

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 184

Country: Papua New Guinea

Part 1: Recent climate

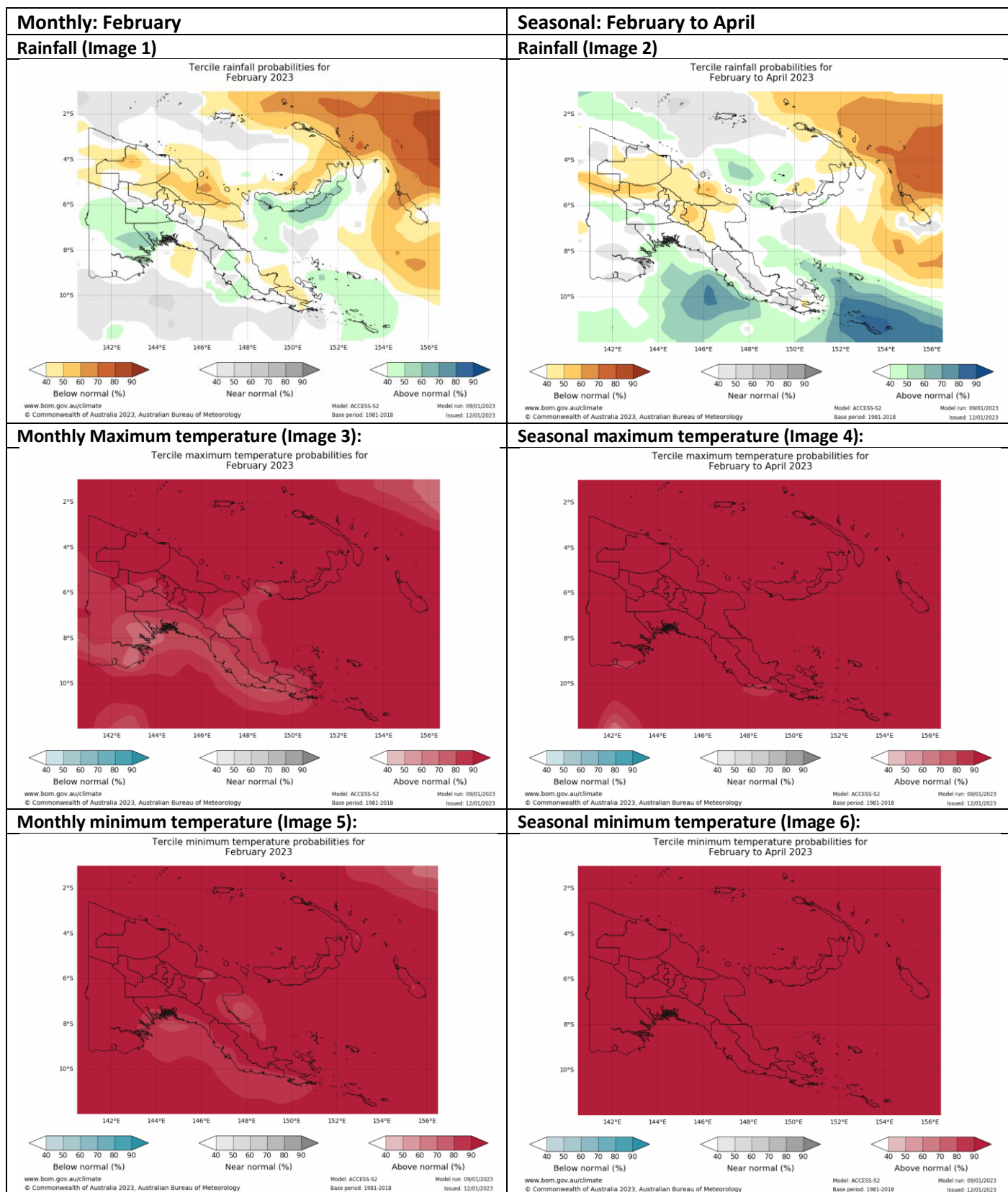
TABLE 1: Monthly Rainfall

Station (include data period)	Oct-2022	Nov-2022	Dec-2022				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
<i>Momase Region</i>							
Madang (1944-2022)				342.6	444.7	385.0	
Nadzab (1973-2022)	14.0	95.4	108.8	122.8	192.3	157.0	15/48
Wewak (1956-2022)	89.0	145.2	78.6	121.5	174.5	142.7	8/67
Vanimo (1918-2022)	237.0	151.4	241.8	200.6	296.3	262.6	32/69
<i>Highlands Region</i>							
Goroka (1948-2022)	23.8	190.2	241.0	162.6	255.3	185.5	37/56
<i>New Guinea Islands Region</i>							
Momote (1949-2022)	60.8	141.2	407.6	247.1	334.7	284.9	66/74
Kavieng (1916-2022)	33.0	111.8	313.8	257.1	346.5	317.0	49/96
<i>Southern Region</i>							
Misima (1917-2022)				170.4	257.0	220.5	
Port Moresby (1875-2022)	23.8	65.5	281.3	90.9	160.3	130.5	128/132

