Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 183

Country: Tuvalu

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Sep-2022	Oct-2022	Nov-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2022)	99.6	18.9	29.9	93.2	206.3	148.3	**5/81**
Nui (1946-2022)	167.8	38.3	206.2	181.6	270.0	227.0	33/77
Funafuti (1933-2022)	113.2	109.9	124.7	202.3	312.8	244.4	**9/90**
Niulakita (1953-2022)	99.4	236.1	187.8	217.1	324.4	281.8	15/69

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

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Nanumea (1941-2022)	148.4	Below normal	291.7	602.8	468.0	**8/81**
Nui (1946-2022)	412.3	Below normal	483.9	698.3	592.9	17/77
Funafuti (1933-2022)	347.8	Below normal	634.9	848.8	739.2	**3/90**
Niulakita (1953-2022)	523.3	Below normal	621.6	824.2	715.9	11/69

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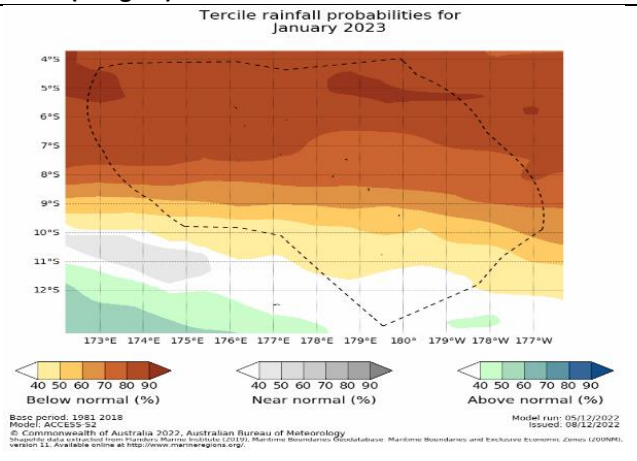
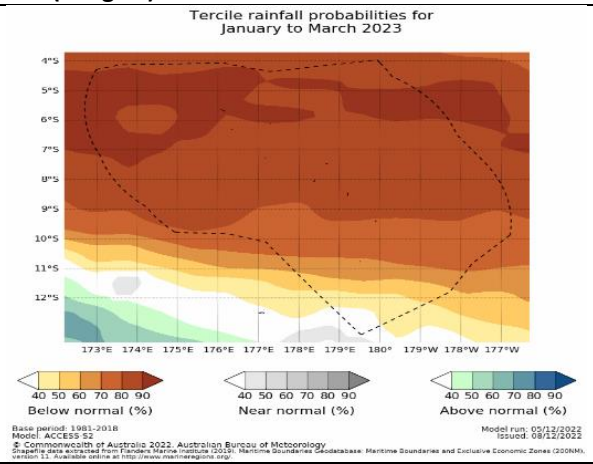
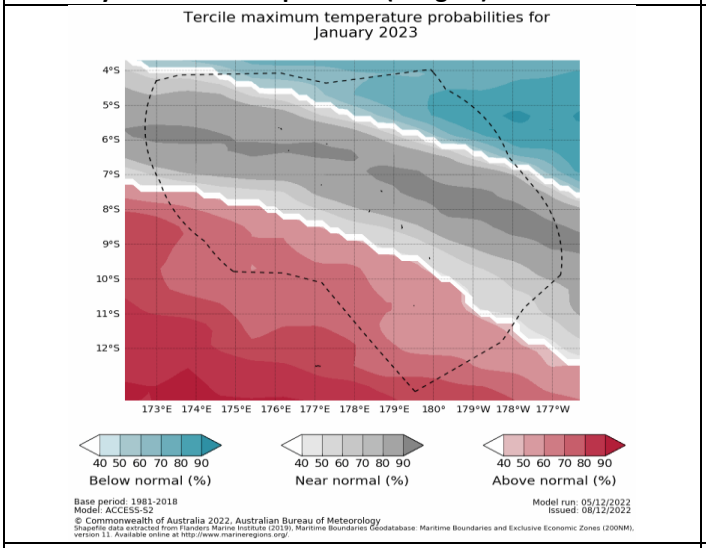
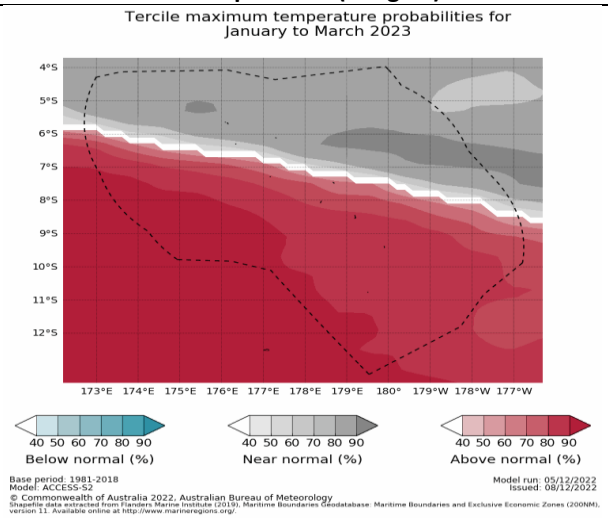
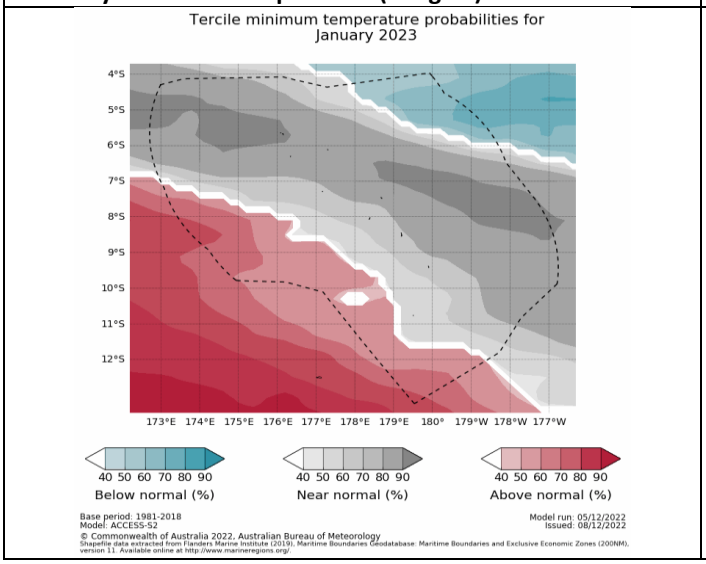
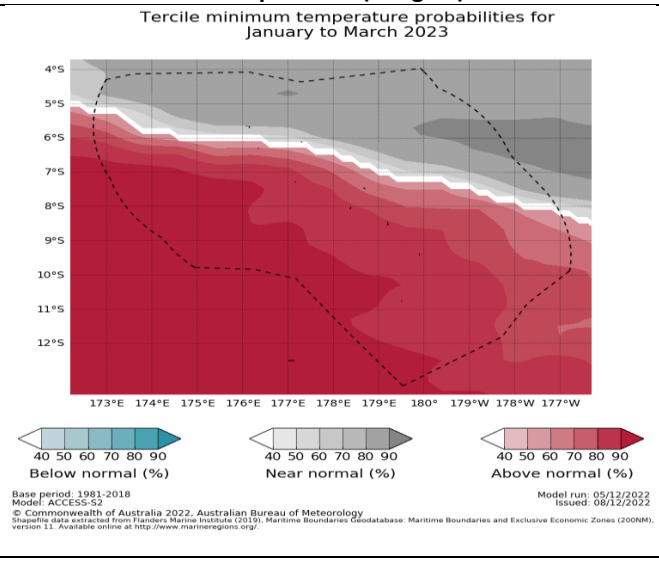
Very Low: X < 0.0 Low: 0 ≤ X < 5 Moderate 5 ≤ X < 10 Good: 10 ≤ X < 15 High: 15≤ X < 25

