Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 173

Country: Papua New Guinea

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Nov-2021	Dec-2021	Jan-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Momase Region							
Madang (1944-2022)				270.2	374.7	334.8	
Nadzab (1973-2022)	18.0	225.4	156.6	134.0	182.5	155.6	26/48
Wewak (1956-2022)	387.8	241.6	164.8	110.9	160.4	138.4	48/67
Vanimo (1918-2022)	287.2	308.6	674.8	213.1	340.7	282.3	71/71
Highlands Region							
Goroka (1948-2022)			195.0	194.9	266.6	225.4	21/61
New Guinea Islands Region							
Momote (1949-2022)	186.0	336.0	236.6	242.9	318.8	274.2	24/71
Kavieng (1916-2022)	162.4	348.2	334.0	256.2	358.6	315.6	47/91
Southern Region							
Misima (1917-2022)	108.4			189.7	306.4	268.0	
Port Moresby (1875-2022)	171.9	144.0	176.8	151.3	235.3	195.0	66/134

TABLE 2: Three-month Total Rainfall for November 2021 to January 2022

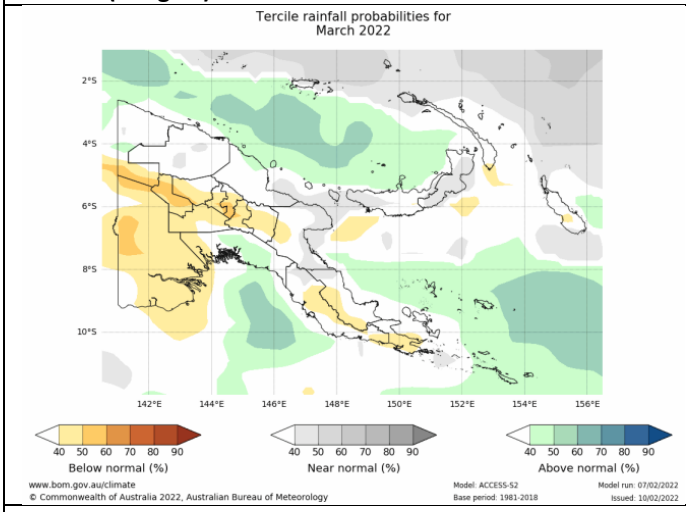
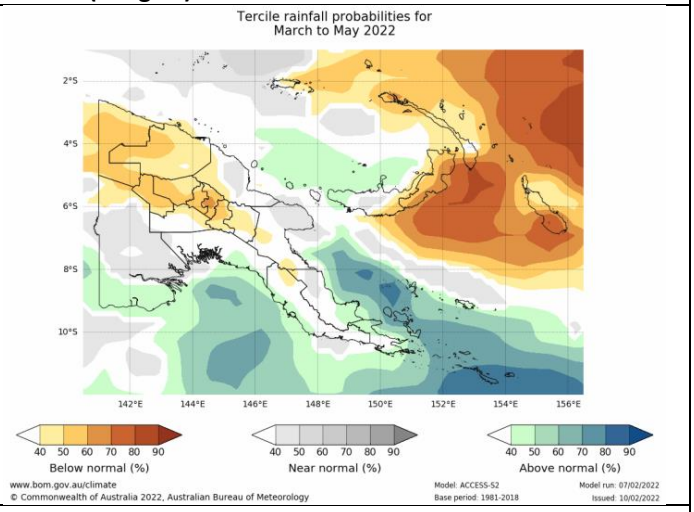
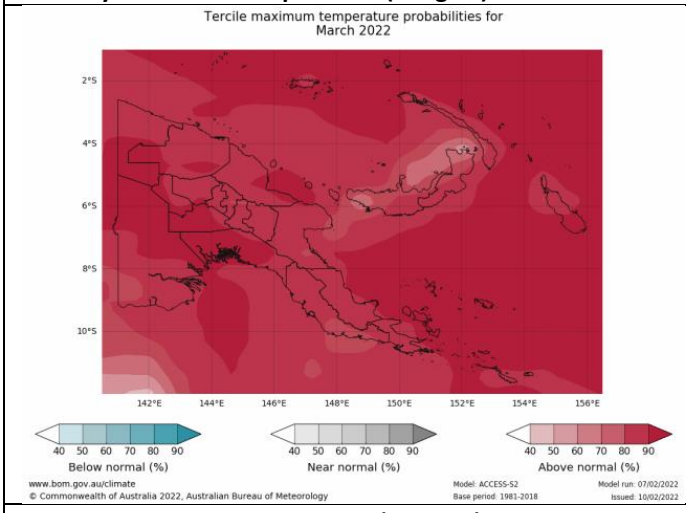
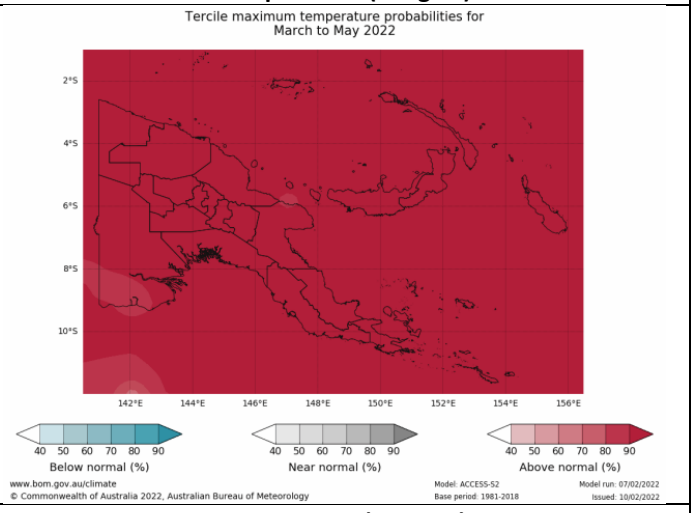
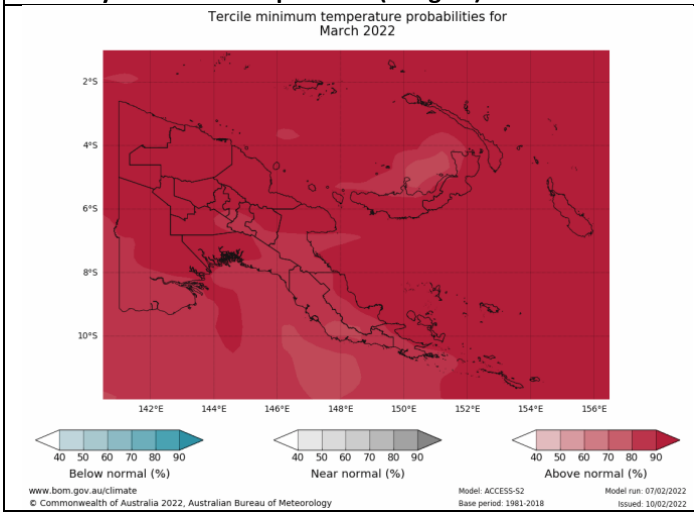
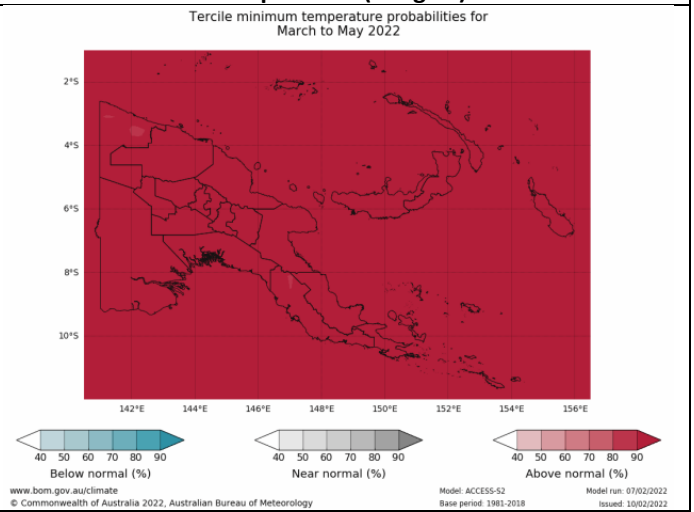
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Momase Region						
Madang (1944-2022)			953.0	1120.0	1036.4	
Nadzab (1973-2022)	400.0	Normal	318.2	471.0	405.5	22/47
Wewak (1894-2022)	794.2	Above normal	441.0	556.4	486.0	**64/65**
Vanimo (1918-2022)			674.9	841.9	737.6	
Highlands Region						
Goroka (1948-2022)			536.5	644.4	597.2	
New Guinea Islands Region						
Momote (1949-2022)	758.6	Normal	729.4	886.8	825.4	30/71
Kavieng (1917-2022)	844.6	Normal	773.9	956.8	848.6	42/89
Southern Region						
Misima (1917-2022)			602.4	748.7	672.3	
Port Moresby (1875-2022)	492.7	Above normal	339.2	478.2	402.8	100/122

