

# Pacific Islands - Online Climate Outlook Forum (OCOF) No. 166

Country: Papua New Guinea

**TABLE 1: Monthly Rainfall**

Station (include data period)	Apr-2021	May-2021	Jun-2021				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Momase Region							
Madang (1944-2021)	426.2			158.4	226.3	205.9	
Nadzab (1973-2021)	107.4	68.8	130.4	64.3	120.9	83.6	36/48
Wewak (1956-2021)	251.4	305.2	318.0	172.4	228.6	204.4	62/66
Vanimo (1918-2021)	252.0	257.6	247.8	174.3	246.3	206.6	47/67
Highlands Region							
Goroka (1948-2021)	209.4	118.4		45.0	79.2	59.0	
New Guinea Islands Region							
Momote (1949-2021)	190.4	321.4	173.8	231.0	318.0	281.0	11/72
Kavieng (1916-2021)	390.0	324.4		193.6	272.2	215.8	
Southern Region							
Misima (1917-2021)	273.0	222.0	439.0	118.1	234.8	165.0	85/95
Port Moresby (1875-2021)	106.0	18.8	30.4	10.4	45.4	23.9	71/123

**TABLE 2: Three-month Rainfall for April to June 2021**

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 January-February 2021				Verification: Consistent, Near- consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Momase Region											
Madang (1944-2021)			904.9	1073.7	1007.2		22	27	51	9	
Nadzab (1973-2021)	306.6	Normal	271.6	347.9	329.1	20/45	32	38	30	-3	Consistent
Wewak (1894-2021)	874.6	Above normal	564.4	671.2	641.6	60/64	26	40	34	-1	Near- consistent
Vanimo (1918-2021)	757.4	Above normal	579.9	739.0	652.9	46/63	34	32	34	-2	Near- consistent
Highlands Region											
Goroka (1948-2021)			330.5	423.5	391.5		32	34	34	-2	
New Guinea Islands Region											
Momote (1949-2021)	685.6	Below normal	705.0	899.1	833.1	19/71	30	40	30	-1	Near- consistent
Kavieng (1917-2021)			701.1	899.2	807.6		39	31	30	0	
Southern Region											
Misima (1917-2021)	934.0	Above normal	596.3	873.3	739.6	66/94	18	28	54	17	Consistent
Port Moresby (1875-2021)	155.2	Below normal	195.7	294.7	250.1	35/116	13	45	42	12	Near- consistent

**TABLE 3: Seasonal Climate Outlooks using SCOPIC for August to October2021**

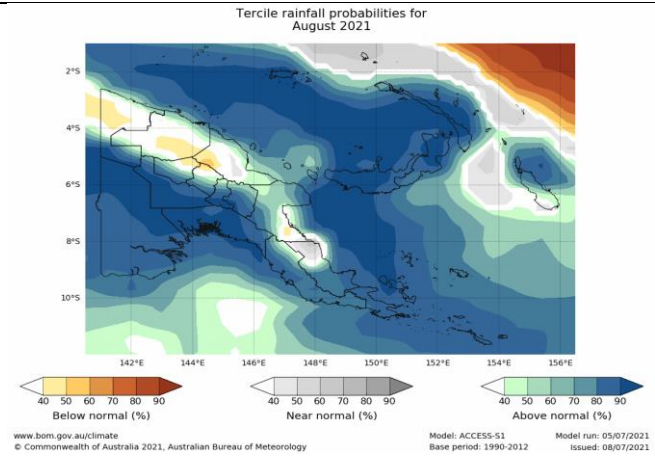
Predictor and Period used: NINO3.4 for May to June 2021

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
<b>Momase Region</b>						
Madang (1944-2021)	44	471.9	56		28	76
Nadzab(1973-2021)	46	339.6	54		5	56
Wewak (1894-2021)	42	573.0	58		26	68
Vanimo (1918-2021)	49	525.4	51		1	52
<b>Highlands Region</b>						
Goroka (1948-2021)	51	343.8	49		-1	61
<b>New Guinea Islands Region</b>						
Momote (1949-2021)	51	758.0	49		0	56
Kavieng (1916-2021)	50	635.4	50		-2	33
<b>Southern Region</b>						
Misima (1917-2021)	44	552.2	56		21	63
Port Moresby (1875-2021)	50	81.1	50		-2	55

