Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 199

Country: Fiji

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)				
Western Division							
Penang Mill (1910-2024)	483.6	591.3	839.2	295.3	460.9	385.6	**110/115**
Lautoka Mill (1900-2024)	424.8	396.0	907.1	232.0	418.2	315.2	**122/124**
Nadi Airport (1942-2024)	389.9	350.9	988.6	258.8	415.6	321.2	**81/81**
Central Division							
Laucala Bay (Suva) (1942-2024)	621.0	506.5	721.8	295.6	429.0	340.8	**82/83**
Nausori Airport (1957-2024)	308.2	407.0	759.3	297.3	439.9	358.1	**66/68**
Tokotoko (Navua) (1945-2024)	530.5	534.5	875.0	314.5	438.6	377.4	**80/80**
Eastern Division							
Lakeba (1950-2024)	663.2	371.1	540.7	212.6	326.7	256.4	**72/74**
Vunisea (Kadavu) (1931-2024)	480.0	446.4	621.9	229.4	309.2	285.7	**87/88**
Ono-i-Lau (1943-2024)	253.2	119.7	418.9	172.4	293.7	228.0	**70/77**
Northern Division							
Labasa Airport (1946-2024)	252.5	621.4	859.1	264.5	417.6	327.6	**68/68**
Savusavu Airfield (1956-2024)	265.7	578.5	554.2	183.5	275.7	228.2	**64/66**
Udu Point (1946-2024)	346.3	319.0	327.3	255.7	360.1	301.0	44/77
Rotuma (1912-2024)	289.6	508.3		273.9	401.4	326.3	

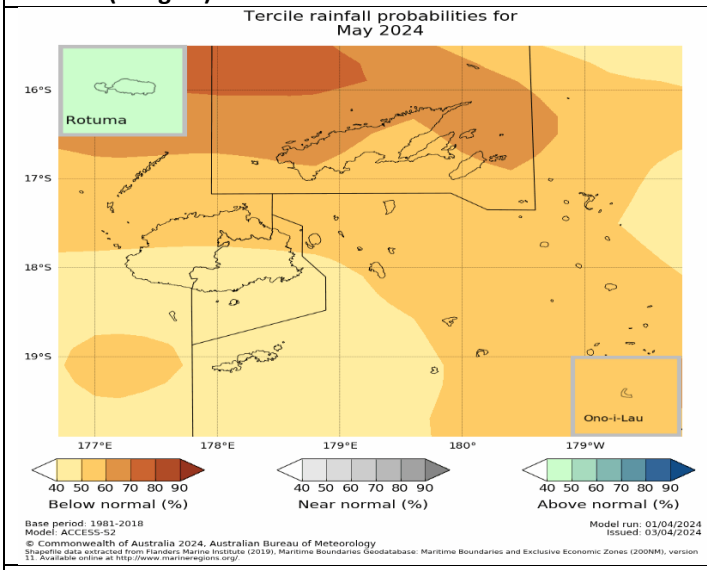
TABLE 2: Three-month Total Rainfall for January to March 2024

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Western Division						
Penang Mill (1910-2024)	1914.1	Above normal	1043.0	1269.3	1133.1	**109/115**
Lautoka Mill (1900-2024)	1727.9	Above normal	873.3	1203.6	1037.6	**120/124**
Nadi Airport (1942-2024)	1729.4	Above normal	839.4	1154.0	941.8	**77/81**
Central Division						
Laucala Bay (Suva) (1942-2024)	1849.3	Above normal	860.5	1070.6	984.7	**83/83**
Nausori Airport (1957-2024)	1474.5	Above normal	892.5	1076.2	997.8	**67/68**
Tokotoko (Navua) (1945-20243)	1940.0	Above normal	911.9	1191.8	1055.9	**78/78**
Eastern Division						
Lakeba (1950-2024)	1575.0	Above normal	656.8	890.8	766.4	**73/73**
Vunisea (Kadavu) (1931-2024)	1548.3	Above normal	677.7	876.6	789.1	**87/87**
Ono-i-Lau (1943-2024)	791.8	Above normal	487.2	750.2	620.6	56/74
Northern Division						
Labasa Airport (1947-2024)	1733.0	Above normal	963.2	1302.8	1119.0	**61/65**
Savusavu Airfield (1957-2024)	1398.4	Above normal	666.8	853.4	779.8	**61/61**
Udu Point (1946-2024)	992.6	Normal	825.8	1046.6	980.4	42/75
Rotuma (1912-2024)			887.4	1153.8	1037.5	

