Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 181

Country: Papua New Guinea

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Jul-2022	Aug-2022	Sep-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Momase Region							
Madang (1944-2022)				74.3	177.9	121.4	
Nadzab (1973-2022)	25.0	75.0	40.2	57.2	139.7	111.2	10/48
Wewak (1956-2022)	149.0	287.2	245.4	147.2	208.6	184.6	58/66
Vanimo (1918-2022)	221.0	81.6	81.6	127.0	192.6	150.3	11/67
Highlands Region							
Goroka (1948-2022)			33.6	68.0	120.0	92.0	8/61
New Guinea Islands Region							
Momote (1949-2022)	170.6	136.6	125.2	190.6	276.3	248.1	9/74
Kavieng (1916-2022)	92.2	76.6	20.6	141.3	204.8	168.8	**2/95**
Southern Region							
Misima (1917-2022)				103.4	255.8	188.4	
Port Moresby (1875-2022)	17.6	48.4	91.8	10.6	32.0	21.0	**120/125**

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Very Low: X < 0.0 Low: 0 ≤ X < 5 Moderate 5 ≤ X < 10 Good: 10 ≤ X < 15 High: 15≤ X < 25

Very High: 25 ≤X < 35 Exceptional: X ≥ 35

TABLE 2: Three-month Total Rainfall for July to September 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Momase Region						
Madang (1944-2022)			321.2	468.2	401.2	
Nadzab (1973-2022)	140.2	Below normal	291.0	464.0	399.8	6/47
Wewak (1894-2022)	681.6	Above normal	468.7	591.5	544.1	56/66
Vanimo (1918-2022)	384.2	Below normal	463.9	555.5	510.9	14/63
Highlands Region						
Goroka (1948-2022)			192.0	283.7	246.8	
New Guinea Islands Region						
Momote (1949-2022)	432.4	Below normal	745.2	1033.7	875.8	8/73
Kavieng (1917-2022)	189.4	Below normal	510.7	724.0	607.0	**1/90**
Southern Region						
Misima (1917-2022)			325.4	582.3	433.0	
Port Moresby (1875-2022)	157.8	Above normal	47.7	94.9	70.7	**99/106**

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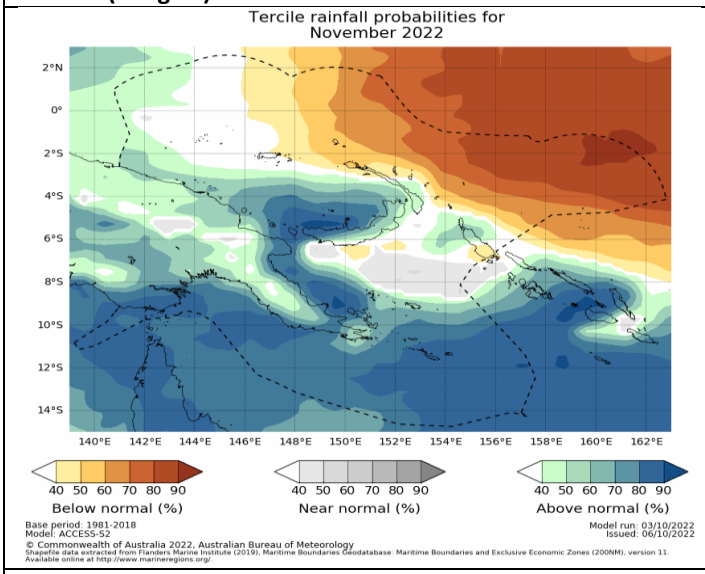
Part 1i. Monthly and Seasonal Outlooks for November and November to January 2023

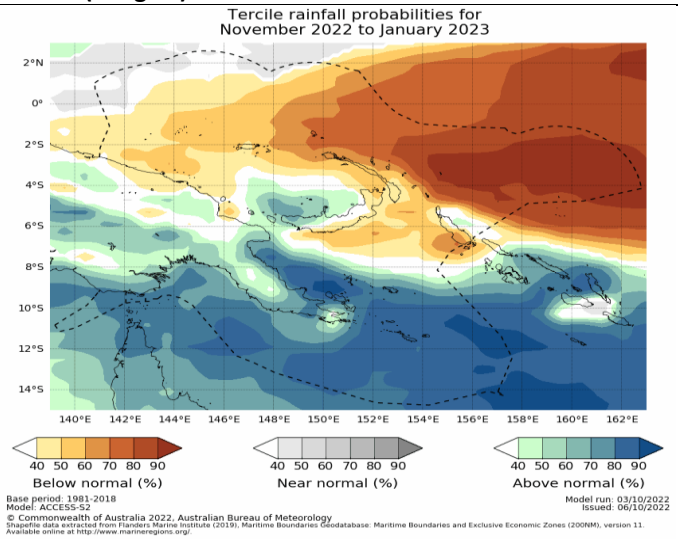
Monthly: November

Rainfall (Image 1)

