Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 190

Country: Tuvalu

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Apr-2023	May-2023	Jun-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2023)	139.4	95.4	104.2	125.9	206.9	167.9	20/80
Nui (1946-2023)	285.4	213.5	109.5	147.0	218.4	170.6	12/77
Funafuti (1933-2023)	270.5	166.7	74.1	162.3	244.2	193.8	**2/90**
Niulakita (1953-2023)	128.3	121.9	60.5	144.4	218.4	197.0	**5/69**

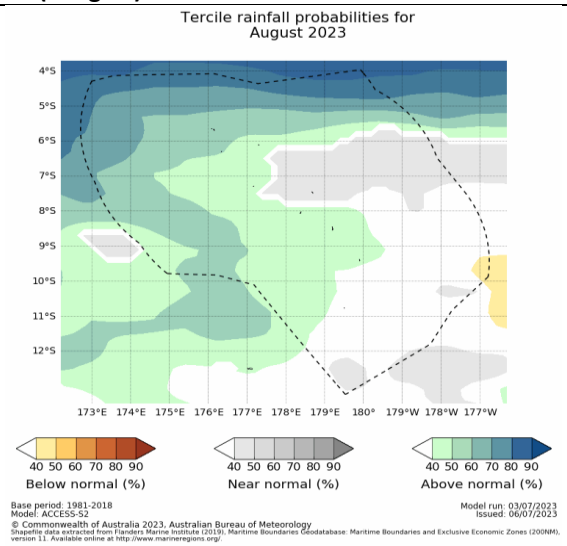
TABLE 2: Three-month Total Rainfall for April to June 2023

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Nanumea (1941-2023)	339.0	Below normal	520.9	767.0	615.0	11/83
Nui (1946-2023)	608.4	Normal	497.9	727.0	576.6	44/78
Funafuti (1933-2023)	511.3	Below normal	628.2	803.9	705.7	14/91
Niulakita (1953-2023)	310.7	Below normal	573.6	754.5	656.8	**3/71**

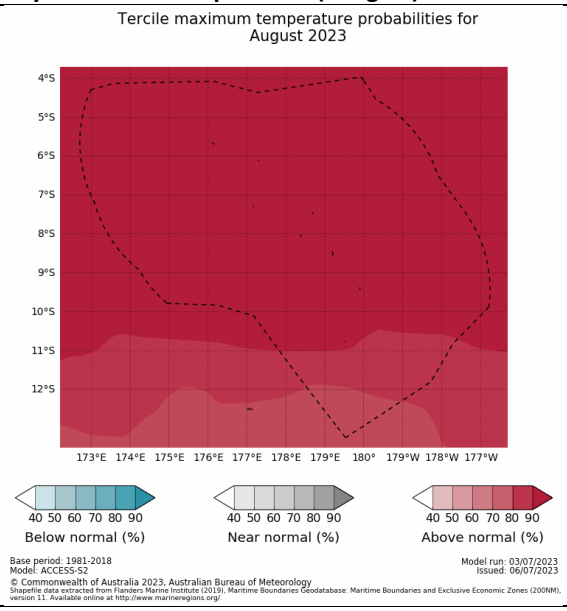
Part 1i. Monthly and Seasonal Outlooks for August and August to October 2023

Monthly: August

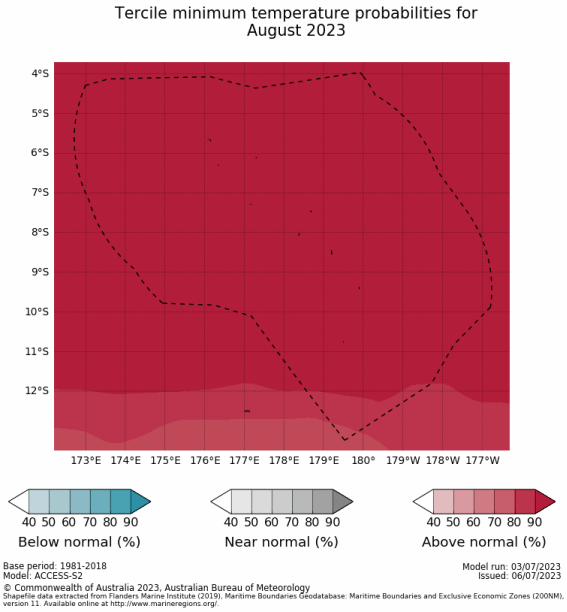
Rainfall (Image 1)



Monthly Maximum temperature (Image 3):

