

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 156

Country: Papua New Guinea

TABLE 1: Monthly Rainfall

Station (include data period)	Jun-2020	Jul-2020	Aug-2020				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Momase Region							
Madang (1944-2020)	378.0	55.4	218.4	63.2	141.5	99.0	62/71
Nadzab (1973-2020)	104.4	171.6	148.0	80.8	159.4	111.3	31/47
Wewak (1956-2020)	240.2	104.4	230.0	116.0	208.8	143.8	48/65
Vanimo (1918-2020)	105.6	96.8	263.0	138.3	191.0	164.8	59/65
Highlands Region							
Goroka (1948-2020)	89.6	11.0	52.4	48.5	89.3	66.1	23/57
New Guinea Islands Region							
Momote (1949-2020)	110.6	210.6	292.6	222.5	327.1	274.0	38/66
Kavieng (1916-2020)	109.0	182.6	302.8	156.9	253.0	205.0	74/89
Southern Region							
Misima (1917-2020)	166.0	140.2	175.6	80.3	157.8	108.4	61/95
Port Moresby (1875-2020)	43.8	49.0	20.4	7.6	32.0	14.8	74/121

TABLE 2: Three-month Rainfall for Juneto August 2020

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 March-April 2020				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
<i>Momase Region</i>											
Madang (1944-2020)	651.8	Above normal	402.0	535.2	471.0	55/69	64	29	7	31	Inconsistent
Nadzab (1973-2020)	424.0	Above normal	294.9	411.2	329.0	31/46	33	35	32	-3	Near-consistent
Wewak (1956-2020)	574.6	Normal	476.5	617.8	554.0	36/65	52	30	18	12	Near-consistent
Vanimo (1918-2020)	465.4	Below normal	517.6	632.3	563.5	17/63	31	32	37	-1	Inconsistent
<i>Highlands Region</i>											
Goroka (1948-2020)	153.0	Below normal	171.4	245.3	191.0	15/53	37	31	32	-1	Consistent
<i>New Guinea Islands Region</i>											
Momote (1949-2020)	613.8	Below normal	814.0	1069.2	967.0	9/65	23	39	38	2	Near-consistent
Kavieng (1917-2020)	594.4	Normal	582.9	791.1	715.0	31/88	32	28	40	-1	Near-consistent
<i>Southern Region</i>											
Misima (1917-2020)	481.8	Normal	331.9	548.0	436.0	42/92	52	37	11	22	Near-consistent
Port Moresby (1875-2020)	113.2	Above normal	55.0	110.8	87.2	77/107	47	29	24	6	Inconsistent

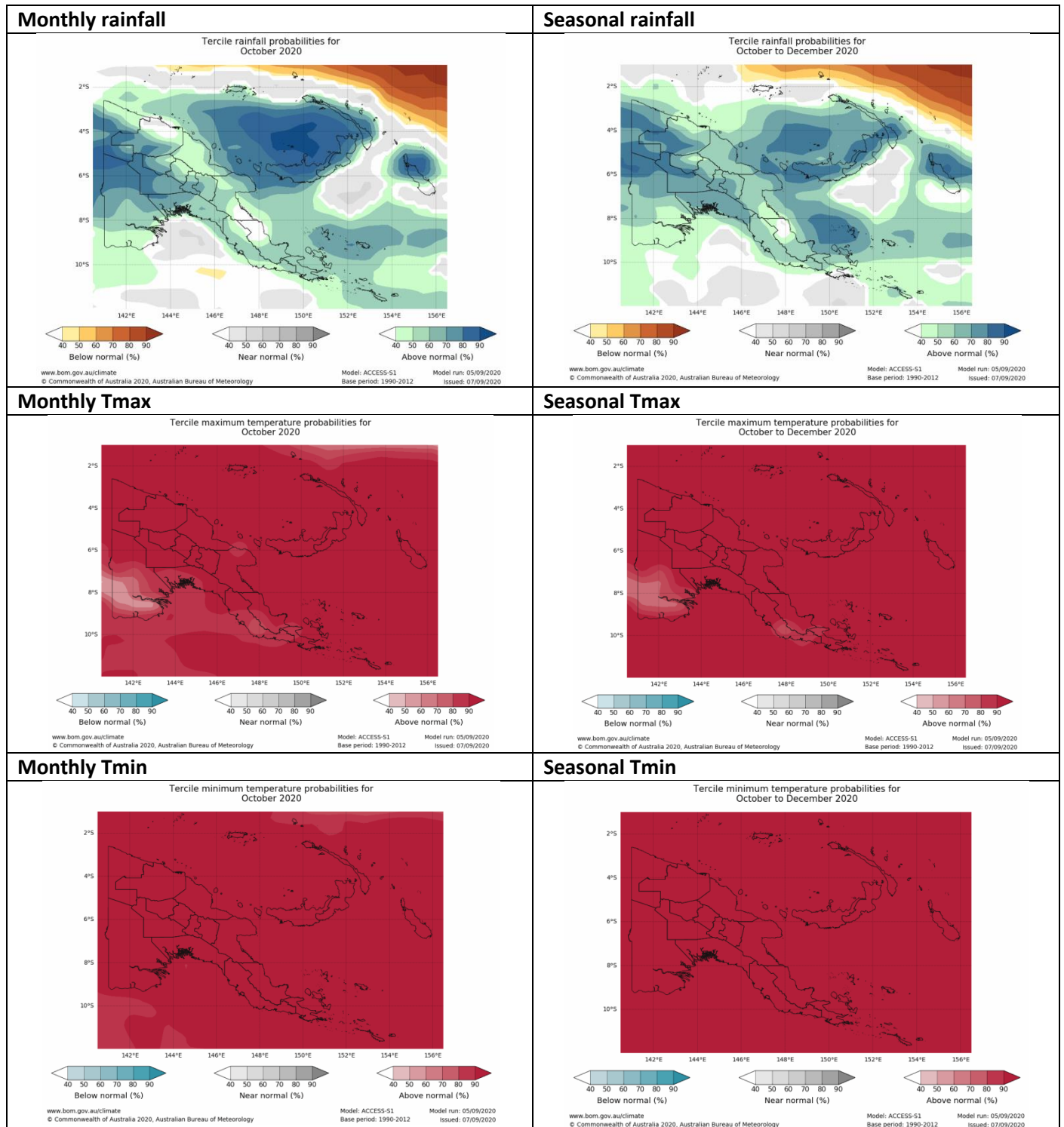
TABLE 3: Seasonal Climate Outlooks using SCOPIC for Octoberto December2020

