

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 153

Country: Papua New Guinea

TABLE 1: Monthly Rainfall

Station (include data period)	Mar-2020	Apr-2020	May-2020				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Momase Region							
Madang (1944-2020)	492.0	243.8	299.4	300.4	416.7	334.5	24/69
Nadzab (1973-2020)	288.8	162.0	69.8	66.4	104.4	76.0	18/46
Wewak (1956-2020)	138.8		89.8	179.8	272.8	223.1	4/65
Vanimo (1918-2020)	165.2		265.6	165.6	245.0	204.6	45/67
Highlands Region							
Goroka (1948-2020)	416.0	187.2	56.8	91.0	140.7	109.0	9/56
New Guinea Islands Region							
Momote (1949-2020)	274.4	182.6	155.6	199.0	257.0	236.0	12/66
Kavieng (1916-2020)	370.0	279.6	169.2	202.0	293.3	246.0	23/90
Southern Region							
Misima (1917-2020)	353.4	224.6	258.0	178.0	312.0	247.0	50/95
Port Moresby (1875-2020)	332.0	39.2	213.8	32.4	73.5	51.0	126/128

TABLE 2: Three-month Rainfall for March to May 2020

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 December 19-January 20				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
<i>Momase Region</i>											
Madang (1944-2020)	1035.2	Normal	999.3	1203.0	1131.8	29/69	34	34	32	-2	Near-consistent
Nadzab (1973-2020)	520.6	Above normal	359.5	428.7	387.5	38/43	29	35	36	-1	Consistent
Wewak (1894-2020)			511.5	644.9	595.5		40	26	34	1	
Vanimo (1918-2020)			666.5	839.5	720.1		33	31	36	-2	
<i>Highlands Region</i>											
Goroka (1948-2020)	660.0	Above normal	491.5	597.6	550.0	40/54	28	30	42	5	Consistent
<i>New Guinea Islands Region</i>											
Momote (1949-2020)	612.6	Below normal	745.0	928.5	833.6	7/63	36	29	35	-2	Consistent
Kavieng (1917-2020)	818.8	Normal	798.5	947.0	870.3	40/85	29	37	34	-1	Consistent
<i>Southern Region</i>											
Misima (1917-2020)	836.0	Normal	688.8	960.8	781.8	52/95	46	36	18	19	Near-consistent
Port Moresby (1875-2020)	585.0	Above normal	364.6	479.7	430.0	112/123	42	33	25	10	Inconsistent