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

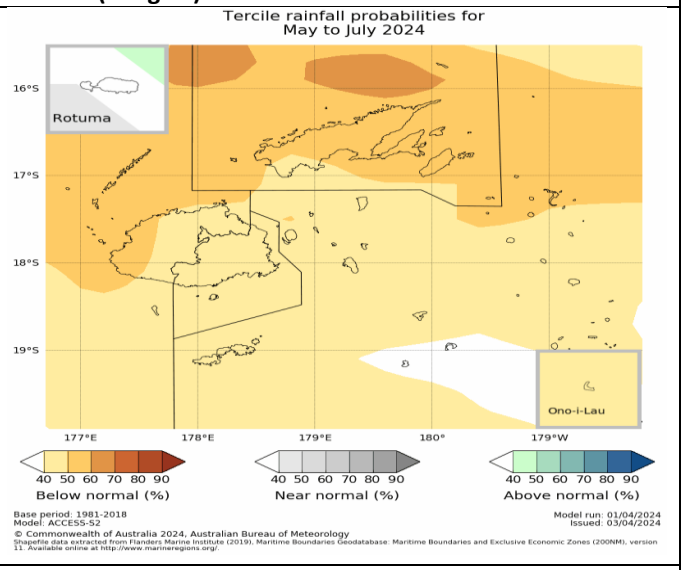
Monthly: May

Rainfall (Image 1)

