

Country: Tuvalu

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Jan-2024	Feb-2024	Mar-2024				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2024)	376.1	532.6	373.8	165.7	315.9	246.8	62/82
Nui (1946-2024)	210.2	594.4	391.5	219.5	336.4	257.4	64/79
Funafuti (1933-2024)	440.3	337.0	249.8	261.9	362.9	313.2	29/92
Niulakita (1953-2024)	286.3	372.5	252.4	248.7	396.3	287.4	26/72

TABLE 2: Three-month Total Rainfall for January to March 2024

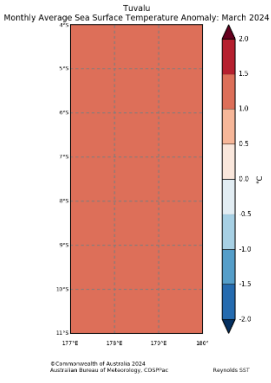
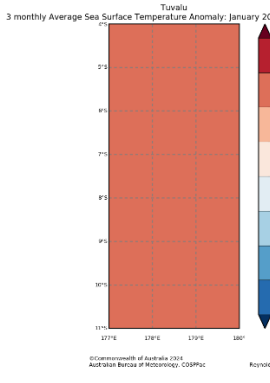
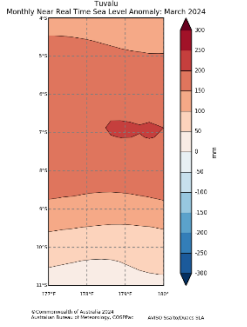
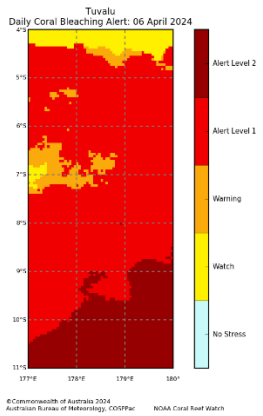
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Nanumea (1941-2024)	1282.5	Above normal	684.4	1112.8	939.3	65/82
Nui (1946-2024)	1196.1	Above normal	768.0	1087.1	963.7	61/76
Funafuti (1933-2024)	1027.1	Normal	930.5	1173.4	1068.4	40/92
Niulakita (1953-2024)	911.2	Below normal	947.9	1164.9	1067.3	23/71

Part 1i. Monthly and Seasonal Outlooks for May and May to July 2024

Monthly: May	Seasonal: May to July
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for May 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Geographic data extracted from Frontier Marine Institute (2019). Maritime Boundaries Database: Maritime Boundaries and Exclusive Economic Zones (2009M), version 11. Available online at <a href="http://www.marinegovernance.org/">http://www.marinegovernance.org/</a> Model run: 06/04/2024 Issued: 08/04/2024</p>	<p>Tercile rainfall probabilities for May to July 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Geographic data extracted from Frontier Marine Institute (2019). Maritime Boundaries Database: Maritime Boundaries and Exclusive Economic Zones (2009M), version 11. Available online at <a href="http://www.marinegovernance.org/">http://www.marinegovernance.org/</a> Model run: 06/04/2024 Issued: 08/04/2024</p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for May 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Geographic data extracted from Frontier Marine Institute (2019). Maritime Boundaries Database: Maritime Boundaries and Exclusive Economic Zones (2009M), version 11. Available online at <a href="http://www.marinegovernance.org/">http://www.marinegovernance.org/</a> Model run: 06/04/2024 Issued: 08/04/2024</p>	<p>Tercile maximum temperature probabilities for May to July 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Geographic data extracted from Frontier Marine Institute (2019). Maritime Boundaries Database: Maritime Boundaries and Exclusive Economic Zones (2009M), version 11. Available online at <a href="http://www.marinegovernance.org/">http://www.marinegovernance.org/</a> Model run: 06/04/2024 Issued: 08/04/2024</p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for May 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Geographic data extracted from Frontier Marine Institute (2019). Maritime Boundaries Database: Maritime Boundaries and Exclusive Economic Zones (2009M), version 11. Available online at <a href="http://www.marinegovernance.org/">http://www.marinegovernance.org/</a> Model run: 06/04/2024 Issued: 08/04/2024</p>	<p>Tercile minimum temperature probabilities for May to July 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Geographic data extracted from Frontier Marine Institute (2019). Maritime Boundaries Database: Maritime Boundaries and Exclusive Economic Zones (2009M), version 11. Available online at <a href="http://www.marinegovernance.org/">http://www.marinegovernance.org/</a> Model run: 06/04/2024 Issued: 08/04/2024</p>

Part 2: Recent Ocean Observation

Monthly/Three months: March 2024 and January to March 2024

<p><u>Monthly: March 2024</u></p>	<p><u>Last three months: January to March 2024:</u></p>
<p>Sea Surface Temperature (Image 1):</p>	<p>Sea Surface Temperature (Image 4):</p>
	