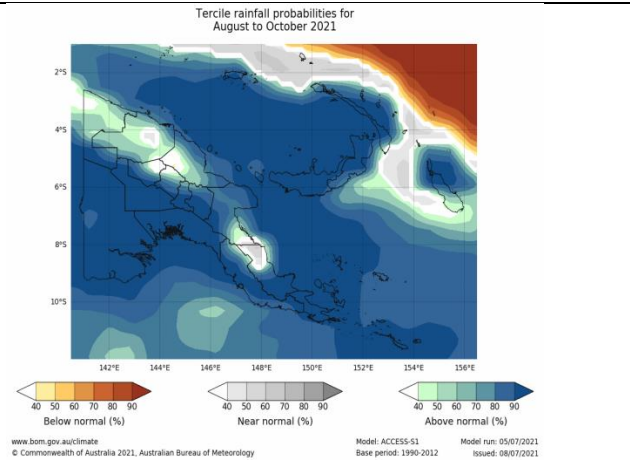
Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)	LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
<b>Momase Region</b>							
Madang (1944-2020)	23	387.0	42	618.8	35	27	53
Nadzab (1973-2020)	30	277.2	35	403.1	35	1	22
Wewak (1894-2020)	21	493.6	42	658.8	37	25	49
Vanimo (1918-2020)	32	489.9	34	567.2	34	-1	48
<b>Highlands Region</b>							
Goroka (1948-2020)	34	272.3	34	388.7	32	-1	41
<b>New Guinea Islands Region</b>							
Momote (1949-2020)	33	649.3	34	898.7	33	-1	18
Kavieng (1916-2020)	33	521.3	34	724.1	33	-2	9
<b>Southern Region</b>							
Misima (1917-2020)	29	432.0	37	702.7	34	23	49
Port Moresby (1875-2020)	33	60.3	34	113.1	33	-1	20

TABLE 4: Monthly and Seasonal Climate Outlooks using ACCESS-S for August to October 2021