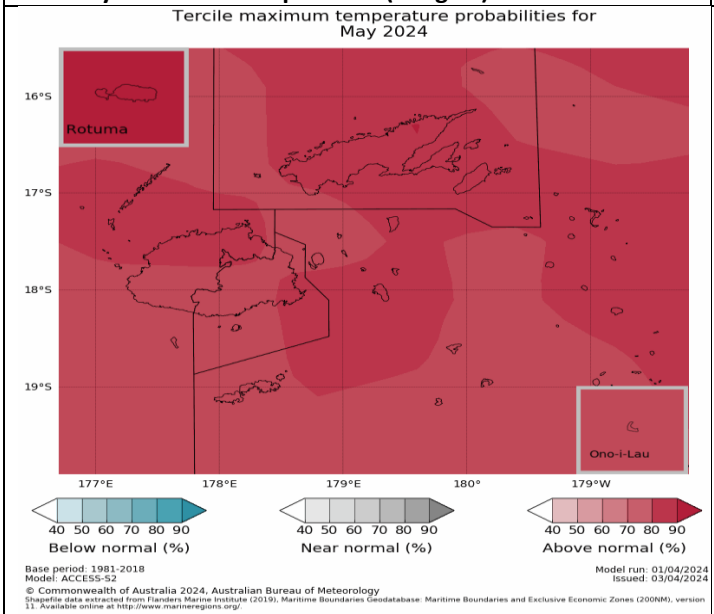


Seasonal: May to July

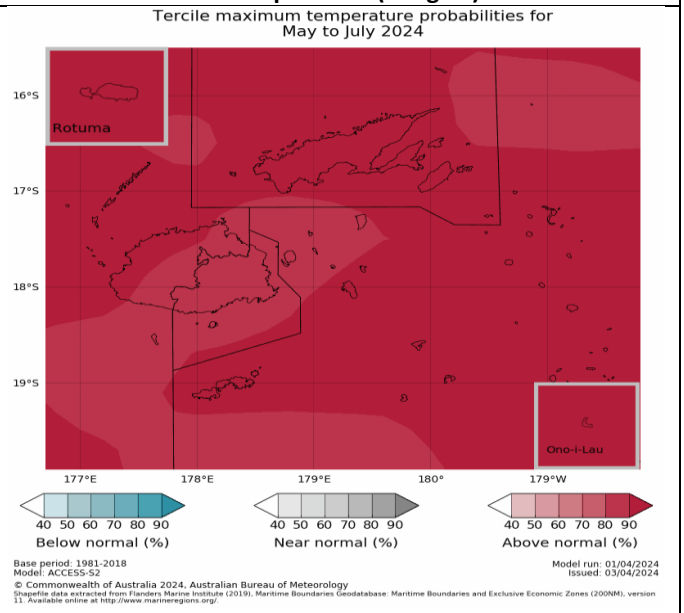
Rainfall (Image 2)



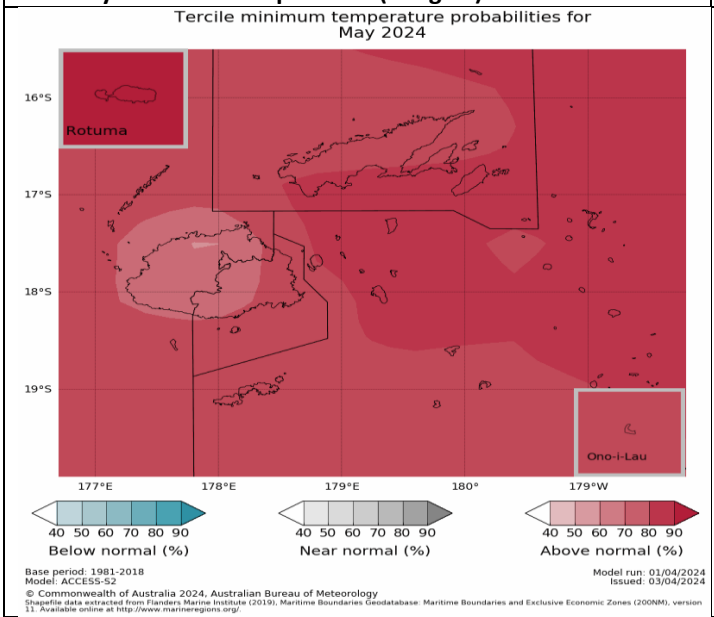
Monthly Maximum temperature (Image 3):



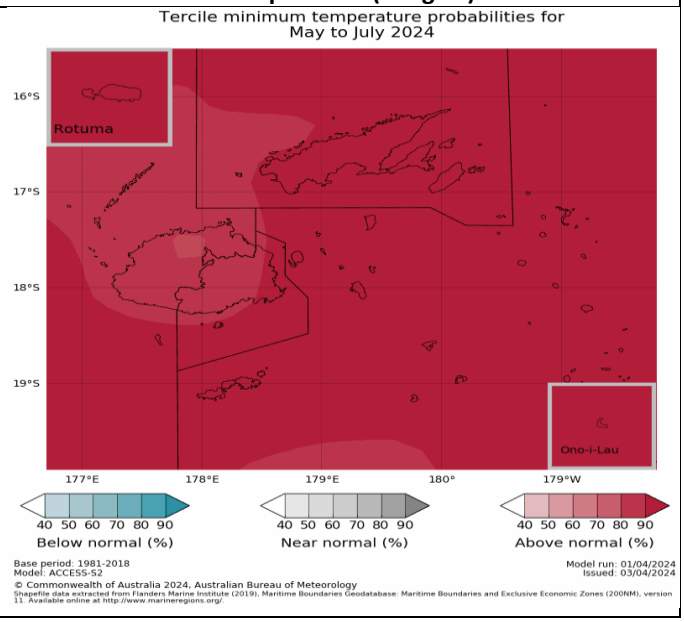
Seasonal maximum temperature (Image 4):



Monthly minimum temperature (Image 5):