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

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

Monthly: January	Seasonal: January to March
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):**
	

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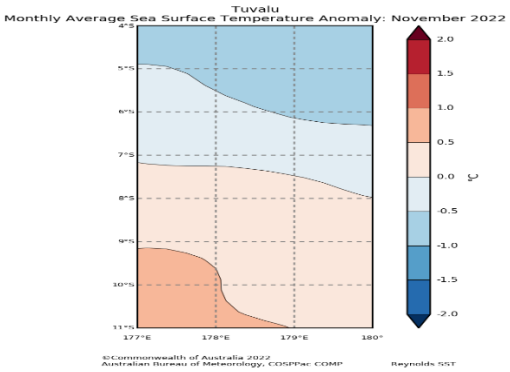
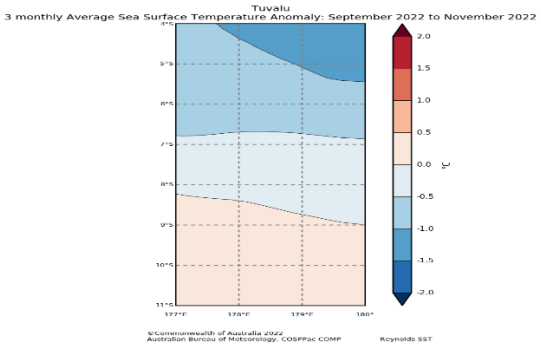
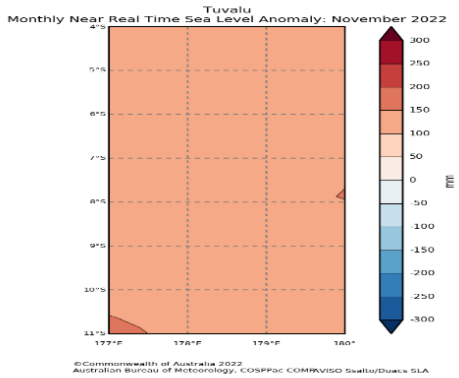
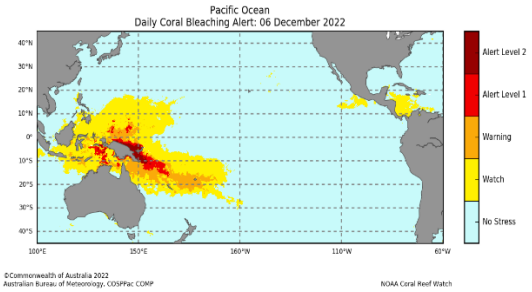
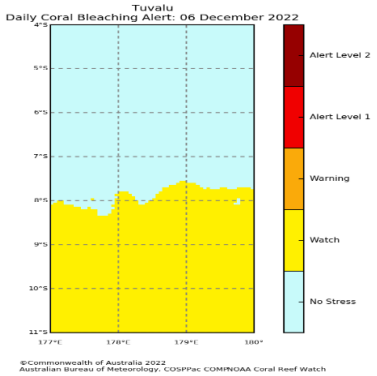
Part 2: Recent Ocean Observation

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

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

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

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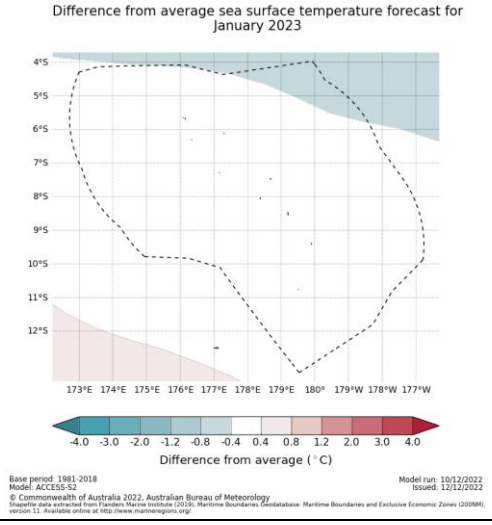
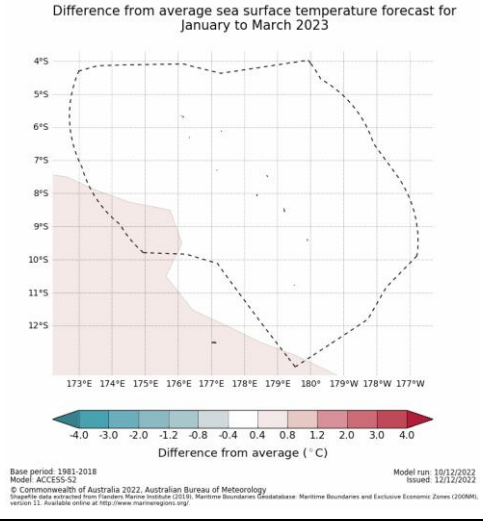
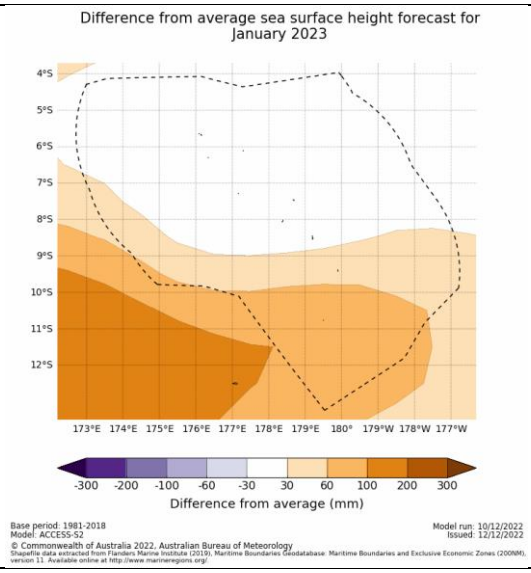
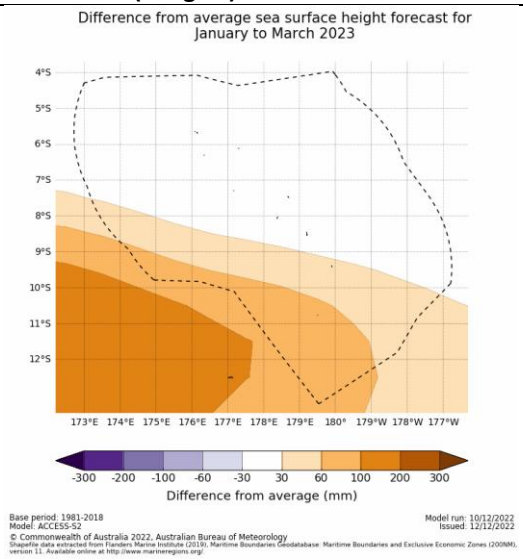
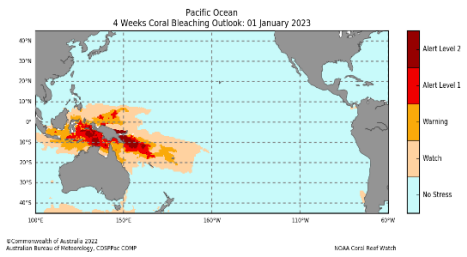
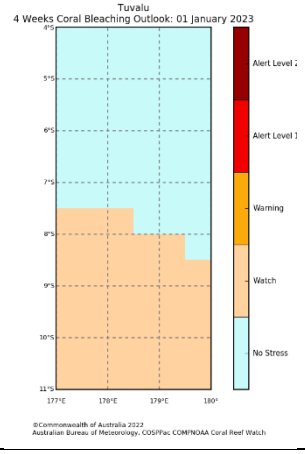
Very High: 25 ≤X < 35 Exceptional: X ≥ 35

