Guinea Islands 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: $X \geq 35$

Table: 5 Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders

Product	Date: April 2019	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	April	All	152	?	?
Disaster Monthly Meeting	25th April	All	25	?	?
Total			177		