

Country: Tonga

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Jul-2025	Aug-2025	Sep-2025				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Northern Division							
Niuafo'ou (1971-2025)	57.0	67.5	112.5	79.6	156.0	104.5	28/53
Niuatoputapu (1947-2025)	72.0	7.0	102.3	53.0	133.7	100.5	39/76
Central Division							
Vava'u (1947-2025)	127.1	19.6	112.3	79.7	169.0	110.6	41/79
Ha'apai (1947-2025)	77.4	59.8	65.1	57.3	116.9	91.0	31/79
Southern Division							
Fua'amotu (1979-2025)	83.6	225.2	20.3	80.7	130.3	102.0	3/46
Nuku'alofa (1944-2025)	54.0	208.5	37.0	75.0	143.7	103.0	9/81

TABLE 2: Three-month Total Rainfall for July to September 2025

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Northern Division						
Niuafo'ou (1971-2025)	237.0	Below normal	257.2	416.9	340.0	13/52
Niuatoputapu (1947-2025)	181.3	Below normal	214.7	354.3	289.8	20/76
Central Division						
Vava'u (1947-2025)	259.0	Normal	258.3	402.7	345.0	27/79
Ha'apai (1947-2025)	202.3	Below normal	231.0	345.3	289.0	23/79
Southern Division						
Fua'amotu (1979-2025)	329.1	Normal	261.7	414.3	340.5	22/46
Nuku'alofa (1944-2025)	299.5	Normal	273.3	368.1	323.7	35/81

Part 1i. Monthly and Seasonal Outlooks for November and November to January 2026

Monthly: November	Seasonal: November to January
Rainfall (Image 1)	Rainfall (Image 2)
Tercile rainfall probabilities for November 2025 Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/10/2025 Issued: 06/10/2025 © Commonwealth of Australia 2025. Bureau of Meteorology, supported by COSPPac 177°W 176°W 175°W 174°W 173°W Below normal (%) Near normal (%) Above normal (%) -- EEZ border V11 (Flanders Marine Institute, 2019).	Tercile rainfall probabilities for November 2025 to January 2026 Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/10/2025 Issued: 06/10/2025 © Commonwealth of Australia 2025. Bureau of Meteorology, supported by COSPPac 177°W 176°W 175°W 174°W 173°W Below normal (%) Near normal (%) Above normal (%) -- EEZ border V11 (Flanders Marine Institute, 2019).
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
Tercile maximum temperature probabilities for November 2025 Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/10/2025 Issued: 06/10/2025 © Commonwealth of Australia 2025. Bureau of Meteorology, supported by COSPPac 177°W 176°W 175°W 174°W 173°W Below normal (%) Near normal (%) Above normal (%) -- EEZ border V11 (Flanders Marine Institute, 2019).	Tercile maximum temperature probabilities for November 2025 to January 2026 Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/10/2025 Issued: 06/10/2025 © Commonwealth of Australia 2025. Bureau of Meteorology, supported by COSPPac 177°W 176°W 175°W 174°W 173°W Below normal (%) Near normal (%) Above normal (%) -- EEZ border V11 (Flanders Marine Institute, 2019).
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
Tercile minimum temperature probabilities for November 2025 Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/10/2025 Issued: 06/10/2025 © Commonwealth of Australia 2025. Bureau of Meteorology, supported by COSPPac 177°W 176°W 175°W 174°W 173°W Below normal (%) Near normal (%) Above normal (%) -- EEZ border V11 (Flanders Marine Institute, 2019).	Tercile minimum temperature probabilities for November 2025 to January 2026 Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/10/2025 Issued: 06/10/2025 © Commonwealth of Australia 2025. Bureau of Meteorology, supported by COSPPac 177°W 176°W 175°W 174°W 173°W Below normal (%) Near normal (%) Above normal (%) -- EEZ border V11 (Flanders Marine Institute, 2019).

Part 2: Recent Ocean Observation

Monthly/Three months: September and July to September 2025

Monthly: September 2025		Last three months: July to September 2025:	
Sea Surface Temperature Anomaly (Image 1):		Sea Surface Temperature Anomaly (Image 4):	
Tonga Monthly Sea Surface Temperature Anomalies: September 2025 © Pacific Community (SPC) 2025 Reynolds		Tonga Seasonal Sea Surface Temperature Anomalies : Jul 2025 - Sep 2025 © Pacific Community (SPC) 2025 Reynolds	
Sea level anomaly (Image 2):			
Tonga Monthly Sea Level Anomaly: September 2025 © Pacific Community (SPC) 2025 Reynolds			
National daily coral bleaching alert (Image 3):		Pacific daily coral bleaching alert (Image 3):	
Tonga Coral Bleaching Alert: 3 October 2025 © Pacific Community (SPC) 2025 NOAA		Pacific Islands Coral Bleaching Alert: 3 October 2025 © Pacific Community (SPC) 2025 NOAA	