TABLE 2: Three-month Total Rainfall for October to December 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
<i>Momase Region</i>						
Madang (1944-2022)			841.0	1082.6	976.7	
Nadzab (1973-2022)	218.2	Below normal	318.3	393.1	343.4	5/46
Wewak (1894-2022)	312.8	Below normal	540.5	662.8	573.8	3/65
Vanimo (1918-2022)	630.2	Normal	588.6	741.2	639.8	32/62
<i>Highlands Region</i>						
Goroka (1948-2022)	455.0	Normal	446.7	601.6	522.4	20/55
<i>New Guinea Islands Region</i>						
Momote (1949-2022)	609.6	Below normal	686.6	865.5	784.6	11/74
Kavieng (1917-2022)	458.6	Below normal	713.8	867.7	799.5	6/94
<i>Southern Region</i>						
Misima (1917-2022)			550.5	743.7	631.9	
Port Moresby (1875-2022)	370.6	Above normal	172.0	291.0	205.8	102/118

Part 1i. Monthly and Seasonal Outlooks for February and February to April 2023

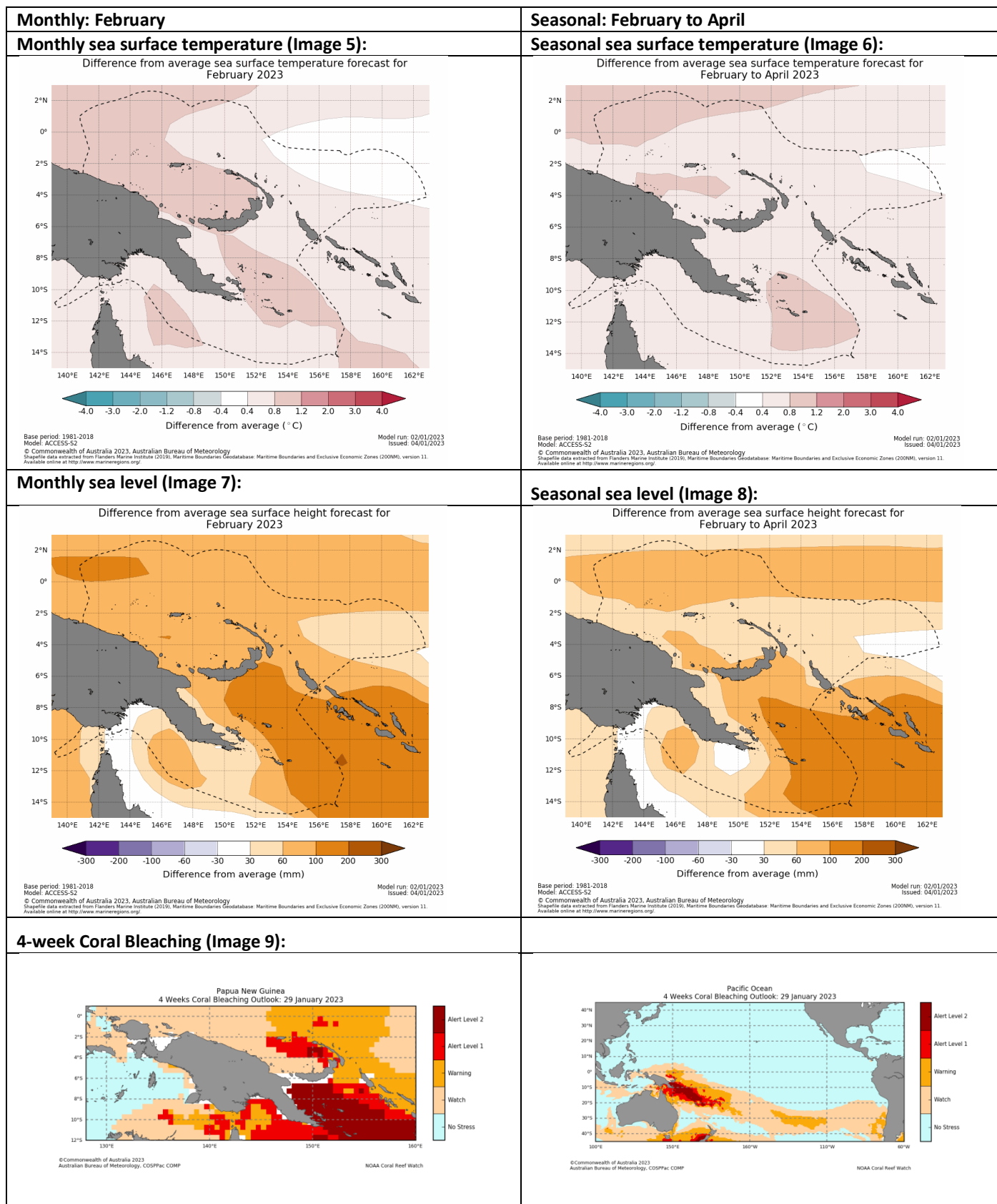


Part 2: Recent Ocean Observation

Monthly/Three months: December 2022 and October to December 2022

Monthly: December	Last three months: October to December 2022:
Sea Surface Temperature (Image 1):	Sea Surface Temperature (Image 4):
<p>Papua New Guinea Monthly Average Sea Surface Temperature Anomaly: December 2022</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac COMP Reynolds SST</p>	<p>Papua New Guinea 3 monthly Average Sea Surface Temperature Anomaly: October 2022 to December 2022</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac COMP Reynolds SST</p>
Sea level (Image 2):	
<p>Papua New Guinea Monthly Near Real Time Sea Level Anomaly: December 2022</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac COMP AVISO SsaltoDuoacs SLA</p>	
Daily coral bleaching alert (Image 3):	
<p>Papua New Guinea Daily Coral Bleaching Alert: 04 January 2023</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac COMP NOAA Coral Reef Watch</p>	<p>Pacific Ocean Daily Coral Bleaching Alert: 04 January 2023</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac COMP NOAA Coral Reef Watch</p>

Part 2i. Monthly and Seasonal Outlooks for February and February to April 2023



Summary Statement

Monthly and last three months: December 2022/October to December 2022 statement

Rainfall for December was below normal at Nazab and Wewak, above normal at Momote and Port Moresby, and near-normal at Vanimo, Goroka, Kavieng. Wewak posted its eighth driest December on record.

December rainfall was not available for Madang and Misima.

Rainfall for October to December was below normal at Nadzab, Wewak, and the New Guinea Island Region. Above normal was observed at Port Moresby, while Vanimo and Goroka had near-normal totals. Wewak, Nadzab, and Kavieng posted their third, fifth and sixth driest October to December on record, respectively.

