Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 201

Country: Tonga

Part 1: Recent climate

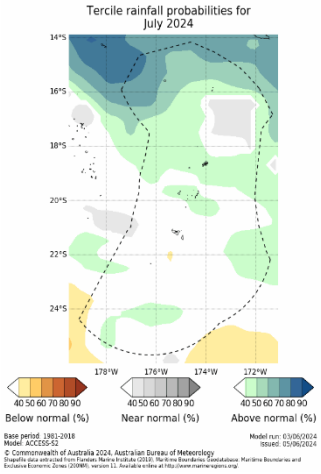
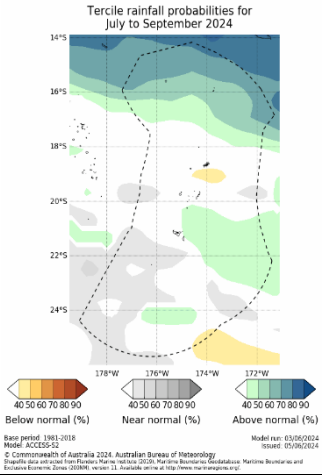
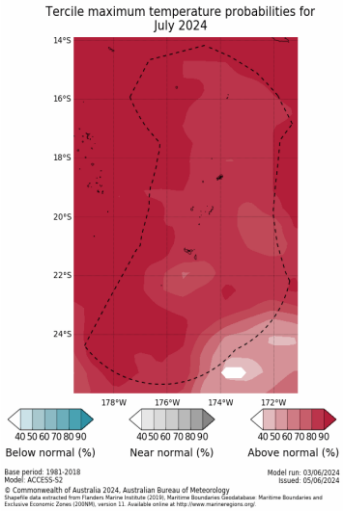
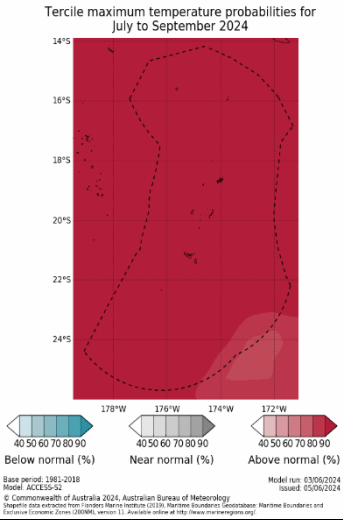
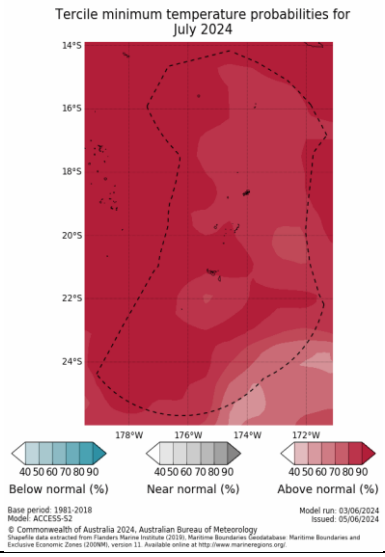
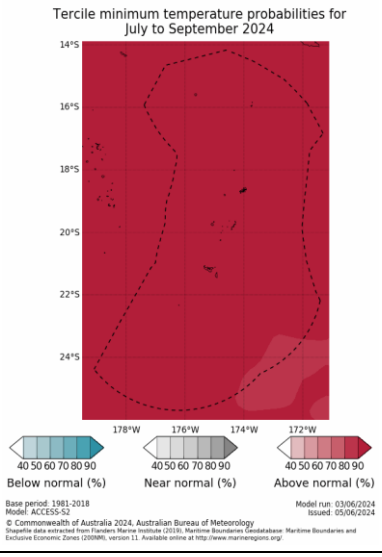
TABLE 1: Monthly Rainfall

Station (include data period)	Mar-2024	Apr-2024	May-2024				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Northern Division							
Niuafo'ou (1971-2024)	158.0	192.0	67.5	137.2	247.5	171.3	7/53
Niuatoputapu (1947-2024)	172.0	178.5	163.0	120.0	177.0	150.9	46/74
Central Division							
Vava'u (1947-2024)	758.5	100.4	162.2	99.1	198.3	142.0	46/78
Ha'apai (1947-2024)	567.6	40.6	135.5	68.0	137.0	94.0	51/77
Southern Division							
Fua'amotu (1979-2024)	637.6	22.3	384.8	68.2	166.2	93.6	**44/45**
Nuku'alofa (1944-2024)	739.0	134.5	297.5	68.2	136.0	95.5	**79/80**