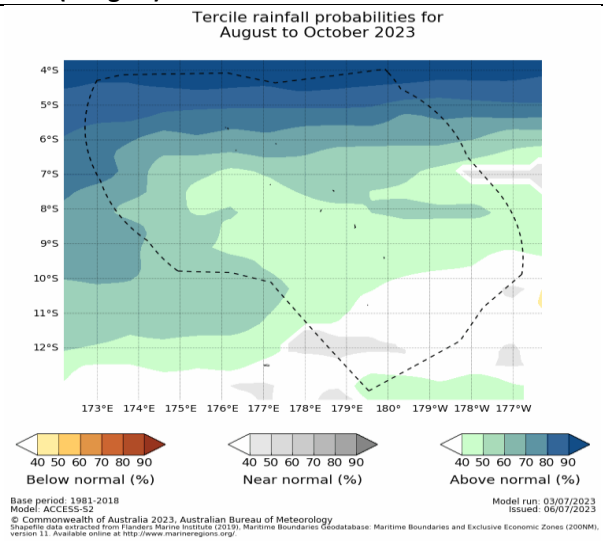


Monthly minimum temperature (Image 5):

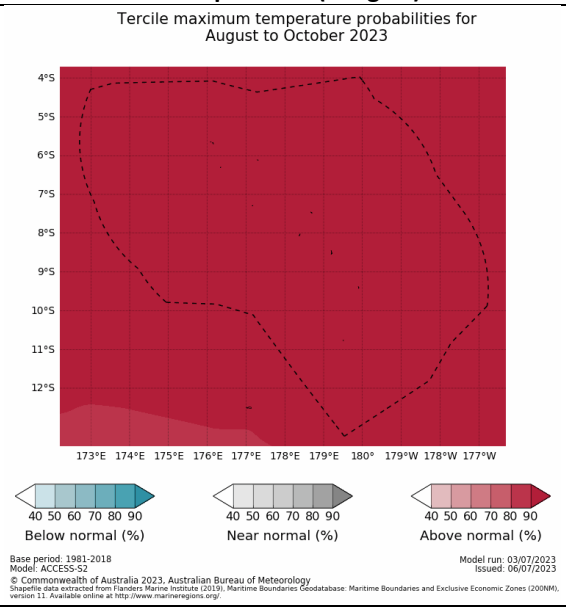


Seasonal: August to October

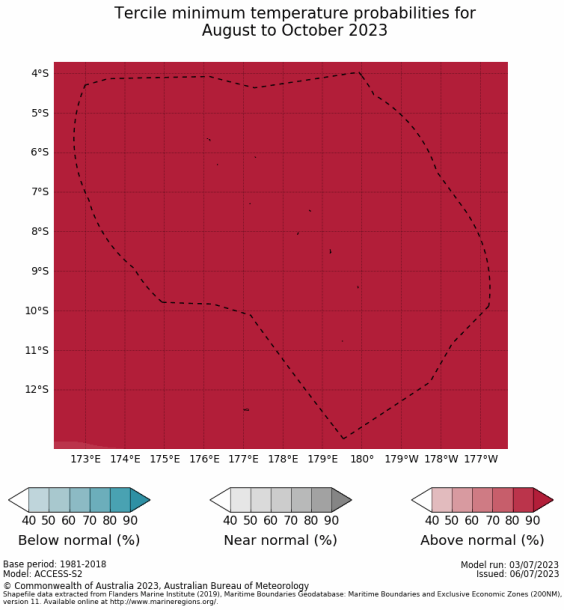
Rainfall (Image 2)



Seasonal maximum temperature (Image 4):

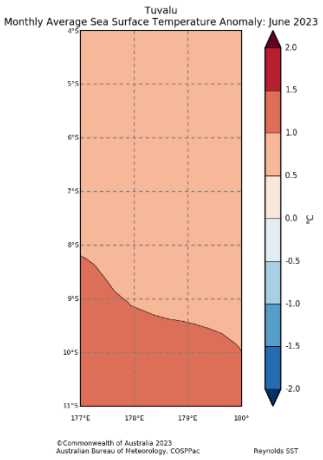
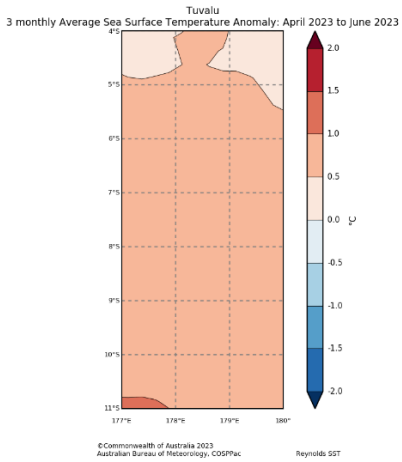
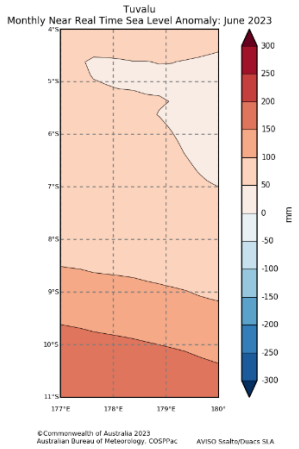
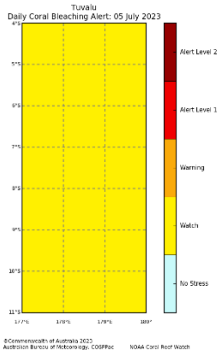
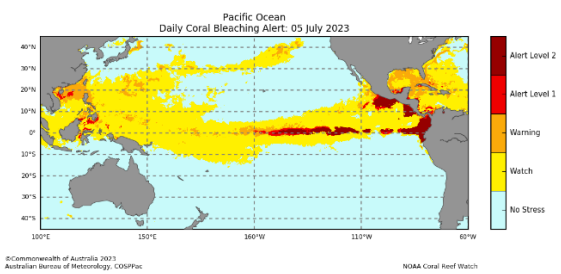