NB: The X LEPS % score has been categorised as follows:

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

Part 1i. Monthly and Seasonal Outlooks for March and March to May 2022

Monthly: March	Seasonal: March to May
Rainfall (Image 1)	**Rainfall (Image 2)**
	
Monthly Maximum temperature (Image 3):	**Seasonal maximum temperature (Image 4):**
	
Monthly minimum temperature (Image 5):	**Seasonal minimum temperature (Image 6):**
	

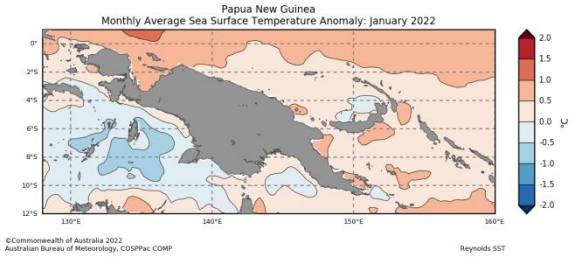
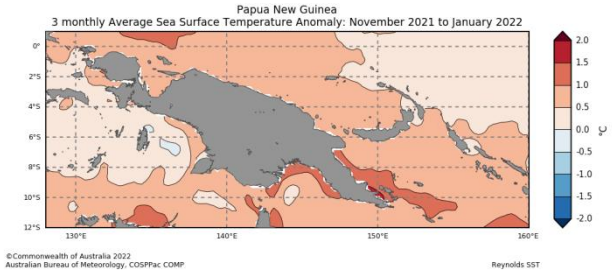
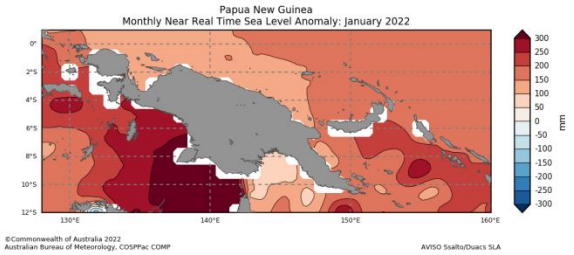
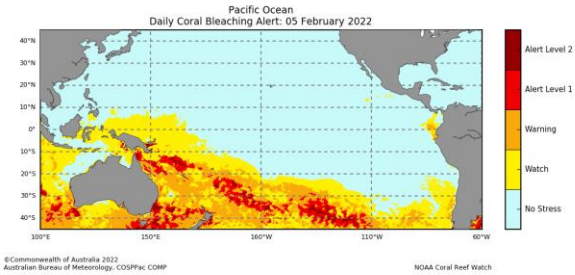
NB: The X LEPS % score has been categorised as follows:

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

Part 2: Recent Ocean summary statement

Monthly: January 2022

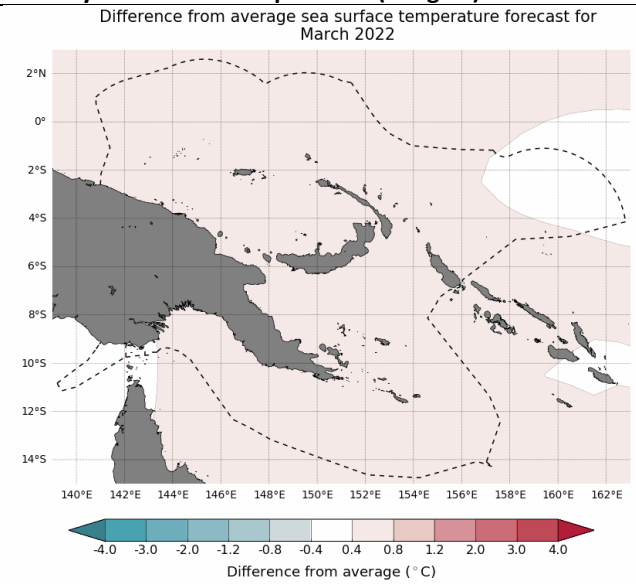
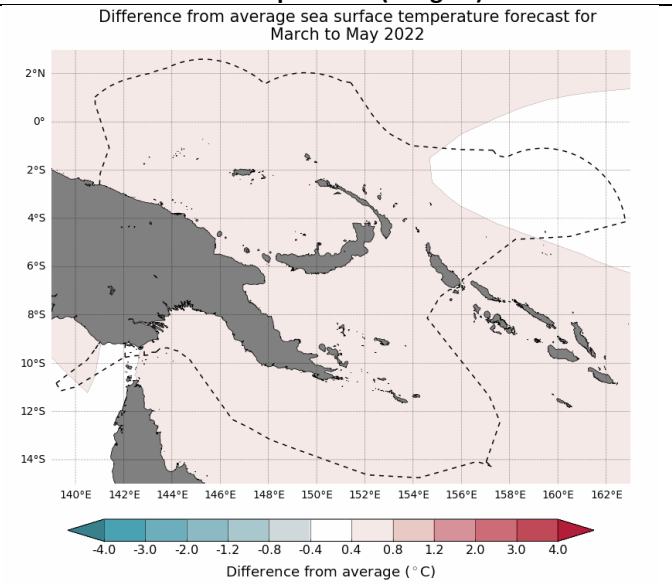
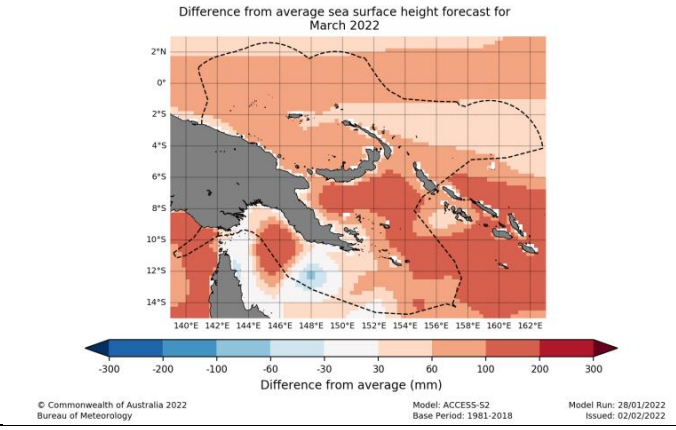
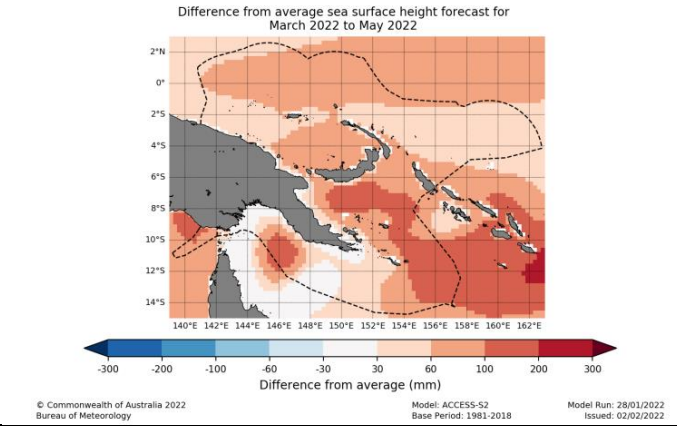
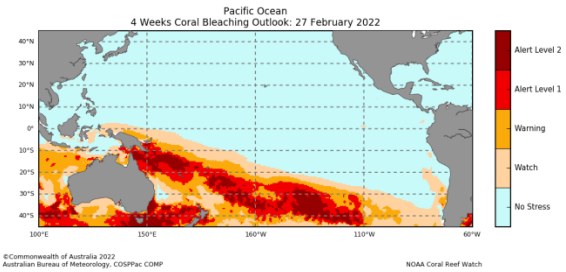
Monthly: January	**Last three months: November 2021 to January 2022:**
Sea Surface Temperature (Image 1):	**Sea Surface Temperature (Image 4):**
	