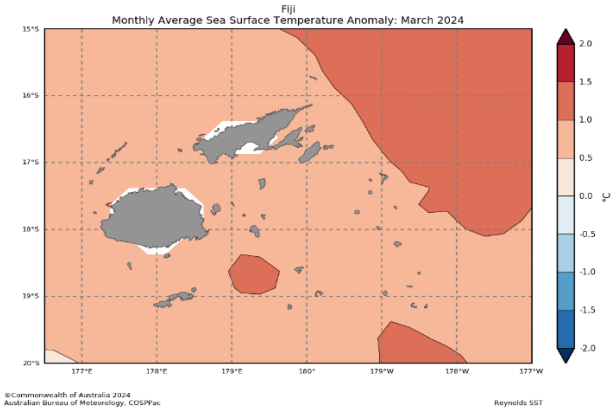
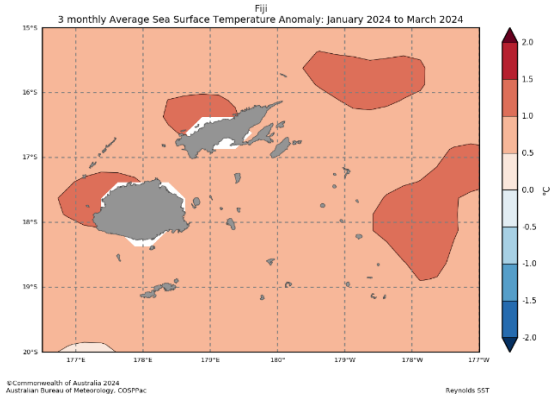
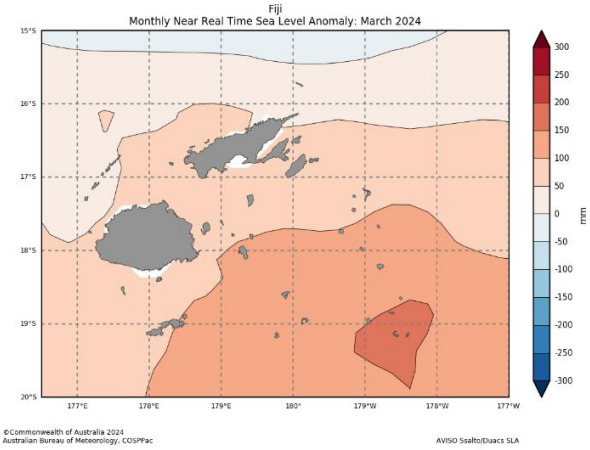
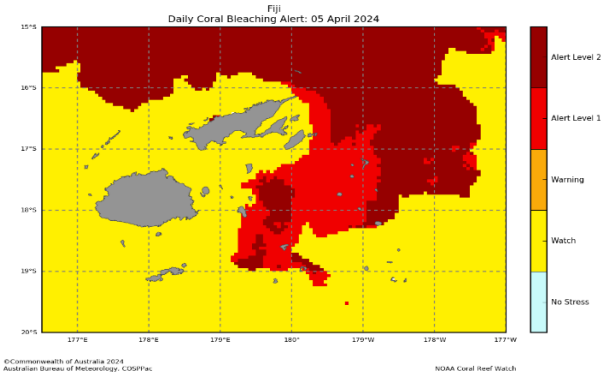
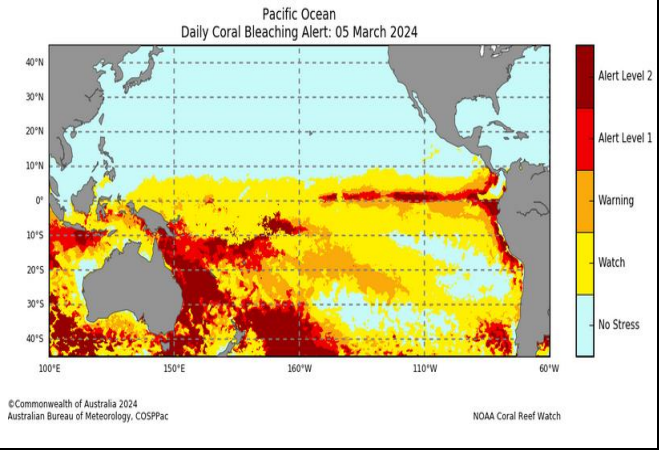