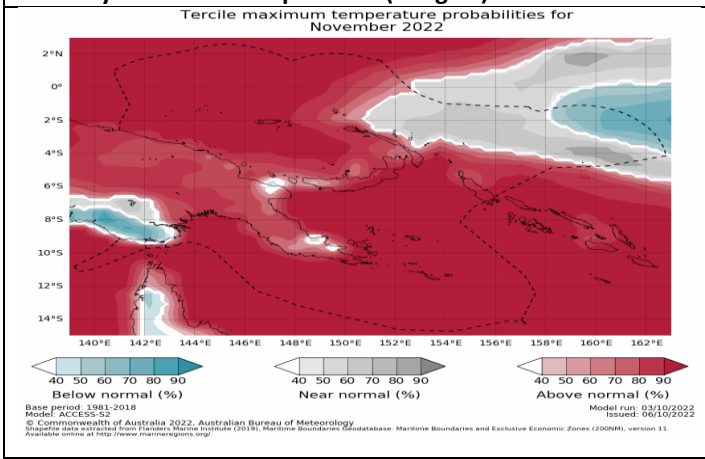


Seasonal: November to January

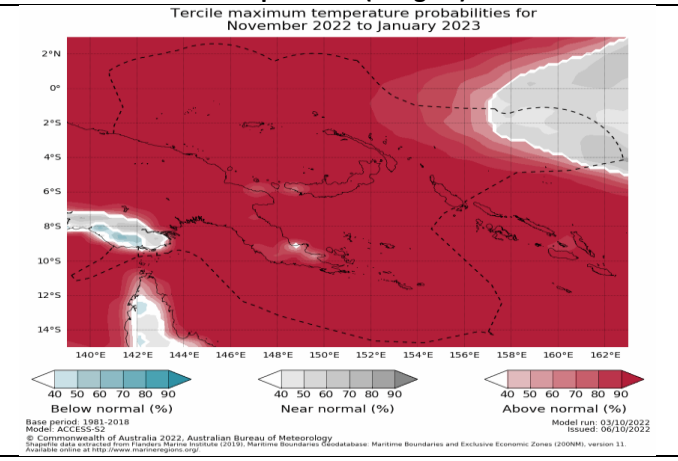
Rainfall (Image 2)



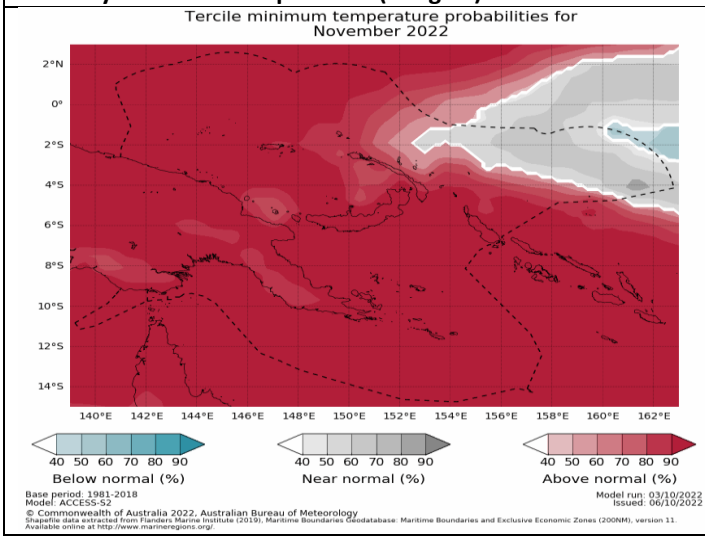
Monthly Maximum temperature (Image 3):



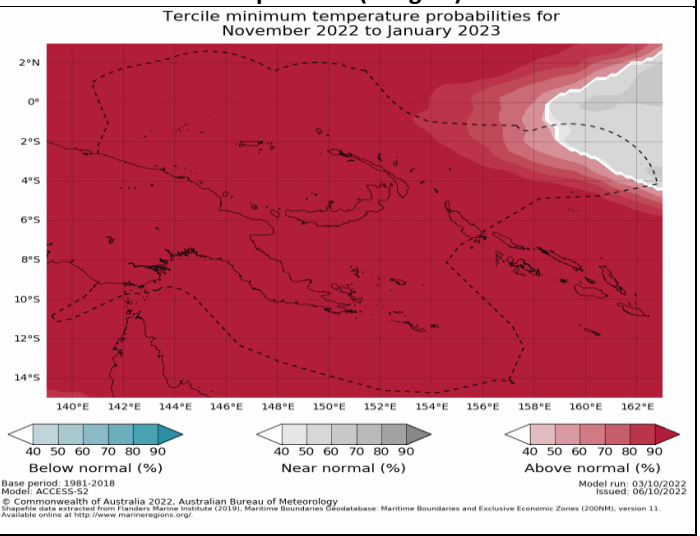
Seasonal maximum temperature (Image 4):