Seasonal minimum temperature (Image 6):

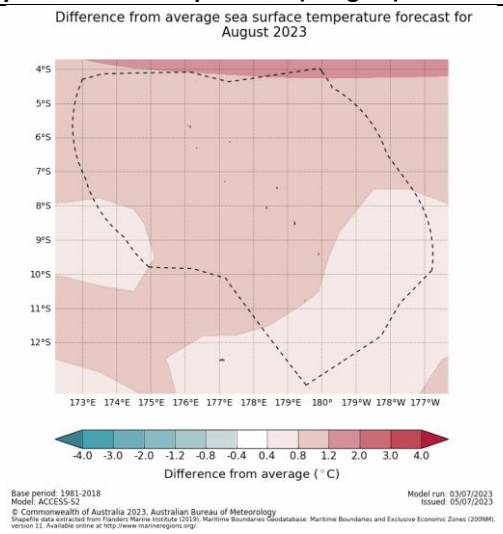
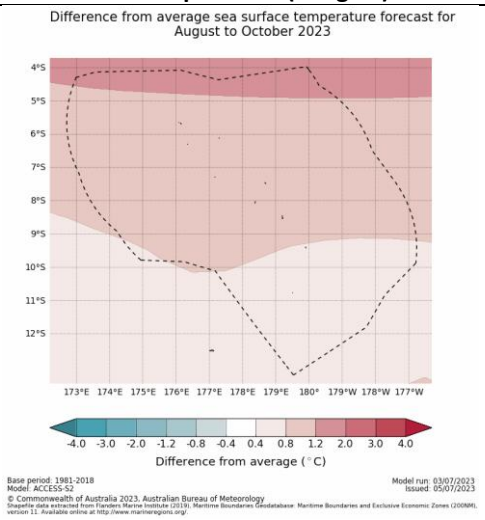
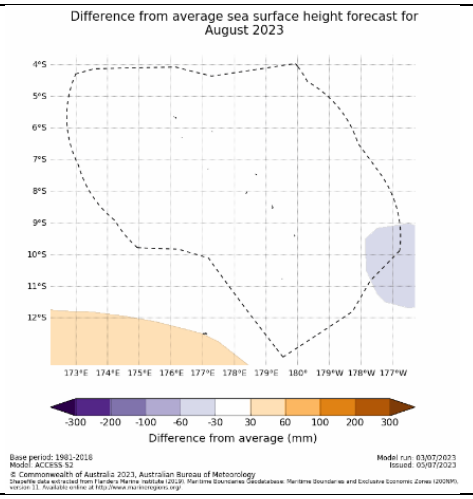
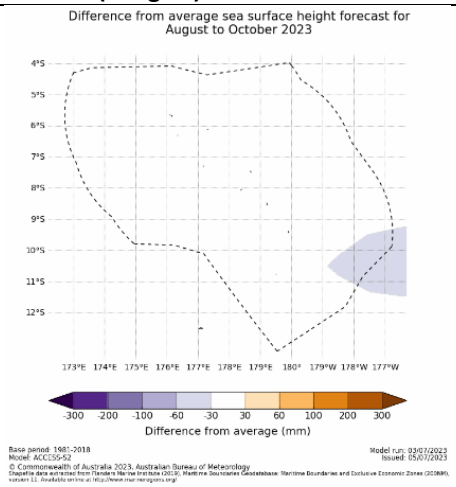
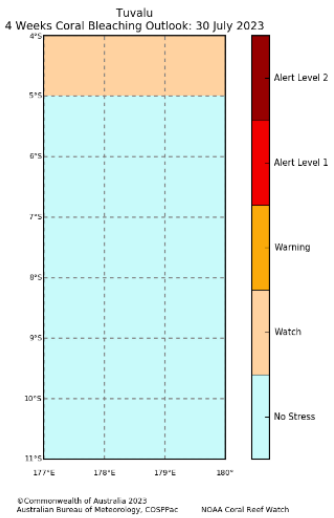
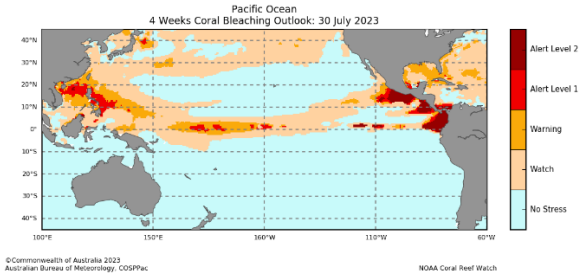