Sea level (Image 2):	
	
Daily coral bleaching alert (Image 3):	
	

NB: The X LEPS % score has been categorised as follows:

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

Part 2i. Monthly and Seasonal Outlooks for March and March to May 2022

Monthly: March	Seasonal: March to May
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):	
	

NB: The X LEPS % score has been categorised as follows:

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

Summary Statement

Monthly and last three months: January 2022/November 2021 to January 2022 statement *(Highly significant changes)*

Rainfall for January was below normal at Momote. Momase region received above normal rainfall except Nadzab with normal rainfall recorded. Goroka, Kavieng and Port Moresby also recorded normal rainfall. Vanimo received its wettest January on record.

Rainfall for the last three-months was normal at Nadzab, Momote and Kavieng, and above normal for Wewak and Port Moresby. Wewak received its 2nd wettest November to January on record.

Rainfall data is not available for Misima.

Part 1i. Monthly and Seasonal Outlooks for March and March to May 2022

Monthly /Seasonal rainfall and temperature Outlook statements *(Highly significant changes)*

The outlook for PNG for January offers little guidance except for Western, Highlands and parts of Southern and Milne Bay which are likely to be below normal. The outlook is also likely to be above normal for Milne Bay islands.

Rainfall outlooks for PNG for March to May are very likely to be below normal for Wewak, Vanimo, Highlands and the New Guinea Islands Region, and above normal for the Milne Bay Islands.

The maximum and minimum temperature outlook for PNG for March and March to May is very likely to be above normal.

Part 2: Recent Ocean summary statement

Monthly and last three months: January/November 2021 to January 2022 *(Highly significant changes)*

Most of PNG in January experienced above average SSTs with significant above normal SSTs in northern region at 0.5-1.5 degree Celsius. Below normal SSTs are also observed north of New Britain, south of the Southern Region and western side of Milne Bay in January 2022.

The sea level anomaly for PNG in January was normal to above normal, with waters ranging from 0 to 250mm above average.

PNG has a 'warning to alert level 2' coral bleaching alert status for patches around the coastlines.

Part 2i. Monthly and Seasonal Outlooks for March and March to May 2022

Ocean Variable statement *(Highly significant changes)*

The outlook across PNG shows sea surface heights are likely to be normal to above average for March and March to May. Above normal sea surface height is predicted to reach 0.1 to 0.3 meters above normal in southeastern waters.

The outlook of coral bleaching for PNG shows a 'warning to alert level 2' status for most of the south to eastern regions.

NB: The X LEPS % score has been categorised as follows:

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

Product	Date: January 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	27	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, PNG Power, Telikom, OkTedi, CASAPNG, Dept Planning, Dept Works, Datec, IPA, SMEC, IOM,	164	128	36
EAR Watch					
Monthly Climate Briefing					
Ocean Outlook					
Climate data request		Investment Promotion Authority, PSM (Engineering Consultants), EASPNG (Consultants)	5	4	1
		Total	**169**	**132**	**37**

NB: The X LEPS % score has been categorised as follows:

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