Predictor and Period used: NINO3.4 for July to August 2020

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Momase Region						
Madang (1944-2020)	45	964.8	55		9	70
Nadzab(1973-2020)	49	343.1	51		-2	48
Wewak (1956-2020)	43	572.0	57		9	57
Vanimo (1918-2020)	37	630.4	63		27	72
Highlands Region						
Goroka (1948-2020)	49	516.2	51		-2	48
New Guinea Islands Region						
Momote (1949-2020)	50	787.1	50		-2	32
Kavieng (1916-2020)	49	803.3	51		-1	50
Southern Region						
Misima (1917-2020)	45	631.0	55		7	64
Port Moresby (1875-2020)	39	201.1	61		29	71

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)	25	839.3	37	1083.8	38	15	48
Nadzab (1973-2020)	25	317.7	39	397.3	36	6	52
Wewak (1956-2020)	28	536.2	33	647.8	39	13	49
Vanimo (1918-2020)	26	583.9	34	709.5	40	16	59
Highlands Region							
Goroka (1948-2020)	34	432.7	33	598.2	33	-3	17
New Guinea Islands Region							
Momote (1949-2020)	34	692.7	31	866.8	35	-1	39
Kavieng (1916-2020)	34	713.6	31	869.4	35	-2	36
Southern Region							
Misima (1917-2020)	29	546.0	35	732.0	36	7	43
Port Moresby (1875-2020)	22	160.0	40	290.5	38	33	63

Table 4: Monthly and Seasonal Climate Outlooks using ACCESS-S for October to December 2020



Summary Statements

Rainfall for August 2020:

Rainfall was generally normal to above normal across the country's monitoring stations. Vanimo recorded its seventh wettest August in 65 years.

Accumulated rainfall for June to August 2020, including outlook verification:

In the past season, rainfall was below normal at Vanimo, Goroka and Momote, while Madang, Nadzab and Port Moresby received above normal rainfall. Normal rainfall was received at Wewak, Kavieng and Misima. The outlook issued in May was near- to inconsistent for all stations, except Goroka with a consistent forecast.

Outlooks for October to December 2020:

1. SCOPIC:

Vanimo: The outlook for October to December shows above normal as the most likely outcome, with normal the next most likely. Below normal is the least likely.

Madang, Nadzab and Port Moresby: The outlook for the season shows a near-equal likelihood of above normal and normal rainfall. Below normal is the least likely.

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

Confidence ranges from very low to very high skill.

2. ACCESS-S:

Monthly rainfall:

Above normal rainfall is the most likely outcome across the country in October.

Monthly maximum and minimum temperatures:

Above normal October temperatures are favoured across the country.

Seasonal rainfall:

Above normal rainfall is favoured across the country for October to December, except for Manus Island where there is little guidance.

Seasonal maximum and minimum temperatures:

Above normal October-December temperatures are favoured across the country.

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: August 2020	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	28 th	Govt: National Disaster Centre, Dept. of Agriculture and Livestock, ClimateChange Development Authority,National Agriculture Research Institute, Dept. of Transport, Dept. ofMineral Policy and GeohazardManagement, Dept. of Works, PNGFire, National Maritime SafetyAuthority, Civil Aviation SafetyAuthority, PNG Forest Authority,National Capital District Commission,PNG Customs Authority, NationalDept. Of Health, Dept. of Education,Centre for Environmental Protection Authority. UN agencies: UNDP, IOM, UNOCH. Private: PNG Air ServicesLimited, ExxonMobil, Ok TediMiningLtd, PNG Power Ltd, GlobalConstruction Ltd, Datec, Interoil, AirNiugini, Bank South Pacific, PNGPorts, Media and Universities.	205	158	47
EAR Watch	20th	Govt:NationalDisaster Centre, Dept. Of Transport, National Agriculture Research Institute, Dept. OfAgriculture and Livestock, ProvincialDisasterCoordinators, Civil Aviation SafetyAuthority, Climate Change DevelopmentAuthority, Dept. Of Mineral Policy and GeohazardManagement, PNG DFAT, Centre ofEnvironmental Protection Authority, National Capital District Commission,Dept. of Education. UN Agencies : UNDP, FAO, IOM, Oxfam. NGOs : Childfund, WVI, PNGRC. Private:PacificHydo Services, PNG Power, Ok Tedi Mining Ltd, Media. Aus DFAT	126	78	48
Disaster Manageme nt Team Virtual Meeting	27th	Govt : National Disaster Centre, National Weather Service. UN : UNRCO, IOM, UNDP, UNICEF, FAO, UNFPA, WHO, UNWomen. NGO/FBO :DFCDR, World Vision, ICRC, IFRC. Donors : NZHC, EU and US Embassy.	37	29	8
Total			368	265	103