Part 2i. Monthly and Seasonal Outlooks for November and November to January 2026

Monthly: November	Seasonal: November to January
Monthly sea surface temperature anomaly (Image 5):	Seasonal sea surface temperature anomaly (Image 6):
Difference from average sea surface temperature forecast for November 2025 Base period: 1981-2018 Model: ACCESS-S2 Model run: 06/10/2025 Issued: 08/10/2025 © Commonwealth of Australia 2025, Bureau of Meteorology, supported by COSPPac --- EEZ border V11 (Flanders Marine Institute, 2019).	Difference from average sea surface temperature forecast for November 2025 to January 2026 Base period: 1981-2018 Model: ACCESS-S2 Model run: 06/10/2025 Issued: 08/10/2025 © Commonwealth of Australia 2025, Bureau of Meteorology, supported by COSPPac --- EEZ border V11 (Flanders Marine Institute, 2019).
Monthly sea level anomaly (Image 7):	Seasonal sea level anomaly (Image 8):
Difference from average sea surface height forecast for November 2025 Base period: 1981-2018 Model: ACCESS-S2 Model run: 06/10/2025 Issued: 08/10/2025 © Commonwealth of Australia 2025, Bureau of Meteorology, supported by COSPPac --- EEZ border V11 (Flanders Marine Institute, 2019).	Difference from average sea surface height forecast for November 2025 to January 2026 Base period: 1981-2018 Model: ACCESS-S2 Model run: 06/10/2025 Issued: 08/10/2025 © Commonwealth of Australia 2025, Bureau of Meteorology, supported by COSPPac --- EEZ border V11 (Flanders Marine Institute, 2019).
National 4-week Coral Bleaching Outlook (Image 9):	Pacific 4-week Coral Bleaching Outlook (Image 9):
Tonga 4 Week Coral Bleaching Outlook: 27 October 2025 © Pacific Community (SPC) 2025 NOAA	Pacific Islands 4 Week Coral Bleaching Outlook: 27 October 2025 © Pacific Community (SPC) 2025 NOAA

Summary Statement

Monthly and last three months: September 2025/July to September 2025 statement

The rainfall for September was normal over Niufo’ou, Niuatoputapu, Vava’u and Ha’apai, below normal over Fua’amotu and Nuku’alofa. Fua’amotu recorded its third lowest September rainfall and Nuku’alofa was its ninth lowest rainfall recorded in September.

For the past three months, rainfall was below-normal over Niufo’ou, Niuatoputapu and Ha’apai, normal over Vava’u, Fua’amotu and Nuku’alofa.

Part 1i. Monthly and Seasonal Outlooks for November and November to January 2026

Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for November is very likely to be above normal over Tongatapu, Ha'apai, Vava'u. In Niuafo'ou and Niuatoputapu the outlook shows November's rainfall is likely to be near normal.

The rainfall for November to January is very likely to be above normal over most of the country.

Maximum and minimum temperatures during November and November to January are very likely to be above normal over most of the country.

Part 2: Recent Ocean summary statement

Monthly and last three months: September 2025/July to September 2025

September sea surface temperatures (SSTs) around Tonga were -0.4 to 0.8°C near normal.

Averaged over July to September, sea surface temperatures around Tonga were 0.4 to 0.8°C near normal.

September sea levels around Tonga were 30 to 200mm above normal.

A coral bleaching is at no stress level for Tonga.

Part 2i. Monthly and Seasonal Outlooks for November and November to January 2026

Ocean Variable statement

November sea surface temperatures around Tonga are predicted to be -0.4 to 0.8°C normal.

Averaged over November to January, sea surface temperatures around Tonga are predicted to be 0.4 to 0.8°C normal.

November and averaged over November to January sea levels around Tonga are predicted to be -30 to 100mm below normal.

Coral Bleaching outlook indicates no stress status for the next 4 weeks.

In brief for Teleconference

- Rainfall was near-normal to below normal for Tonga in September and July to September.
- The rainfall outlook generally indicates above normal to be most likely in November but and for total rainfall over November to January.
- SSTs were near normal for September and July to September. The outlook shows near normal SSTs for the next one and three months.
- Sea levels were below normal for September. Below normal sea levels are predicted for November and November to January.
- Current coral bleaching conditions and the outlook for the next 4 weeks show no stress levels

TABLE 3: Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders (September 2025)

Product	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Disability	Comments (If there are comments from you Stakeholders)
Climate Bulletin	Government Ministries, NGO's, Media Private Sector		32	42	3	
EAR Watch						
Monthly Climate Briefing						
Ocean Outlook	Government Ministries, NGO's, Media Private Sector					
Climate data request						
Total						

Stakeholder category	Do your products reach this group? (Y/N)	Tailored product? (Y/N)
Agriculture sector		
Disaster Risk Reduction sector		
Energy sector	Yes	
Health sector		
Water sector		
Fisheries and Aquaculture sector		
Tourism sector		
Maritime sector		
Research & education sector		
Women's ☐ organisations		
National disability organisations		
Community based organisations (e.g. councils)		
Products offered in local dialects/ languages		