Monthly minimum temperature (Image 5):



Seasonal minimum temperature (Image 6):



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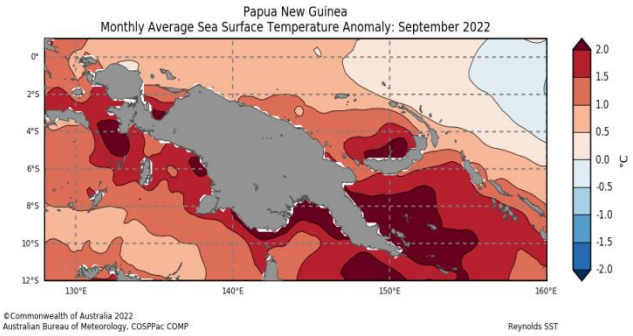
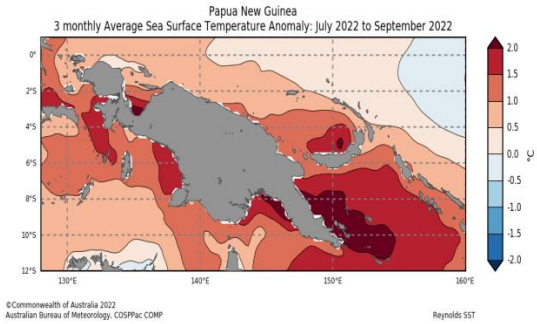
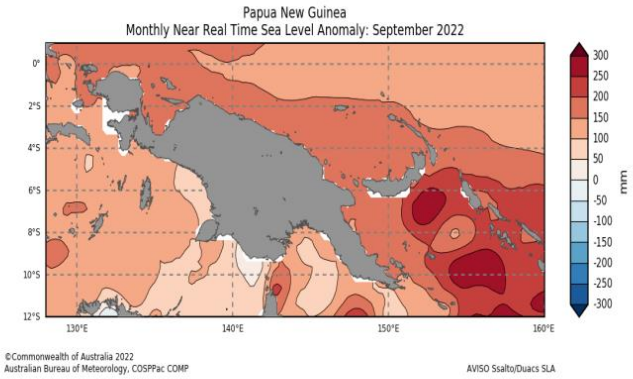
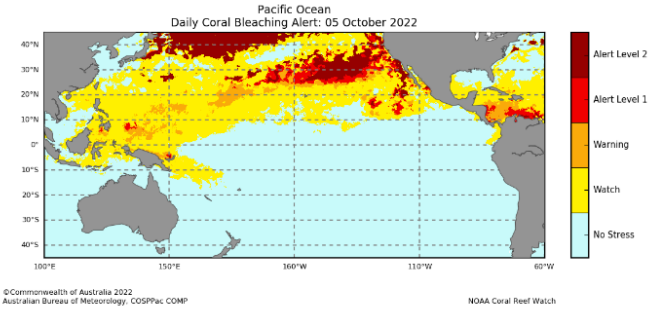
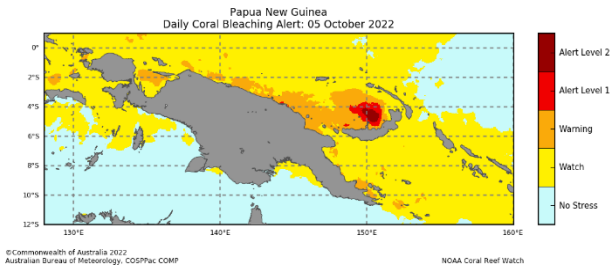
Part 2: Recent Ocean Observation

Monthly/Three months: September 2022 and July to September 2022

Monthly: September	**Last three months: July to September 2022:**
Sea Surface Temperature (Image 1):	**Sea Surface Temperature (Image 4):**
	
Sea level (Image 2):	
	
Daily coral bleaching alert (Image 3):	
	