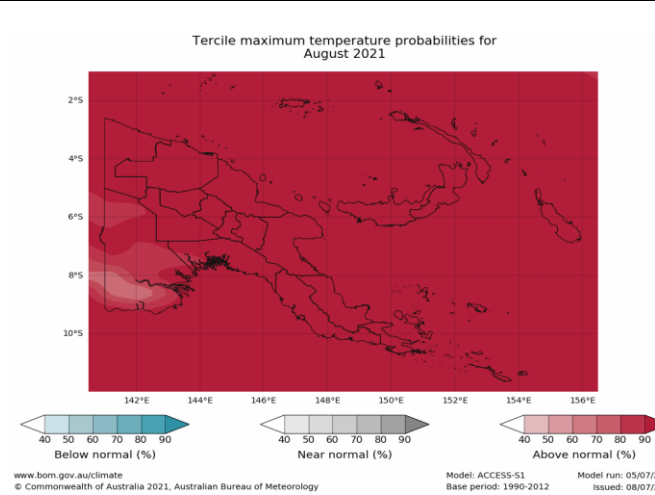
Monthly rainfall



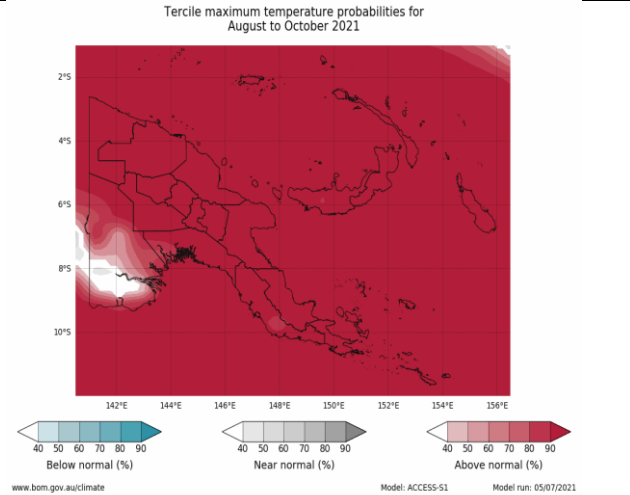
Seasonal rainfall



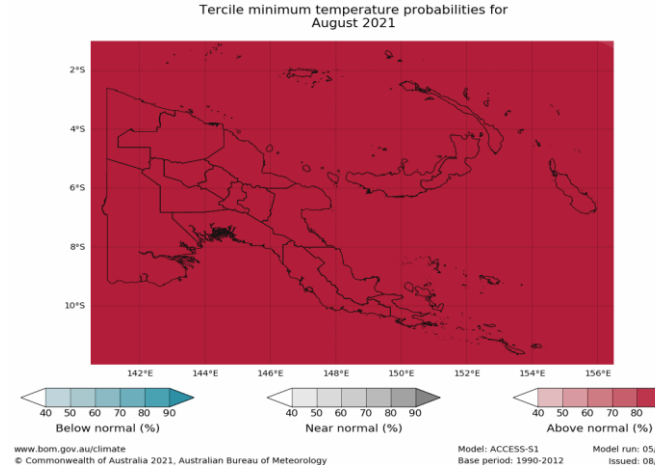
Monthly Tmax



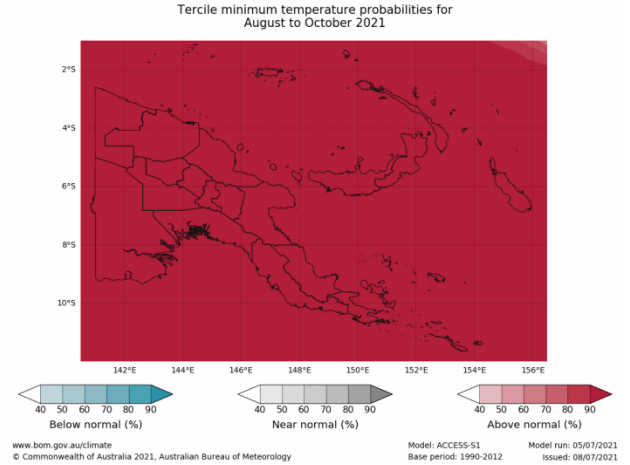
Seasonal Tmax



Monthly Tmin



Seasonal Tmin



## **Summary Statements**

### **Rainfall for June 2021:**

Above normal was received at four sites, while Momote received below normal and Port Moresby received normal rainfall. Madang, Goroka and Kavieng's June rainfall was not available. Wewak recorded its fifth wettest June on record.

### **Accumulated rainfall for April to June 2021, including outlook verification:**

Above normal rainfall was received at Wewak, Vanimo, and Misima. Momote and Port Moresby received below normal whilst Nadzab received normal rainfall. Three months total rainfall was not available for Madang, Goroka and Kavieng. Wewak recorded its fifth wettest April to June on record.

The forecast issued in March was verified as near-consistent at all stations except for Nadzab and Misima which had consistent forecast.

### **Outlooks for August to October 2021:**

#### **1. SCOPIC:**

**Madang and Wewak:** The outlook shows normal as the most likely outcome, with above normal the next most likely. Below normal is the least likely.

**Nadzab, Vanimo, Goroka, Momote, Kavieng, Misima and Port Moresby:** The outlook offers little guidance as the chances of above-normal, normal, and below-normal are similar.

Confidence ranges from very low to very high.

#### **2. ACCESS-S:**

##### **Monthly rainfall:**

**New Guinea Islands and Southern Region:** The outlook favours above normal rainfall.

**Momase Region:** The outlook offers little guidance as the chances for the three terciles are similar.

**Highlands Region:** The outlook shows above normal rainfall as the most likely outcome with little guidance for the northern areas.

##### **Monthly maximum and minimum temperatures:**

Above-normal temperatures are favoured across the country for the August.

##### **Seasonal rainfall:**

Above normal rainfall is favoured across the country for the next season.

##### **Seasonal maximum and minimum temperatures:**

Above-normal temperatures are favoured across the country for the August to October period.

**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.**

<b>Product</b>	<b>Date: June 2021</b>	<b>Stakeholder</b>	<b>Total Number of Participants</b>	<b>Number of male</b>	<b>Number of female</b>
Climate Bulletin	16 <sup>th</sup> June	National Disaster Centre, Climate Change Development Authority, Provincial Disaster Coordinators, Universities, NWS Staff, Mining & Energy Sector, Agriculture, Fisheries, Water PNG, Forestry, Tourism Promotion Authority, Education, Health, Aviation, Shipping, Transport, Banking Institutions, World Vision, UNDP, AHC/DFAT, Customs and Immigration, National Maritime Safety Authority, Coffee & Copra Industry, National Capital District Commission, Mineral Resource Authority, Media	145	103	42
EAR Watch					
Monthly Climate Briefing					
Ocean Bulletin					
<b>Total</b>			<b>145</b>	<b>103</b>	<b>42</b>