

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 152

Country: Papua New Guinea

TABLE 1: Monthly Rainfall

Station (include data period)	Feb-2020	Mar-2020	Apr-2020				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
<b>Momase Region</b>							
Madang (1944-2020)	209.4	492.0	243.8	329.1	459.3	396.0	11/70
Nadzab (1973-2020)	169.6	288.8	162.0	87.6	136.0	103.4	32/45
Wewak (1956-2020)	66.2	138.8		161.1	232.2	186.4	
Vanimo (1918-2020)	140.8	165.2		183.3	287.3	225.9	
<b>Highlands Region</b>							
Goroka (1948-2020)	256.8	416.0	187.2	154.5	220.2	193.2	24/56
<b>New Guinea Islands Region</b>							
Momote (1949-2020)	213.2	274.4	182.6	246.5	305.1	280.0	11/64
Kavieng (1916-2020)	189.6	370.0	279.6	268.3	327.3	295.9	41/90
<b>Southern Region</b>							
Misima (1917-2020)	197.0	353.4	224.6	208.0	344.4	263.0	35/95
Port Moresby (1875-2020)	82.2	332.0	39.2	83.5	141.7	106.8	15/128

**TABLE 2: Three-month Rainfall for February to April 2020**

Station	Three-month Total	33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 November-December 2019				Verification: Consistent, Near-consistent, Inconsistent?	
	Rainfall (mm)					B-N	N	A-N	LEPS		
<i>Momase Region</i>											
Madang (1944-2020)	945.2	Normal	939.5	1151.4	1046.4	25/70	29	37	34	-1	Consistent
Nadzab (1973-2020)	620.4	Above normal	392.4	497.8	455.2	40/44	27	37	36	1	Near-consistent
Wewak (1956-2020)			433.9	519.7	475.9		37	30	33	-1	
Vanimo (1918-2020)			725.2	911.8	834.6		29	34	37	2	
<i>Highlands Region</i>											
Goroka (1948-2020)	860.0	Above normal	610.0	745.4	664.8	46/54	27	35	38	2	Consistent
<i>New Guinea Islands Region</i>											
Momote (1949-2020)	670.2	Below normal	759.0	934.9	801.4	12/63	36	31	33	-1	Consistent
Kavieng (1917-2020)	839.2	Normal	820.6	957.2	893.5	35/86	26	37	37	2	Near-consistent
<i>Southern Region</i>											
Misima (1917-2020)	775.0	Normal	707.9	946.6	827.2	38/94	41	39	20	10	Near-consistent
Port Moresby (1875-2020)	453.4	Below normal	471.9	592.9	535.6	48/127	43	31	26	10	Consistent

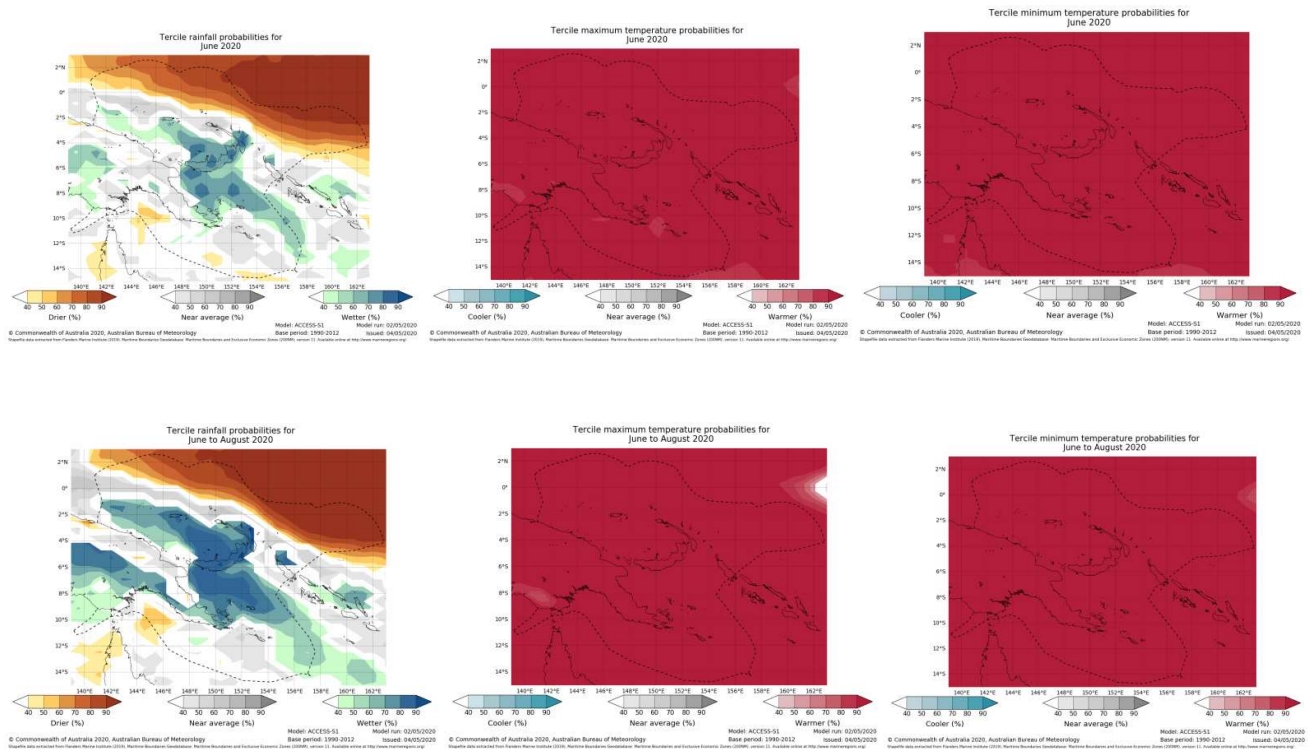
**TABLE 3: Seasonal Climate Outlooks using SCOPIC for Juneto August2020**