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

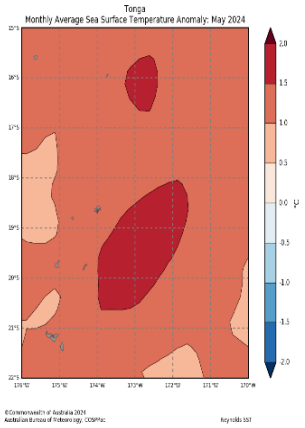
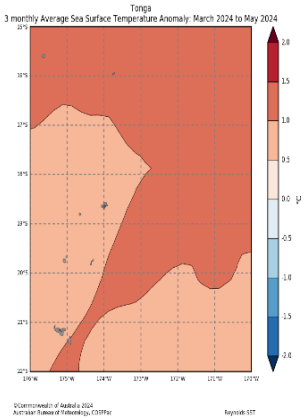
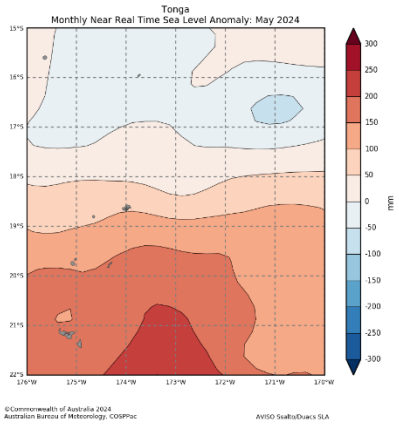
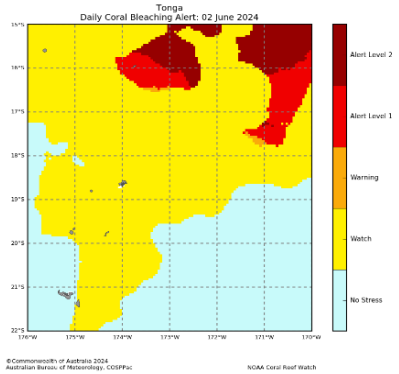
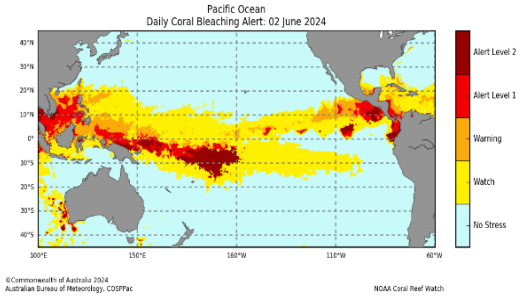
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Northern Division						
Niuafo'ou (1971-2024)	417.5	Below normal	641.8	801.2	749.0	**5/52**
Niuatoputapu (1947-2024)	513.5	Below normal	556.0	743.2	628.0	17/70
Central Division						
Vava'u (1947-2024)	1021.1	Above normal	594.3	777.6	717.6	**73/78**
Ha'apai (1947-2024)	743.7	Above normal	447.2	665.0	570.0	65/77
Southern Division						
Fua'amotu (1979-2024)	1044.7	Above normal	429.0	619.2	531.8	**45/45**
Nuku'alofa (1944-2024)	1171.0	Above normal	453.5	603.0	529.0	**79/79**

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

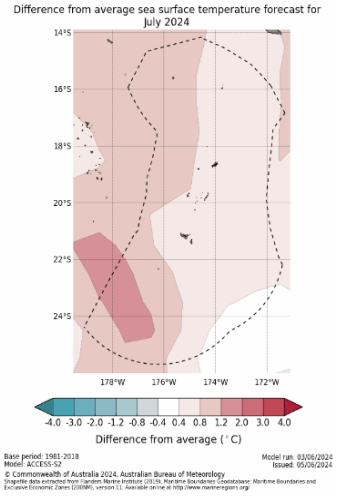
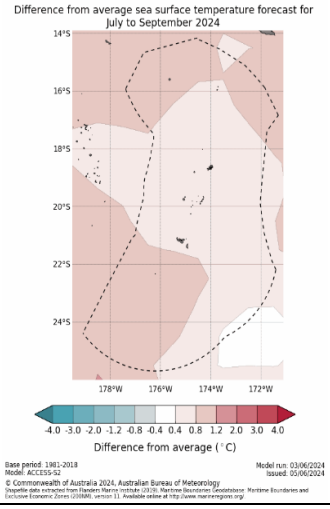
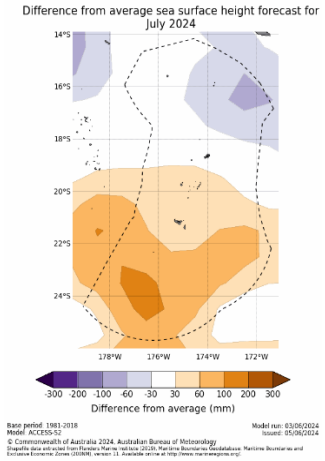
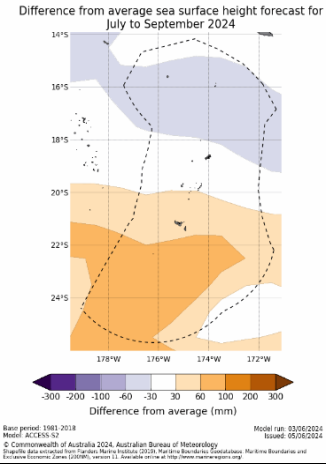
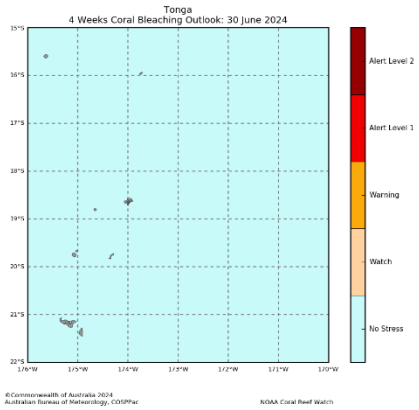
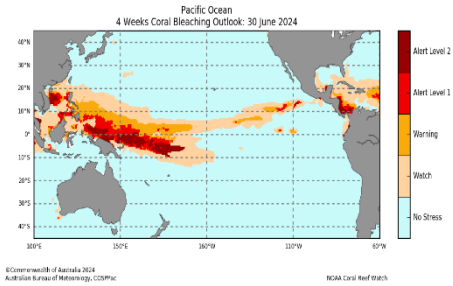
Monthly: July	Seasonal: July to September
Rainfall (Image 1)	**Rainfall (Image 2)**
	
