Pacific Islands - Online Climate Outlook Forum (OCOF) No. 131

Country: Papua New Guinea

TABLE 1: Monthly Rainfall

Station (include data period)	May-2018	Jun-2018	Jul-2018				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Momase Region							
Madang (1944-2018)		211.4	97.6	105.1	183.2	144.0	20/69
Nadzab (1973-2018)	90.0	71.2	173.0	79.7	146.9	117.8	33/44
Wewak (1956-2018)	263.6	257.0	178.0	153.4	207.6	177.8	33/63
Vanimo (1918-2018)	223.8	189.0	177.4	136.6	218.4	188.3	29/64
Highlands Region							
Goroka (1948-2018)	91.0	86.6	80.0	43.0	71.0	55.0	42/55
New Guinea Islands Region							
Momote (1949-2018)	137.0	334.8	435.4	312.1	413.3	351.0	46/65
Kavieng (1916-2018)	252.6	163.8	289.8	201.0	281.6	228.5	62/88
Southern Region							
Misima (1917-2018)	357.8	124.8	223.4	89.3	191.3	137.0	70/93
Port Moresby (1875-2018)	61.6	1.4	21.6	5.1	24.9	13.2	75/119

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

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities* based on NINO3.4 Month-Month 20xx				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Momase Region											
Madang (1944-2018)			630.3	813.3	743.2		13	34	53	20	
Nadzab (1973-2018)	334.2	Normal	269.2	373.4	301.5	25/43	35	32	33	-3	Near-consistent
Wewak (1956-2018)	698.6	Above normal	556.7	685.9	630.0	43/63	25	31	44	4	Consistent
Vanimo (1918-2018)	590.2	Normal	566.3	687.7	608.3	27/63	36	33	31	-3	Near-consistent
Highlands Region											
Goroka (1948-2018)	257.6	Normal	204.6	277.8	239.0	32/50	25	35	40	4	Near-consistent
New Guinea Islands Region											
Momote (1949-2018)	907.2	Normal	798.1	1041.6	901.2	33/64	40	28	32	0	Near-consistent
Kavieng (1917-2018)	706.2	Normal	634.1	820.2	730.6	41/86	28	45	27	0	Consistent
Southern Region											
Misima (1917-2018)	706.0	Normal	487.0	791.5	625.2	56/91	11	32	57	33	Near-consistent
Port Moresby (1875-2018)	84.6	Normal	82.7	151.3	118.3	38/108	23	35	42	5	Near-consistent

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

Predictor and Period used: NINO3.4 for June to July 2018

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Momase Region						
Madang (1944-2018)	68	694.6	32		27	72
Nadzab(1973-2018)	57	276.8	43		10	67
Wewak (1956-2018)	57	591.6	43		9	61
Vanimo (1918-2018)	56	537.4	44		5	65
Highlands Region						
Goroka (1948-2018)	47	421.0	53		-1	57
New Guinea Islands Region						
Momote (1949-2018)	49	726.0	51		-2	32
Kavieng (1916-2018)	51	665.1	49		-1	45
Southern Region						
Misima (1917-2018)	66	686.4	34		22	71
Port Moresby (1875-2018)	64	109.4	36		18	64

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)	47	622.9	38	833.6	15	29	58
Nadzab (1973-2018)	39	235.7	36	344.5	25	14	45
Wewak (1956-2018)	41	529.7	32	670.5	27	17	48
Vanimo (1918-2018)	38	493.1	35	629.9	27	6	33
Highlands Region							
Goroka (1948-2018)	32	355.0	34	474.0	34	0	43
New Guinea Islands Region							
Momote (1949-2018)	35	657.0	34	800.9	31	-2	19
Kavieng (1916-2018)	35	554.1	33	773.8	32	-2	20
Southern Region							
Misima (1917-2018)	44	513.7	33	848.2	23	16	44
Port Moresby (1875-2018)	43	88.0	38	152.8	19	16	45

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

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Momase Region					
Madang	33	551.0	24	698.0	**43**
Nadzab	**46**	196.0	15	297.0	39
Wewak	18	524.0	5	615.0	**77**
New Guinea Islands Region					
Momote	36	632.0	21	783.0	**43**
Kavieng	42	496.0	9	729.0	**49**
Southern Region					
Misima	**42**	340.0	21	699.0	35
Port Moresby	**49**	54.0	15	125.0	36
Daru	5	73.0	**83**	170.0	12

Summary Statements

Rainfall for July 2018:

Below normal was received at the Madang station whilst above normal was received at Nadzab, Goroka, NGI region and Misima. Rest of Momase Region and Port Moresby received normal rainfall.

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

Wewak received above normal rainfall and the forecast was consistent.

All the other monitoring stations received normal rainfall and the forecast was near consistent except for Kavieng with a consistent forecast.

Three months total was not available for Madang station.

Outlooks for September to November 2018:

1. SCOPIC:

Madang, Wewak & Southern Region: the outlook shows below normal as the most likely outcome with normal the next most likely, above normal rainfall is the least likely.

Rest of Momase Region: The outlook shows a near-equal likelihood of below normal and normal rainfall. Above normal is the least likely.

Highlands & NGI Region: Outlooks offers little guidance as the chances of below normal, normal and above normal are similar.

Confidence ranges from very low to very high skill.

2. POAMA:

Madang, Wewak & NGI Region: the outlook favours above normal rainfall

Nadzab & Southern Region: the outlook offers favours below normal rainfall for Nadzab, Misima and Port Moresby whilst Daru favours normal rainfall.

Stakeholder Engagement July 2018:

Country	Date	Stakeholder	Total Number of Participants	Number of male	Number of female
PNG	July 16th to 20th	Disaster Managers (Oxfam, IOM, DFAT (Australian High Commission), Department of Agriculture & Livestock, PNG Red Cross, National Broadcasting Commission, National Disaster Centre, University of Papua New Guinea, Pacific Adventist University, Geo-hazards Management Division, United Nations Development Fund, The National Newspaper and PNG Loop News/TV Wan.)	24 Total with NWS & team = 33	15 18	9 15

The Humanitarian Partnership Workshop for the PNG National Weather Service was conducted in July 16th to 20th July. The first three days was a technical training for the climate officers using SCOPIC and also drafting the PNG Early Action Rainfall Watch.

PNG NWS was able to produce a monthly Early Action Rainfall Watch that met the needs of the humanitarian sector in the last two days of the workshop with consultation from our stakeholders.