Part 2: Recent Ocean Observation

Monthly/Three months: April and April to June 2023

Monthly: June	**Last three months: April to June 2023:**
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 August and August to October 2023

Monthly: August	Seasonal: August to October
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

Monthly and last three months: June 2023/April to June 2023 statement

All stations (Nanumea, Nui, Funafuti and Niulakita) recorded below normal rainfall for the month of June. Funafuti observed it's second driest June in 90 years of record, while Niulakita recorded its fifth driest June in 69 years of record.

During the last three months, Nanumea, Funafuti, and Niulakita recorded below normal rainfall, while Nui recorded normal rainfall. Niulakita recorded its third driest April to June in 71 years of record.

Part 1i. Monthly and Seasonal Outlooks for August and August to October 2023

Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for August is likely to be above normal over Nanumea, Nanumaga, Niutao, Nui, Nukufetau, Funafuti and Nukulaelae. In Vaitupu, August's rainfall is likely to be near-normal. While the outlook offers little guidance for the Southern and Eastern part of Tuvalu's EEZ including Niulakita.

The rainfall for August to October is likely to be above normal over the northern, central and southern group of Tuvalu, except in Niulakita the outlook offers little guidance for the Southern part of Tuvalu's EEZ.

Maximum and minimum temperatures outlook for August and averaged over August to October are very likely to be above normal over Tuvalu.

Part 2: Recent Ocean summary statement

Monthly and last three months: June 2023/April to June 2023

June ocean temperatures around Northern group and Central group were 0.5 to 1.0°C above normal. In the Southwest to Southeast part of Tuvalu were 1.0 to 1.5°C above normal.

Averaged over April to June, ocean temperatures around Northern, Central and Southern part of Tuvalu were 0.5 to 1.0°C above normal.

June sea levels around the Northern and Central part were 50mm to 100mm above normal. While near normal for the Eastern part of Tuvalu. In the Southern part reveals 100mm to 200mm above normal.

Coral Bleaching reveals watch states across the country of Tuvalu.

Part 2i. Monthly and Seasonal Outlooks for August and August to October 2023

Ocean Variable statement

August ocean temperatures around Tuvalu are predicted to be 0.8 to 1.2°C above normal.

Averaged over August to October, ocean temperatures around the Northern and Central part are predicted to be 0.8 to 1.2°C above normal. While for the Southern group the ocean temperature at the Southern part of Tuvalu are predicted to be 0.4 to 0.8°C above normal.

August sea levels around Tuvalu and averaged for August to October are predicted to be near normal.

Coral Bleaching outlook for the Northern part on Watch. There is No stress in the Central and Southern part of Tuvalu for the next four weeks.

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

Product	Date: June 2023	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
Climate Bulletin (Weather Forecast- Strong Wind Warning)	3rd -11th July	MET Staff	24	13	11	
		Disaster Dept	2	2		
		TRC	2		2	
		TuCAN	1	1		
		Agriculture	2		2	
		All Civil Servants	All staff gov	7		
		All Kaupule Secretary	13		6	
EAR Watch	27th June	MET Staff	24	13	11	
		Disaster Dept	2	2		
		TRC	2		2	
		TuCAN	1	1		
		Agriculture	2		2	
		All Civil Servants	All staff gov			
		All Kaupule Secretary	13	7	6	
Monthly Climate Briefing		MET Staff	24	13	11	
		Disaster Dept	2	2		
		TRC	2		2	
		TuCAN	1	1		
		Agriculture	2		2	
		All Civil Servants	All staff gov			
		All Kaupule Secretary	13	7	6	
Ocean Outlook	27th June	MET Staff	24	13	11	
		Disaster Dept	2	2		
		TRC	2		2	
		TuCAN	1	1		
		Agriculture	2		2	
		All Civil Servants	All staff gov			
		All Kaupule Secretary	13	7	6	
Climate data request	30th June	Media	2		2	
		Total	**170**	**92**	**86**	