Seasonal minimum temperature (Image 6):



Part 2: Recent Ocean Observation

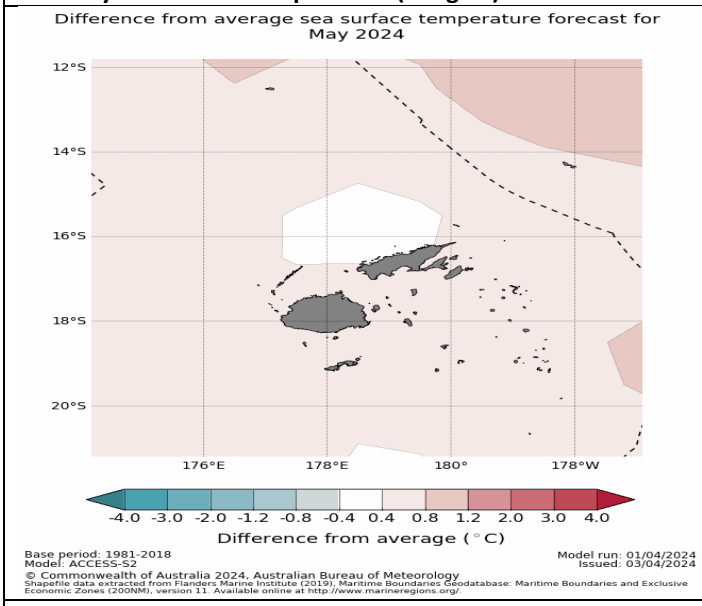
Monthly/Three months: March 2024 and January to March 2024

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

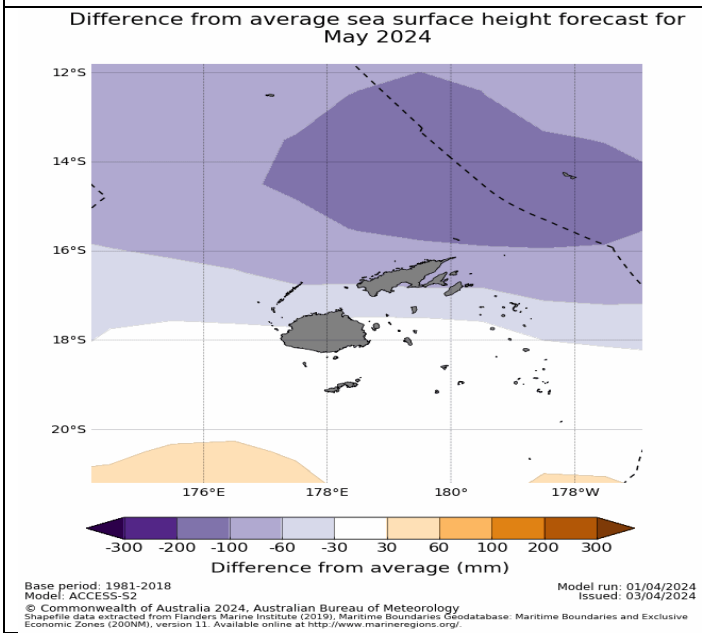
Part 2i. Monthly and Seasonal Outlooks for May and May to July 2024

Monthly: May

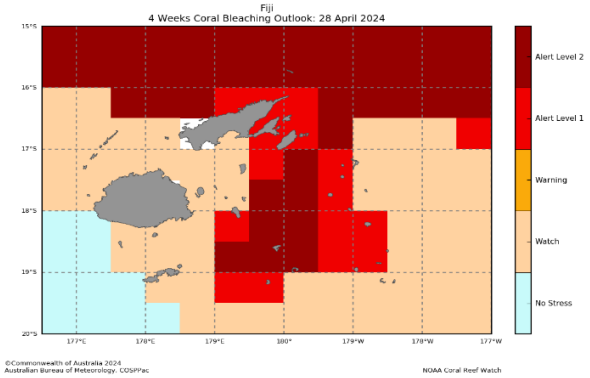
Monthly sea surface temperature (Image 5):