Monthly Maximum temperature (Image 3):	**Seasonal maximum temperature (Image 4):**
	
Monthly minimum temperature (Image 5):	**Seasonal minimum temperature (Image 6):**
	

Part 2: Recent Ocean Observation

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

Monthly: May 2024	Last three months: March to May 2024:
Sea Surface Temperature (Image 1):	**Sea Surface Temperature (Image 4):**
	 tt
Sea level (Image 2):	
	
Daily coral bleaching alert (Image 3):	
	

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

Monthly: July	Seasonal: July to September
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: May 2024/March to May 2024 statement

The rainfall for May was above normal at Fua'amotu and Nuku'alofa, near-normal at Ha'apai, Vava'u and Niuatoputapu, and below normal at Niuafo'ou. Fua'amotu and Nuku'alofa recorded their second highest May rainfall.

March to May 2024 rainfall was above normal for the Southern and Central Divisions of Tonga, while it was below normal for the Northern Division. Fua'amotu and Nuku'alofa recorded their highest March to May rainfall, while Vava'u had its sixth highest. Niuafo'ou had its fifth lowest March to May rainfall on record.

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

Monthly /Seasonal rainfall and temperature Outlook statements

July rainfall is likely or very likely to be above normal over the main islands in the Northern and Central Divisions. In the Southern Division, however, the outlook offers little guidance for May rainfall.

July to September rainfall is likely to be above normal over the Northern Division. In the Central and Southern Divisions, the outlook offers little guidance.

Maximum and minimum temperatures during July and averaged over July to September, are very likely to be above normal across the country.

Part 2: Recent Ocean summary statement

Monthly and last three months: May 2024/March to May 2024

May ocean temperatures around Tonga were 1.0 to 1.5°C above normal temperatures.

Averaged over March to May, ocean temperatures around Tonga were 0.5 to 1.5°C above normal.

There is a coral bleaching 'Alert Level 2' for part of the northern group and 'Watch' for the rest of Tonga.

Sea levels were near-normal over the northern group, but above normal elsewhere.

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

Ocean Variable statement

July ocean temperatures and average over July to September ocean temperatures around Tonga are predicted to be 0.4 to 1.2°C above normal.

July sea levels and averaged over July to September sea levels around Tonga are predicted to be 30mm to 100mm below normal for the Niuas, 30mm to 100mm above normal for Tongatapu and Ha'apai group and near-normal for Vava'u group.

The 4-week coral bleaching outlook to 30th June 2024 shows "No Stress" for Tonga.

IN BRIEF for Teleconference

- Rainfall was mostly normal to above normal for May and below normal and above normal for March to May.
- The rainfall outlook likely to be above normal in the northern part of Tonga while normal to little guidance in the central to southern Tonga over July to September period.
- SSTs were above normal for May and March to May. The outlook shows above normal SSTs for the next one and three months.
- Sea-surface heights (SSHs) were near-normal to above normal for May. Below-normal sea surface heights are predicted for July and July to September for the northern group, near-normal for the central group and above average for the southern group .
- Coral bleaching Alert Level 2 for part of northern Tonga.

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

Product	Date: May 2024	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
Climate Bulletin	3 May	Government ministries, NGOs, Media, Private sector	155	118	37	
EAR Watch						
Monthly Climate Briefing						
Ocean Outlook	3 May	Government ministries, NGOs, Media, Private sector	155	118	37	
Climate data request						
		Total	**310**	**236**	**74**	