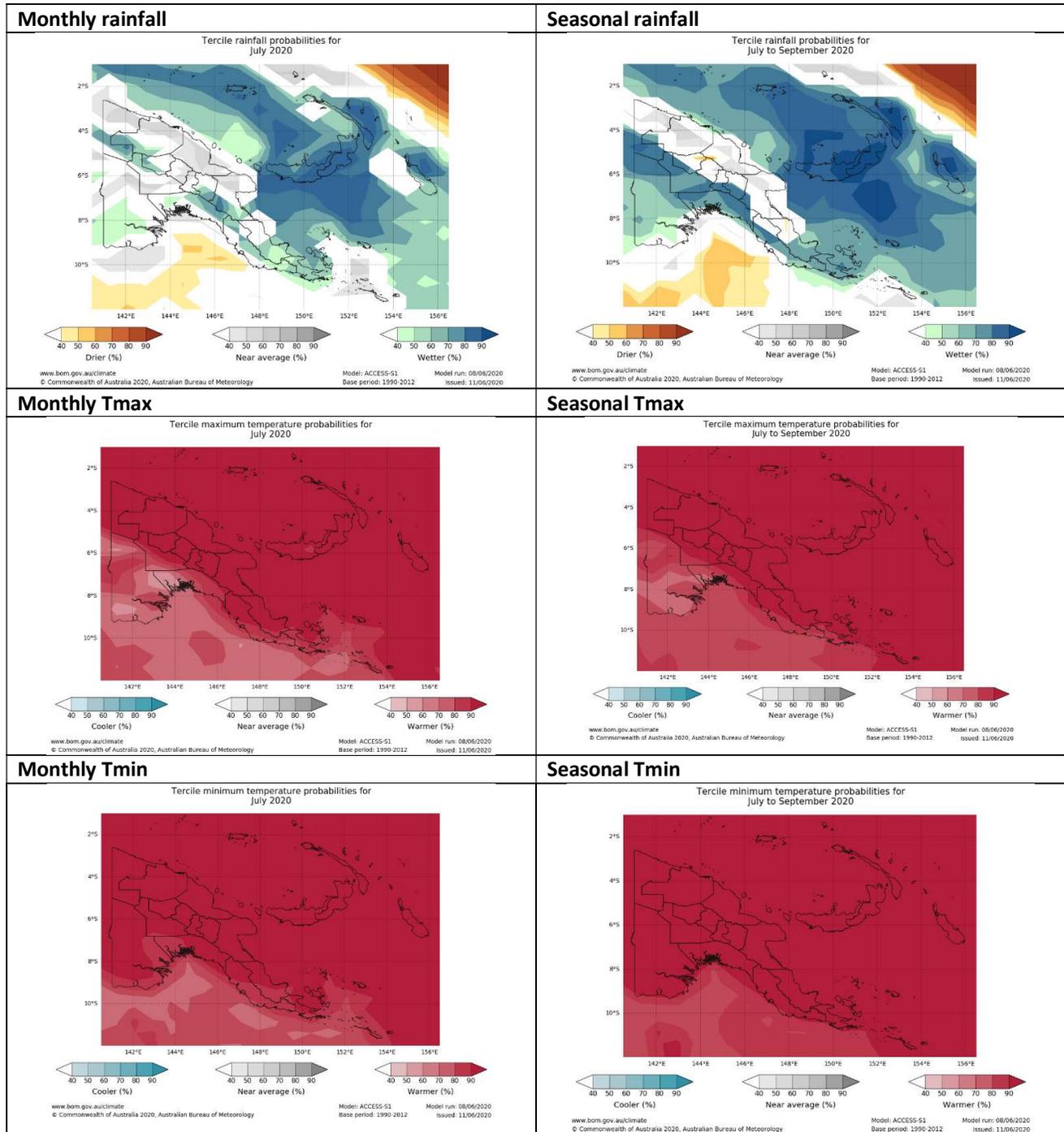
TABLE 3: Seasonal Climate Outlooks using SCOPIC for July to September 2020

Predictor and Period used: NINO3.4 for April to May 2020

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Momase Region						
Madang (1944-2020)	60	395.5	40		11	62
Nadzab (1973-2020)	51	387.0	49		-2	59
Wewak (1894-2020)	70	542.8	30		41	79
Vanimo (1918-2020)	47	510.9	53		-1	57
Highlands Region						
Goroka (1948-2020)	48	250.5	52		-1	52
New Guinea Islands Region						
Momote (1949-2020)	45	901.0	55		3	59
Kavieng (1916-2020)	48	620.6	52		-1	52
Southern Region						
Misima (1917-2020)	65	411.0	35		25	73
Port Moresby (1875-2020)	53	67.5	47		0	52

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 (1944-2020)	42	318.5	39	465.4	19	17	46
Nadzab (1973-2020)	34	281.7	32	459.9	34	-3	23
Wewak (1894-2020)	43	467.1	36	590.3	21	23	52
Vanimo (1918-2020)	31	465.3	33	571.2	36	-1	37
Highlands Region							
Goroka (1948-2020)	32	215.0	34	292.0	34	-2	39
New Guinea Islands Region							
Momote (1949-2020)	31	753.5	32	1059.0	37	0	34
Kavieng (1916-2020)	31	510.7	34	726.3	35	-1	36
Southern Region							
Misima (1917-2020)	43	321.0	35	570.4	22	18	51
Port Moresby (1875-2020)	35	46.7	32	94.7	33	-1	23

Monthly and Seasonal Climate Outlooks using ACCESS-S for July to September 2020



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: $X \geq 35$

Summary Statements

Rainfall for May 2020:

Rainfall was below normal at a majority of the monitoring stations, except for above normal at Vanimo and Port Moresby, and normal rainfall at Nadzab and Misima.