Monthly sea level (Image 7):

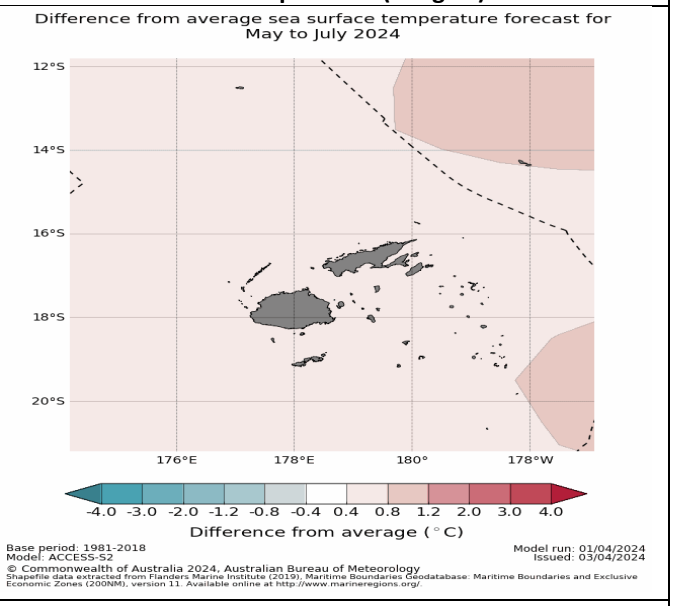


4-week Coral Bleaching (Image 9):

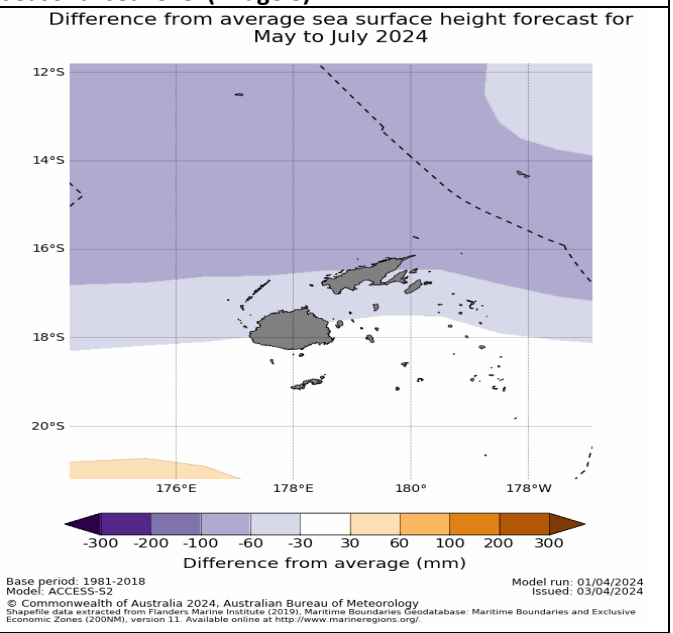


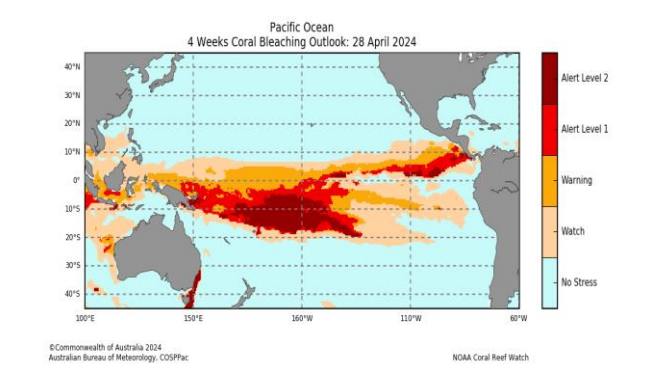
Seasonal: May to July

Seasonal sea surface temperature (Image 6):



Seasonal sea level (Image 8):





Summary Statement

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

March 2024 was a very wet month across Fiji, with above normal rainfall being recorded throughout the country, except at Udu Point where *near-normal* rainfall was observed. Nadi, Navua and Labasa reordered their wettest March in 81, 80 and 68 years of record, respectively. Suva and Vunisea recorded their second wettest March in 83 and 88 years of record. Lautoka, Nausori, Lakeba and Savusavu recorded their third wettest March in 124, 68, 74 and 66 years of record. Penang recorded its sixth wettest March in 115 years of record and Ono-i-Lau recorded its eighth wettest March in 77 years of record.

