

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 206

Country: Tuvalu

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Aug-2024	Sep-2024	Oct-2024				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2024)	191.5	329.4	103.8	89.6	197.7	140.7	32/82
Nui (1946-2024)	291.5	309.8	87.0	144.3	217.3	182.0	8/79
Funafuti (1933-2024)	502.6	356.0	285.2	203.3	292.9	260.4	56/92
Niulakita (1953-2024)	307.2	390.5	215.6	211.2	312.4	260.0	27/71

TABLE 2: Three-month Total Rainfall for August to October 2024

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Nanumea (1941-2024)	624.7	Above normal	341.0	614.4	505.0	59/82
Nui (1946-2024)	688.3	Above normal	497.8	672.8	564.7	53/79
Funafuti (1933-2024)	1143.8	Above normal	609.3	798.9	680.4	83/92
Niulakita (1953-2024)	913.3	Above normal	580.5	829.2	704.3	54/72

Part 1i. Monthly and Seasonal Outlooks for December and December to February 2025

Monthly: December	Seasonal: December to February
<p>Rainfall (Image 1)</p> <p>Tercile rainfall probabilities for December 2024 Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/11/2024 Issued: 07/11/2024</p> <p>© Commonwealth of Australia 2024. Bureau of Meteorology, supported by COSPPac</p> <p>176°E 177°E 178°E 179°E 180°</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>-- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p>Rainfall (Image 2)</p> <p>Tercile rainfall probabilities for December 2024 to February 2025 Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/11/2024 Issued: 07/11/2024</p> <p>© Commonwealth of Australia 2024. Bureau of Meteorology, supported by COSPPac</p> <p>176°E 177°E 178°E 179°E 180°</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>-- EEZ border V11 (Flanders Marine Institute, 2019).</p>
<p>Monthly Maximum temperature (Image 3):</p> <p>Tercile maximum temperature probabilities for December 2024 Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/11/2024 Issued: 07/11/2024</p> <p>© Commonwealth of Australia 2024. Bureau of Meteorology, supported by COSPPac</p> <p>176°E 177°E 178°E 180°</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>-- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p>Seasonal maximum temperature (Image 4):</p> <p>Tercile maximum temperature probabilities for December 2024 to February 2025 Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/11/2024 Issued: 07/11/2024</p> <p>© Commonwealth of Australia 2024. Bureau of Meteorology, supported by COSPPac</p> <p>176°E 177°E 178°E 180°</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>-- EEZ border V11 (Flanders Marine Institute, 2019).</p>
<p>Monthly minimum temperature (Image 5):</p> <p>Tercile minimum temperature probabilities for December 2024 Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/11/2024 Issued: 07/11/2024</p> <p>© Commonwealth of Australia 2024. Bureau of Meteorology, supported by COSPPac</p> <p>176°E 177°E 178°E 179°E 180°</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>-- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p>Seasonal minimum temperature (Image 6):</p> <p>Tercile minimum temperature probabilities for December 2024 to February 2025 Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/11/2024 Issued: 07/11/2024</p> <p>© Commonwealth of Australia 2024. Bureau of Meteorology, supported by COSPPac</p> <p>176°E 177°E 178°E 179°E 180°</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>-- EEZ border V11 (Flanders Marine Institute, 2019).</p>

Part 2: Recent Ocean Observation

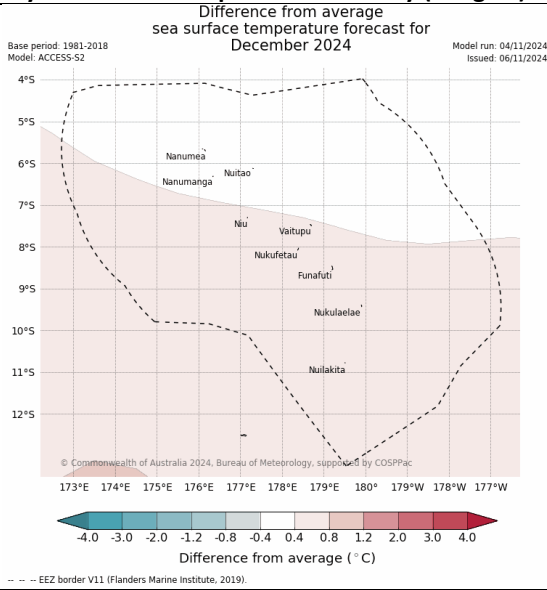
Monthly/Three months: October 2024 and August to October 2024