Wewak recorded its fourth driest May in 65 years, while Port Moresby recorded its third wettest May in 128 years.

Accumulated rainfall for March to May 2020, including outlook verification:

Rainfall was generally normal to above normal for the past season, apart from Momote where rainfall was below normal. The outlook issued in February was consistent at four sites, near-consistent at two and inconsistent at one.

Port Moresby had its twelfth wettest March to May on record.

Three-month totals were not available for Wewak and Vanimo.

Outlooks for July to September 2020:

1. SCOPIC:

Madang, Wewak and Misima: The outlook shows below normal as the most likely outcome, with normal the next most likely. Above normal is the least likely.

All other stations: The outlook offers little guidance as the chances of above normal, normal and below normal are similar (Climatology).

Confidence ranges from very low to high skill.

2. ACCESS-S:

Monthly rainfall:

Momase region: Normal rainfall is favoured for the region.

Highlands region: The outlook for the season offers little guidance as the chances of above normal, normal and below normal is similar.

New Guinea Islands region: Above normal rainfall is favoured for the NGI region.

Southern region: The outlook offers little guidance as the chances of above normal, normal and below normal is similar except for Milne Bay & Central with above normal as the favoured outcome.

Monthly maximum and minimum temperature:

A warmer than normal July is favoured across the country.

Seasonal rainfall:

Momase region: The outlook offers little guidance as the chances of above normal, normal and below normal is similar.

Highlands region: Normal to above normal is the most likely outcome.

New Guinea Islands region: Above normal is favoured for the region.

Southern region: Above normal rainfall is favoured for the region.

Seasonal maximum temperature:

Warmer than normal is favoured for most parts of the country for the next three months, except for Western Province in the Southern region where chances drop to the 40-50% range.

Seasonal minimum temperature:

Warmer than normal is favoured for the whole country for the July-September period.

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

Product	Date: May 2020	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	21 st	Govt: National Disaster Centre, Dept. of Agriculture and Livestock, Climate Change Development Authority, National Agriculture Research Institute, Dept. of Transport, Dept. of Mineral Policy and Geohazard Management, Dept. of Works, PNG Fire, National Maritime Safety Authority, Civil Aviation Safety Authority, PNG Forest Authority, National Capital District Commission, PNG Customs Authority, National Dept. Of Health, Dept. of Education, Centre for Environmental Protection Authority. UN agencies: UNDP, IOM, UNOCH. Private: PNG Air Services Limited, ExxonMobil, Ok Tedi Mining Ltd, PNG Power Ltd, Global Construction Ltd, Datec, InterOil, Air Niugini, Bank South Pacific, PNG Ports, Media and Universities.	201	145	56
EAR Watch	8 th	Govt: National Disaster Centre, Dept. Of Transport, National Agriculture Research Institute, Dept. Of Agriculture and Livestock, Provincial Disaster Coordinators, Civil Aviation Safety Authority, Climate Change Development Authority, Dept. Of Mineral Policy and Geohazard Management, PNG DFAT, Centre of Environmental Protection Authority, National Capital District Commission, Dept. of Education. UN Agencies : UNDP, FAO, IOM, Oxfam. NGOs : Childfund, WVI, PNGRC. Private: Pacific Hydro Services, PNG Power, Ok Tedi Mining Ltd, Media. Aus DFAT	123	88	35
EAR Watch re-circulated by Disaster Management Team	9 th	National Disaster Centre, UNRCO, IOM, UNDP, UNICEF, FAO, WHO, UN Women, UNFPA, UNDSS, OHCHR, UNAIDS, WVI, WFP, PNGCC, Caritas, Care International, Child Fund, MSF, Oxfam, Plan International, PSI PNG, Save The Children, ICRC, IFRC, PNG Red Cross Society, World Bank, DFFAT, PRC, EU, JICA, MFAT, USAID, CDC, PNG Disability Sector Coalition, Department of Education, Department of Agriculture and Livestock	121	70	51
Total			445	303	142