Part 1i. Monthly and Seasonal Outlooks for February and February to April 2023

Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for February is likely to be below normal over New Ireland, northern Bougainville, parts of West and East Sepik, the northern Highlands region and northern Morobe. In the Southern Highlands and parts of Western, Gulf and the New Britain islands, the outlook shows February's rainfall is likely to be above normal.

The rainfall for February to April is likely to be below normal over New Ireland, Bougainville, East Sepik, Madang, and most parts of the Highlands Region (Hela, Enga, Chimbu and Eastern Highlands). In other parts of PNG, the outlook offers little guidance. In contrast, above normal rainfall is likely or very likely over the Milne Bay region and Louisiade Archipelago.

Maximum and minimum temperatures during February and averaged over February to April, are very likely to be above normal over PNG.

Part 2: Recent Ocean summary statement

Monthly and last three months: December/October to December 2022

December ocean temperatures around PNG were 0.5 to 2°C above normal.

Averaged over October to December, ocean temperatures around PNG were 0.5 to 2°C above normal.

December sea levels around PNG were 50mm to 300mm above normal.

PNG has a 'watch to Alert Level 2' coral bleaching.

Part 2i. Monthly and Seasonal Outlooks for February and February to April 2023

Ocean Variable statement

February ocean temperatures around PNG are predicted to be 0.4 to 1.2°C above normal.

Averaged over February to April, ocean temperatures around PNG are predicted to be 0.4 to 1.2°C above normal.

February sea levels around PNG are predicted to be 30mm to 200mm above normal.

Averaged over February to April, sea levels around PNG are predicted to be 30mm to 100mm above normal.

The four-week coral bleaching outlook to 29 January, shows PNG has a 'warning to Alert Level 2' status.

TABLE 3: Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders

Product	Date: December 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	6 th	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, Water PNG. 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, Kina Bank, SMEC, PNG Ports, Media and Universities.	153	108	45
Drought Update	16th	WMO, BOM, UNDP, PNGNWS	12	8	4
Climate data request		R.Napitalai Ltd, Hatwok Man Consultancy Services, WaterPNG, Ecolab PNG	11	10	1
Total			176	126	50