Pacific Islands - Online Climate Outlook Forum (OCOF) No. 133

Country: Papua New Guinea

TABLE 1: Monthly Rainfall

Station (include data period)	Jul-2018	Aug-2018	Sep-2018				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Momase Region							
Madang (1944-2018)	97.6	260.4	251.4	74.9	180.5	121.4	**63/69**
Nadzab (1973-2018)	173.0	73.5	157.0	56.2	133.6	107.9	**36/44**
Wewak (1894-2018)	178.0	116.0	135.2	142.9	206.8	180.3	20/62
Vanimo (1918-2018)	177.4	145.0	148.0	125.4	186.7	149.0	31/63
Highlands Region							
Goroka (1948-2018)	80.0	114.4	174.6	70.7	123.0	96.8	45/56
New Guinea Islands Region							
Momote (1949-2018)	435.4	299.0	268.2	199.7	276.7	248.3	41/65
Kavieng (1916-2018)	289.8	261.4	372.0	141.5	205.2	168.4	**85/91**
Southern Region							
Misima (1917-2018)	223.4	142.2	364.6	110.2	262.7	193.0	77/93
Port Moresby (1875-2018)	21.6	79.4	47.2	10.4	33.6	18.8	97/121

TABLE 2: Three-month Rainfall for July to September 2018

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities* based on NINO3.4 April-May 2018				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Momase Region											
Madang (1944-2018)	609.4	Above normal	322.7	466.8	401.2	**59/69**	30	**36**	34	16	Near-consistent
Nadzab (1973-2018)	403.5	Normal	270.6	462.7	387.0	23/43	31	**35**	34	-3	Consistent
Wewak (1894-2018)	429.2	Below normal	468.0	592.8	544.1	16/62	21	**41**	38	26	Near-consistent
Vanimo (1918-2018)	470.4	Normal	462.4	559.3	516.1	22/59	**34**	**34**	32	-1	Near-consistent
Highlands Region											
Goroka (1948-2018)	369.0	Above normal	210.0	286.7	249.0	**46/52**	34	33	33	-2	Near-consistent
New Guinea Islands Region											
Momote (1949-2018)	1002.6	Normal	758.7	1074.5	901.0	40/64	**34**	**34**	32	0	Near-consistent
Kavieng (1917-2018)	923.2	Above normal	519.1	723.5	609.8	74/85	**34**	**34**	32	-2	Near-consistent
Southern Region											
Misima (1917-2018)	730.2	Above normal	331.3	617.5	464.0	68/91	27	**41**	32	25	Near-consistent
Port Moresby (1875-2018)	148.2	Above normal	41.8	87.3	64.7	**95/102**	32	**34**	**34**	-1	Near-consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for November 2018 to January 2019

Predictor and Period used: NINO3.4 for August to September 2018

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Momase Region						
Madang (1944-2018)	50	1036.6	50		-2	37
Nadzab(1973-2018)	48	406.6	52		-1	54
Wewak (1894-2018)	56	480.2	44		8	63
Vanimo (1918-2018)	51	727.7	49		-2	50
Highlands Region						
Goroka (1948-2018)	49	575.4	51		-2	53
New Guinea Islands Region						
Momote (1949-2018)	48	829.0	52		0	51
Kavieng (1916-2018)	48	855.8	52		1	52
Southern Region						
Misima (1917-2018)	57	702.0	43		7	61
Port Moresby (1875-2018)	62	365.0	38		25	70

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 (1944-2018)	31	957.0	35	1123.6	34	-1	39
Nadzab (1973-2018)	32	381.2	34	471.0	34	-3	9
Wewak (1894-2018)	38	437.9	36	548.5	26	9	50
Vanimo (1918-2018)	34	640.2	34	822.8	32	-2	32
Highlands Region							
Goroka (1948-2018)	33	517.6	34	641.9	33	-2	21
New Guinea Islands Region							
Momote (1949-2018)	32	731.8	32	891.0	36	0	46
Kavieng (1916-2018)	31	794.0	35	963.7	34	-1	34
Southern Region							
Misima (1917-2018)	37	602.8	32	780.6	31	2	44
Port Moresby (1875-2018)	40	297.5	37	426.6	23	18	48

TABLE 4: Seasonal Climate Outlooks using POAMA2 for November 2018 to January 2019

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Momase Region					
Madang	34	960.0	33	1116.0	33
Nadzab	**55**	345.0	9	416.0	36
Wewak	21	427.0	18	506.0	**61**
New Guinea Islands Region					
Momote	21	720.0	21	888.0	**58**
Kavieng	22	767.0	30	942.0	**48**
Southern Region					
Misima	**73**	553.0	9	738.0	18
Port Moresby	**64**	272.0	9	411.0	27
Daru	5	441.0	28	531.0	**67**

Summary Statements

Rainfall for September 2018:

Normal rainfall was received at Vanimo & Momote. Rest of the stations received above normal rainfall except for Wewak which received below normal.

Accumulated rainfall for July to September 2018, including outlook verification:

Below normal rainfall was received at Wewak. Nadzab, Vanimo & Momote received normal rainfall whilst the rest of the monitoring stations received above normal.

The forecasts were consistent at Nadzab and near consistent for the rest of the monitoring stations.

Outlooks for November 2018 to January 2019:

1. **SCOPIC:**
   Wewak & Southern Region: The outlook shows below normal as the most likely outcome, with normal the next most likely. Above normal the least likely.

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

   Confidence range from very low to high.

2. **POAMA:**
   The POAMA model favours below normal for Nadzab, Misima and Port Moresby whilst above normal is favoured for rest of the stations. As for Madang, the outlook offers little guidance as the chances of above normal, normal and below normal are similar.

Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders

Country	Date:September 2018	Stakeholder	Total Number of Participants	Number of male	Number of female
Kokopo, East New Britain Province, PNG	APEC 12th Senior Disaster Management Officials Forum on 25th-26th	Lead: APEC Authority with coordination from Climate Change Office and NDMO	58 29 locals and 29 internationals	tbc	Tbc

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: $X \geq 35$