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

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
<b>Momase Region</b>						
Madang (1944-2020)	86	471.0	14		36	76
Nadzab(1973-2020)	49	329.0	51		-2	22
Wewak (1956-2020)	70	554.0	30		15	70
Vanimo (1918-2020)	57	563.5	43		1	56
<b>Highlands Region</b>						
Goroka (1948-2020)	53	191.0	47		-2	43
<b>New Guinea Islands Region</b>						
Momote (1949-2020)	45	967.0	55		-1	55
Kavieng (1916-2020)	43	715.0	57		0	56
<b>Southern Region</b>						
Misima (1917-2020)	79	436.0	21		28	73
Port Moresby (1875-2020)	63	87.2	37		6	60

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)	LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
<b>Momase Region</b>							
Madang (1944-2020)	64	402.0	29	535.2	7	31	58
Nadzab (1973-2020)	33	294.9	35	411.2	32	-3	11
Wewak (1956-2020)	52	476.5	30	617.8	18	12	44
Vanimo (1918-2020)	31	517.6	32	632.3	37	-1	33
<b>Highlands Region</b>							
Goroka (1948-2020)	37	171.4	31	245.3	32	-1	26
<b>New Guinea Islands Region</b>							
Momote (1949-2020)	23	814.0	39	1069.2	38	2	23
Kavieng (1916-2020)	32	582.9	28	791.1	40	-1	41
<b>Southern Region</b>							
Misima (1917-2020)	52	331.9	37	548.0	11	22	51
Port Moresby (1875-2020)	47	55.0	29	110.8	24	6	49

# Monthly and Seasonal Climate Outlooks using ACCESS-S for June to August 2020



## Summary Statements

### Rainfall for April 2020:

Rainfall was generally below normal to normal at most of the monitoring stations, except for above normal at Nadzab.

Due to the State Of Emergency, Wewak and Vanimo rainfall totals were not available.

### Accumulated rainfall for February to April 2020, including outlook verification:

Rainfall was generally below normal to normal for the past season, apart from Nadzab and Goroka where rainfall was above normal. The outlook issued in January was consistent at four locations and near-consistent at three.

Nadzab recorded its 5<sup>th</sup> wettest February to April in 44 years of record.

Three month totals were not available for Wewak and Vanimo.

### Outlooks for June to August 2020:

#### 1. SCOPIC:

**Madang, Wewak and Southern Region:** The outlook favours below normal, with normal the next most likely.

**Kavieng:** The outlook for the season shows above normal rainfall as the most likely outcome, with below normal the next most likely; normal is the least likely.

**Momote:** The outlook shows a near-equal likelihood of normal and above 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 are similar (Climatology).

Confidence ranges from very low to very high.

## 2. ACCESS-S:

### Monthly rainfall:

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

**Highlands region:** Normal rainfall is favoured for the region.

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

**Southern region:** Normal to above normal is favoured for the next month.

### Monthly maximum and minimum temperature:

Warmer than normal in day time and night time temperatures for the whole country.

### Seasonal rainfall:

**Momase region:** Below normal rainfall is favoured for Vanimo, with normal rainfall favoured for the rest of the region.

**Highlands region:** 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 and minimum temperature:

Warmer than normal in day time and night time temperatures for the whole 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: April 2020	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	23	Govt: National Disaster Centre, Dept. of Agriculture and Livestock, ClimateChange 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.	200	139	61
EAR Watch	22	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	120	83	37
Monthly Climate Briefing	nil				
Ocean Bulletin	N/A				
<b>Total</b>			320	222	98