Monthly: October 2024	Last three months: August to October 2024:
<p>Sea Surface Temperature Anomaly (Image 1):</p> <p>Tuvalu Monthly Average Sea Surface Temperature Anomaly: October 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac Reynolds SST</p>	<p>Sea Surface Temperature Anomaly (Image 4):</p> <p>Tuvalu 3 monthly Average Sea Surface Temperature Anomaly: August 2024 to October 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac Reynolds SST</p>
<p>Sea level anomaly (Image 2):</p> <p>Tuvalu Monthly Near Real Time Sea Level Anomaly: October 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac AVISO SeaLevelDuoaa SLA</p>	
<p>Daily coral bleaching alert (Image 3):</p> <p>Tuvalu Daily Coral Bleaching Alert: 03 November 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac NOAA Coral Reef Watch</p>	<p>Pacific Ocean Daily Coral Bleaching Alert: 03 November 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac NOAA Coral Reef Watch</p>

Part 2i. Monthly and Seasonal Outlooks for December and December to February 2025

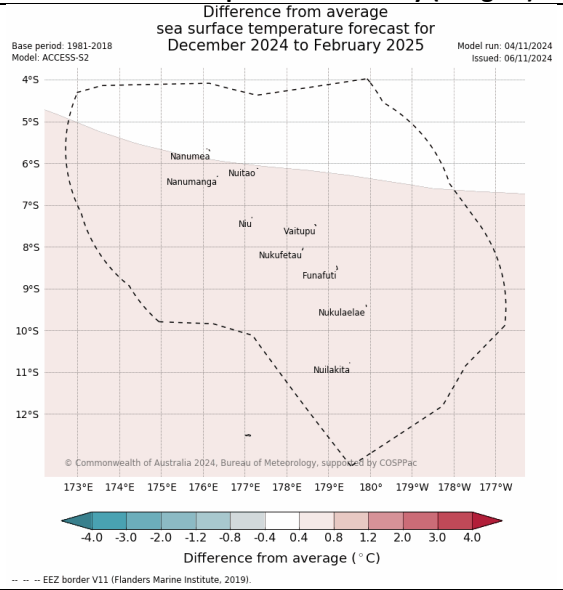
Monthly: December

Monthly sea surface temperature anomaly (Image 5):

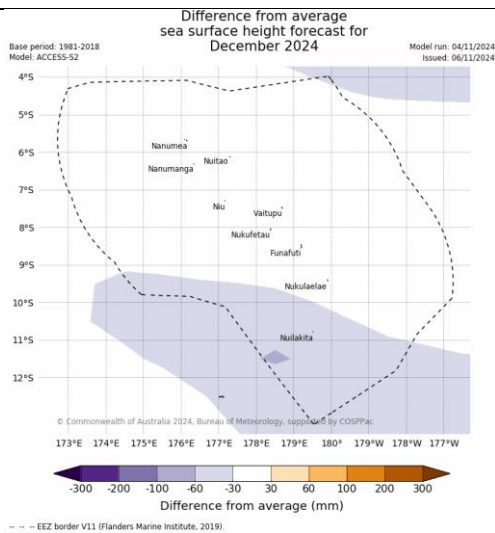


Seasonal: December to February

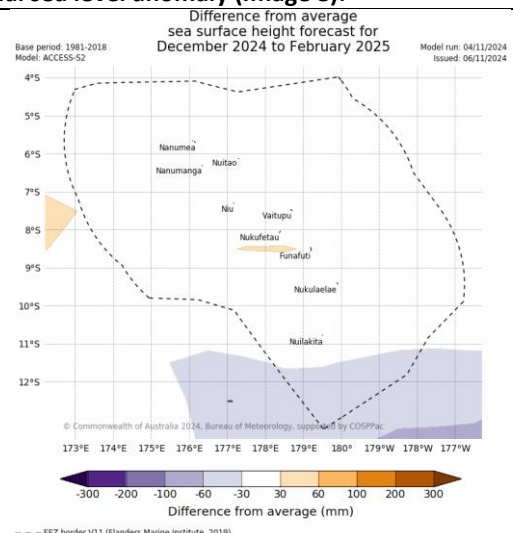
Seasonal sea surface temperature anomaly (Image 6):



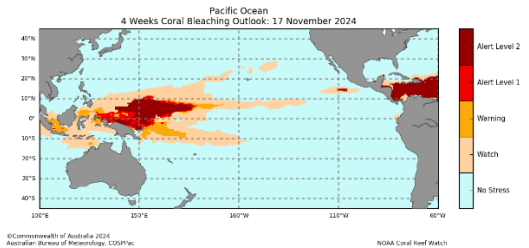
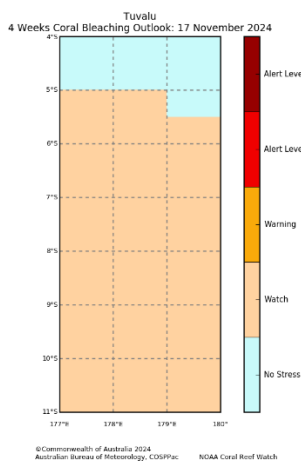
Monthly sea level anomaly (Image 7):



Seasonal sea level anomaly (Image 8):



4-week Coral Bleaching (Image 9):



Summary Statement

Monthly and last three months: October 2024/August to October 2024 statement

The rainfall for October was near normal over Nanumea, Funafuti, and Niulakita, while Nui recorded below normal rainfall.