Monthly: January	Seasonal: January to March
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):	
	

Summary Statement

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Monthly and last three months: November 2022/September to November 2022 statement

November: Below normal rainfall was observed at Nanumea, Funafuti and Niulakita, while Nui observed normal rainfall.

September to November: Below normal rainfall was observed across the whole country.

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

Monthly /Seasonal rainfall and temperature Outlook statements

Rainfall across the country from January and January to March is likely to be very likely to be below normal, especially over the northern islands.

Monthly maximum and minimum temperatures are likely or very likely to be near-normal across the country, except for maximum temperatures at Niulakita which are likely to be above normal.

Seasonal maximum and minimum temperatures are likely or very likely to be above normal over Tuvalu, except at Nanumea where temperatures are likely to be near normal.

Part 2: Recent Ocean summary statement

Monthly and last three months: November/September to November 2022

Sea surface temperatures around Tuvalu in November ranged from 0.5 to 1.0 degrees below normal in the north to 0.5 to 1.0 degrees above normal in the south. There was a similar pattern for September to November, with SSTs up to 1.5 degrees below normal in the north grading to 0.5 degrees above normal in the south. November sea level around the whole group was 100mm to 150mm above average.

Coral bleaching reveals 'Watch' status for the southern part of Tuvalu.

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

Ocean Variable statement

The monthly and seasonal sea surface temperature outlook for January and January to March, predicts near-normal differences for the whole group.

The monthly and seasonal sea level anomaly forecasts reveal near-normal sea surface height differences, except southern Tuvalu forecasted to experience above-normal sea level anomalies of utmost 100mm.

Coral bleaching outlook is on 'Watch' status for southern Tuvalu.

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Very High: $25 \leq X < 35$ Exceptional: $X \geq 35$

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

Product	Date: November 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin		MET Staffs	22	17	5
		Disaster Dept	2	2	
		TRC	2	1	1
		TuCAN	1	1	
		Agriculture	2		2
		All Civil Servants			
		All Kaupule Secretary			
EAR Watch		MET Staffs	22	17	5
		Disaster Dept	2	2	
		TRC	2	1	1
		TuCAN	1	1	
		Agriculture	2		2
		All Civil Servants			
		All Kaupule members			
Monthly Climate Briefing		MET Staffs	22	17	5
		Disaster Dept	2	2	
		TRC	2	1	1
		TuCAN	1	1	
		Agriculture	2		2
		All Civil Servants			
		All Kaupule members			
Ocean Outlook		MET Staffs	22	17	5
		Disaster Dept	2	2	
		TRC	2	1	1
		TuCAN	1	1	
		Agriculture	2		2
		All Civil Servants			
		All Kaupule members			
Climate data request	22/11/22	BOM (Zulfi)	1	1	
		Total	**117**	**85**	**32**

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