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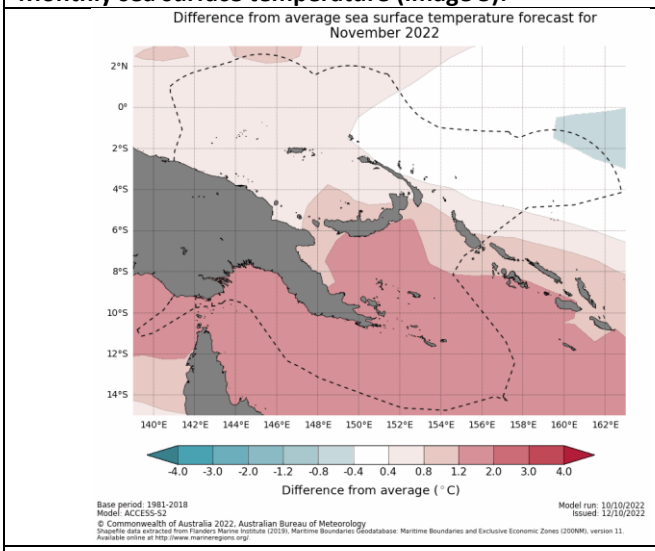
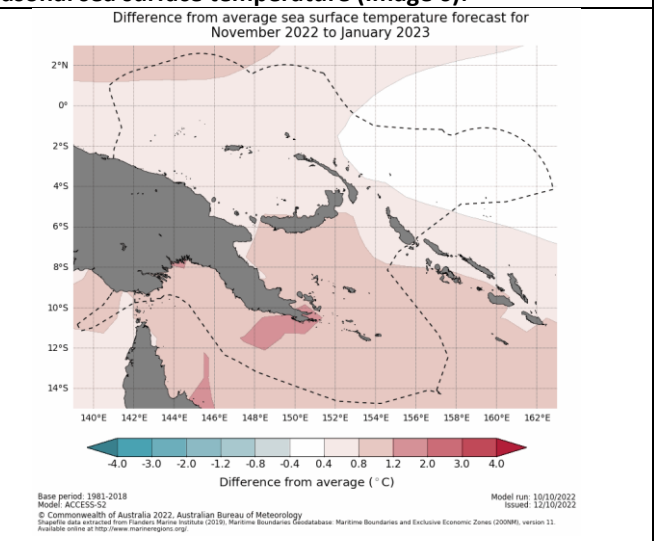
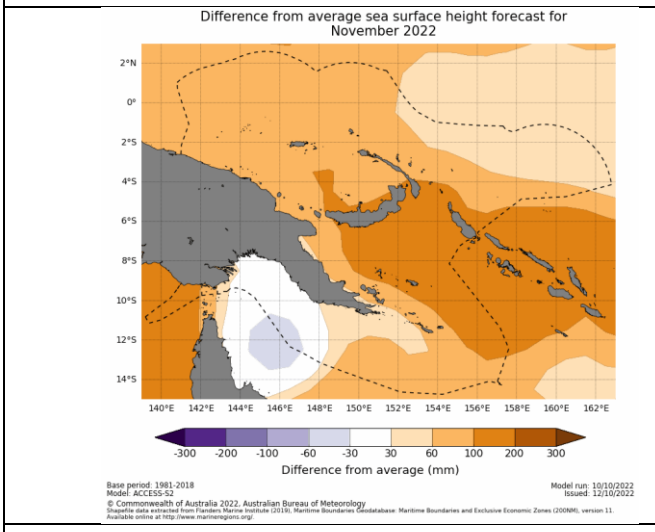
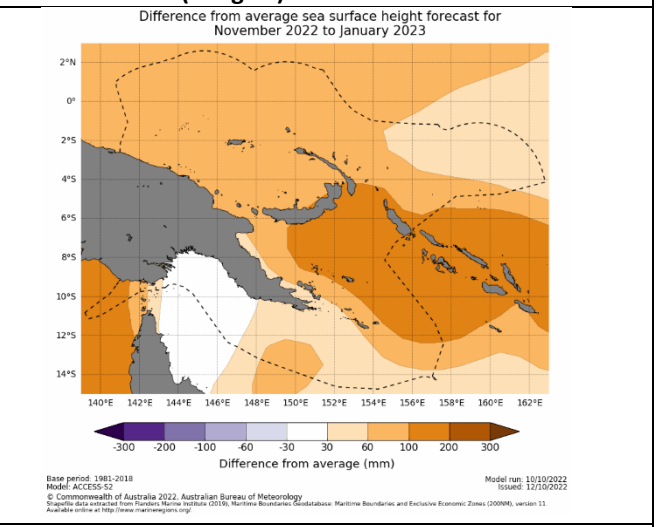
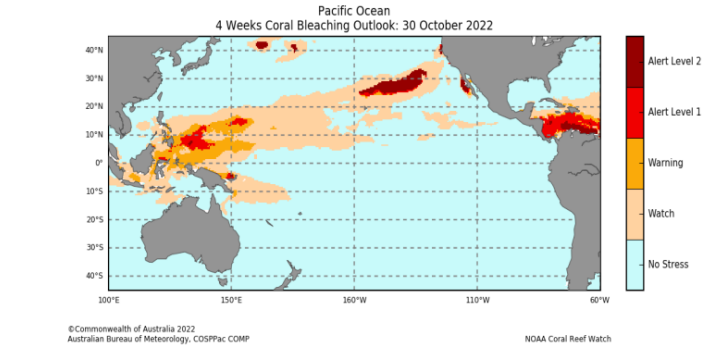
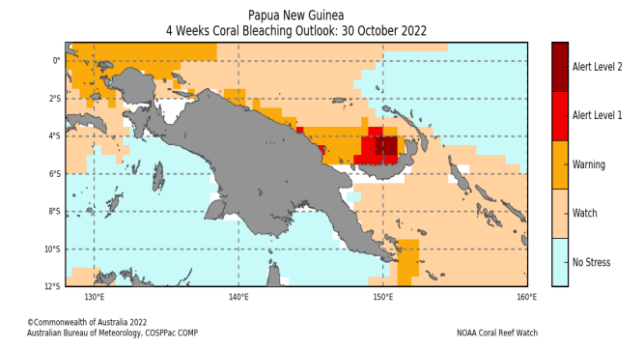
Part 2i. Monthly and Seasonal Outlooks for November and November to January 2023