For the past three months, rainfall was above normal over Tuvalu. Funafuti recorded its tenth wettest August to October periods in 92 years of record.

Part 1i. Monthly and Seasonal Outlooks for December and December to February 2025

Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for December and December to February 2025 is very likely to be below normal over the northern and central Tuvalu, while below normal is likely for southern Tuvalu.

Maximum and minimum temperatures during December 2024 and December to February 2025 are very likely to be above normal over most of Tuvalu. Near normal temperatures is likely for the northernmost part of the country.

Part 2: Recent Ocean summary statement

Monthly and last three months: October 2024/August to October 2024

October sea surface temperatures (SSTs) around Tuvalu were utmost 1.0°C above normal.

Averaged over August to October, sea surface temperatures around Tuvalu were 0.5 to 1.0°C above normal.

October sea levels around the Northern were 100 to 500mm above normal, while the Central group was 50 to 100mm above normal, and near normal in the Southern group of Tuvalu.

A coral bleaching Alert is on Watch across the country.

Part 2i. Monthly and Seasonal Outlooks for December and December to February 2025

Ocean Variable statement

December Sea surface temperatures around the Northern groups are predicted to be 0.4 to -0.4°C near normal. The central and southern groups are predicted to be 0.8 to 1.2 above normal.

Averaged over December to February, sea surface temperatures around Tuvalu are predicted to be 0.8 to 1.2°C above normal, except the Northeast side is predicted to be near normal.

December sea levels around Tuvalu are predicted to be 30mm to -30mm near-normal except Niulakita is expected to be below normal.

Averaged over December to February, sea levels around Tuvalu are predicted to be 30 to -30mm near normal.

Coral Bleaching outlook indicates on Watch over Tuvalu.

IN BRIEF for Teleconference

- Rainfall was generally near-normal for October and above normal August to October period.
- The rainfall outlook generally indicates below average most likely in December and December to February 2025.
- SSTs were above normal for October and August to October. The outlook shows near-normal to above-normal SSTs for the next one and three months.
- Sea levels were near normal to above normal for October. Near-normal sea levels are predicted for December and December to January.

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

Product	Date: October 2024	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
Climate Bulletin	26/10/24	MET Staff	30	18	12	
		Disaster Dept	2	1	1	
		TRC	2	1	1	
		TuCAN	1	1	1	
		Agriculture	3	1	2	
		Head Quarter	14	10	4	
		(PWIDW)	1	1		
		All-Island	1	1		
		Council	2	1	1	
		Permanent Sec	2	2		
		Gov	2	1		
		Fisheries Dept	1	1		
		Health Dept	1	1		
		TEC Dept	2	1	1	
		Environment	1	1		
		Climate- Change	1	1		
		Tuvalu- Maritime School	1			
EAR Watch	26/10/24	MET Staff	30	18	12	
		Disaster Dept	2	1	1	
		TRC	2	1	1	
		TuCAN	1	1	1	
		Agriculture	3	1	2	
		Head Quarter	2	10	4	
		(PWIDW)	14	1		
		All-Island	1	1		
		Council	2	1	1	

		Permanent Sec Gov	1 2	2 1		
		Fisheries Dept	1	1		
		Health Dept	1	1		
		TEC Dept	2	1	1	
		Environment	1	1		
		Climate- Change	1	1		
		Tuvalu- Maritime School	1			
Monthly Climate Briefing	26/10/24	Climate Section	4	2	2	
		Forecast Section	2	2		
Ocean Outlook	26/10/24	MET Staff	30	18	12	
		Disaster Dept	2	1	1	
		TRC	2	1	1	
		TuCAN	1	1	1	
		Agriculture	3	1	2	
		Head Quarter (PWIDW)	2 14	10 1	4	
		All-Island Council	1 2	1 1	1	
		Permanent Sec Gov	1 2	2 1		
		Fisheries Dept	1	1		
		Health Dept	1	1		
		TEC Dept	2	1	1	
		Environment	1	1		
		Climate- Change	1	1		
		Tuvalu- Maritime School	1			
Climate data request						
Total			204	133	71	