<p>Sea level (Image 2):</p>	
	
<p>Daily coral bleaching alert (Image 3):</p>	
	

## Part 2i. Monthly and Seasonal Outlooks for May and May to July 2024

Monthly: May	Seasonal: May to July
<h3>Monthly sea surface temperature (Image 5):</h3> <p>Difference from average sea surface temperature forecast for May 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Issued: 08/04/2024</p>	<h3>Seasonal sea surface temperature (Image 6):</h3> <p>Difference from average sea surface temperature forecast for May to July 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Issued: 08/04/2024</p>
<h3>Monthly sea level (Image 7):</h3> <p>Difference from average sea surface height forecast for May 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Issued: 08/04/2024</p>	<h3>Seasonal sea level (Image 8):</h3> <p>Difference from average sea surface height forecast for May to July 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Issued: 08/04/2024</p>
<h3>4-week Coral Bleaching (Image 9):</h3> <p>Tuvalu 4 Weeks Coral Bleaching Outlook: 28 April 2024</p> <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, CSIRO/AFRC NOAA Coral Reef Watch</p>	

## Summary Statement

### Monthly and last three months: March 2024/January to March 2024 statement

The rainfall for March was above normal over Nanumea and Nui below normal at Funafuti, and near-normal at Niulakita.

For the past three months, rainfall was above normal over Nanumea and Nui, near-normal at Funafuti, but below normal at Niulakita.

## Part 1i. Monthly and Seasonal Outlooks for May and May to July 2024

### Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for May is likely or very likely to be above normal over Tuvalu, except for the far north of the EEZ where the outlook offers little guidance.

The rainfall for May to July is likely or very likely to be above normal over Tuvalu, except for the northern regions, including Nanumea, where rainfall is likely to be near-normal.

Maximum and minimum temperatures during May and averaged over May to July are likely or very likely to be above normal over Tuvalu.

## Part 2: Recent Ocean summary statement

### Monthly and last three months: March 2024/January to March 2024

March and averaged over January to March ocean temperatures around Tuvalu were 1.0 to 1.5°C above normal.

March sea levels around the group were up to 200mm above normal, except for the far Southern side of Tuvalu EEZ, sea levels were near normal.

Coral Bleaching Alert shows Alert Level 1 for most places except for an Alert Level 2 in the southern most part of the EEZ.

## Part 2i. Monthly and Seasonal Outlooks for May and May to July 2024

### Ocean Variable statement

May ocean temperatures around Northern group and Central group are predicted to be 1.2 to 2.0°C above normal. Elsewhere are predicted to be 0.4 to 1.2°C above normal. Averaged over May to July, ocean temperatures around Tuvalu are predicted to be 0.4 to 1.2°C above normal. May sea levels around Northern group and Central group including Funafuti and Niulakita are predicted to be near normal, while Nui and Funafuti are predicted to be 30 to 60mm above normal. But for the Far Southern side of Tuvalu EEZ including Niulakita are predicted to be below normal.

Averaged over May to July, sea levels around Tuvalu are predicted to be -30 to 30mm near normal, except Niulakita are predicted to be below normal.

Coral Bleaching Outlook predicted to be Alert Level 1 to Alert Level 2 over Tuvalu.

## IN BRIEF for Teleconference

- Rainfall was normal and below normal for March and March to May, except Nanumea and Nui where rainfall was above normal for both periods.
- The rainfall outlook generally indicates above normal most likely in May and May to July.
- Maximum and Minimum temperature for March and March to May are predicted to be above normal.
- SSTs were above normal for March and January to March. The outlook shows above normal SSTs for the next one and three months.
- Sea-surface heights (SSHs) were above normal for March and January to March around Tuvalu. Near-normal sea surface heights for Northern group and Central group except Nui and Vaitupu are predicted to be above normal and below normal at Southern group are predicted for May. Above normal SSH are predicted for May to July.
- Coral Bleaching Alert and Outlook predicts Alert Level 1 to Alert Level 2 for Tuvalu open waters.

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

Product	Date: March 2024	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
Climate Bulletin	23/03/24	MET Staff	24	13	11	
		Disaster Dept	2	1	1	
		TRC	2	2		
		TuCAN	1		1	
		Agriculture	1		1	
		All Civil Servants	All			
		All-Kaupule Secretary	13	7	6	
EAR Watch	23/03/24	MET Staff	24	13	11	
		Disaster Dept	2	1	1	
		TRC	2	2		
		TuCAN	1		1	
		Agriculture	1		1	
		All Civil Servants	All			
		All-Kaupule Secretary	13	7	6	
Monthly Climate Briefing	23/03/24	MET Staff	24	13	11	
		Disaster Dept	2	1	1	
		TRC	2	2		
		TuCAN	1		1	
		Agriculture	1		1	
		All Civil Servants	All			
		All-Kaupule Secretary	13	7	6	
Ocean Outlook	23/03/24	MET Staff	24	13	11	
		Disaster Dept	2	1	1	

		TRC	2	2		
		TuCAN	1		1	
		Agriculture	1		1	
		All Civil Servants	All			
		All-Kaupule	13	7	6	
		Secretary				
Rainfall & Ocean Outlook Vidéo Platform Via Social Media	25/03/24	Met Staff	24	13	11	Like : 49
		Disaster Dept	1		1	Share : 11
		Agriculture	1	1		
		Fisheries	2	2		
		Kaupule Secretary	13	7	6	
Climate data request						
<b>Total</b>			<b>213</b>	<b>115</b>	<b>98</b>	