Monthly: November	Seasonal: November to January
Monthly sea surface temperature (Image 5):	**Seasonal sea surface temperature (Image 6):**
	
Monthly sea level (Image 7):	**Seasonal sea level (Image 8):**
	
4-week Coral Bleaching (Image 9):	
	

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Summary Statement

Monthly and last three months: September 2022/July to September 2022 statement.

Rainfall for September was below normal at Nadzab, Vanimo, Goroka, Momote and Kavieng, but above normal at Wewak and Port Moresby. Kavieng recorded its second driest September on record while Port Moresby recorded its sixth wettest September on record.

September rainfall data was not available for 2 monitoring stations (Madang and Misima).

Rainfall for July to September was below normal at Nadzab, Vanimo, Momote and Kavieng, while Port Moresby and Wewak received above normal rainfall. Kavieng recorded its driest July to September on record, while Port Moresby had its eighth wettest.

Part 1i. Monthly and Seasonal Outlooks for November and November to January 2023

Monthly /Seasonal rainfall and temperature Outlook statements

November rainfall is likely to be above normal across the country, except for Momote, Kavieng and southern Bougainville where rainfall is likely to be below normal.

November to January rainfall is very likely to be above normal for Southern Region plus the lower half of the Highlands region. The outlook offers little guidance for West Sepik, West New Britain, Hela, Enga and Western highlands. Below normal rainfall is likely for Manus, New Ireland, Bougainville and East New Britain.

Maximum and minimum temperatures averaged over November and November to January are very likely to be above normal across the country, except for the southwestern parts of Western Province that are likely to be below normal.

Part 2: Recent Ocean summary statement

Monthly and last three months: September/July to September 2022.

In September, most of PNG experienced above average SSTs. In the coastal waters of Central, Milne Bay, Western, Gulf and Northern Provinces, SSTs ranged from 1.0 to over 2.0 degrees Celsius above normal.

For July to September, observations show that PNG experienced above average SSTs. Significant warmer SSTs over2.0 degrees Celsius are found around Western, Gulf, Central, Milne Bay, and West New Britain waters.

Sea level was above normal in September, with anomalies ranging from +150mm to +250mm for the Solomon Sea.

PNG has a 'Alert level 2' coral bleaching north of New Britain waters and a patch of 'Alert Level 1' coral bleaching in the Sepik waters.

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Part 2i. Monthly and Seasonal Outlooks for September and September to January 2023

Ocean Variable statement.

The monthly and seasonal outlook for the sea surface temperature shows above normal temperature difference of 0.4 to 2 degree celcius.

The sea level outlook shows above normal sea level difference of 30mm to 200mm for September and September to January.

The coral bleaching outlook shows a 'warning to alert level 2' status for the waters north of New Britain and patches of 'Alert Level 1' coral bleaching in the coast of sepik waters.

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

Product	Date: September 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin					
EAR Watch					
Monthly Climate Briefing					
Ocean Outlook					
Climate data request					
		Total			

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