Rainfall was also very high for Janaury to March 2024, with several record or near-record totals being reported. Once again, *above normal* rainfall was recorded across the country, apart from Udu Point which had *near-normal* rainfall. Suva, Navua, Lakeba, Vunisea and Savusavu recorded their wettest January to March in in 83, 78, 73, 87 and 61 years of record, respectively. Nausori recorded its second wettest March in 68 years of record. Lautoka, Nadi and Labasa recorded their fifth wettest January to March in 124, 81 and 65 years of record, respectively. Penang recorded its seventh wettest January to March in 115 years of record.

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

Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for May 2024 and May to July is likely to be *below normal* across the Fiji Group. At Rotuma, however, *above normal* rainfall is likely for May 2024, but there is little guidance for May to July 2024.

Maximum and minimum temperatures for Fiji for May 2024 and averaged over May to July 2024 are very likely to be *above normal* across Fiji, including Rotuma.

Part 2: Recent Ocean summary statement

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

March ocean temperatures around Fiji were 0.5 to 1.5°C above normal.

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

March sea levels around Fiji were 50 to 200mm above normal.

There is a coral bleaching '*Alert Level 2'* for parts of northern and southern Lau Group.

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

Ocean Variable statement

May ocean temperatures are predicted to be 0.4 to 1.2°C *above normal*.

Averaged over May to July 2024, ocean temperatures are predicted to be 0.4 to 1.2°C *above normal*.

Monthly sea surface heights for May are likely to be 60 to 300mm *below normal* for northern half of Fiji's Exclusive Economic Zone (EEZ), while remaining parts of the Fiji group are likely to be *near normal*.

Seasonal sea surface heights are likely to be 60 to 200mm *below normal* for northern half of Fiji's EEZ, while remaining parts of the Fiji group are likely to be *near normal*.

Coral bleaching 4-week outlook is predicted to be at '*Alert Level 2*' for parts of northern and southern Lau Group.

IN BRIEF for Teleconference

- For March 2024 and January to March 2024, rainfall was *above normal* across the Western, Central, Eastern Divisions, at Labasa and Savusavu, while Udu Point recorded *near-normal* rainfall.
- The rainfall outlook generally indicates below average is most likely in May and for the total rainfall over May to July.
- SSTs were above normal for March and January to March. The outlook predicts above normal SSTs for the next one and three months.
- Sea-surface heights (SSHs) were *above normal* for March. *Below normal* sea surface heights for northern half of Fiji's exclusive economic zone are predicted for May and May to July.
- There is a coral bleaching '*Alert Level 2'* for parts of northern and southern Lau Group. Coral bleaching outlook predicts '*Alert Level 2'* for parts of northern and southern Lau Group.

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)
Fiji Climate Summary	07/03/2024	General Public	140	106	34	
EAR Watch	13/03/2024	Humanitarian partners	122	96	26	
Fiji Climate Outlook	28/03/2024	General public	124	93	31	
Climate Outlook for Monasavu	29/02/2024	Energy Fiji Limited	13	13	-	
Fiji Ocean Outlook	20/03/2024	A number of key ocean related stakeholders	36	29	7	
Fiji Sugarcane Rainfall Outlook	05/03/2024	Sugar Industry stakeholders	77	60	17	
ENSO Update	25/03/2024	General Public	142	116	26	
Meteorological Data Request	1/03/2024-31/03/2024	A range of stakeholders	64	60	4	
Total			**718**	**573**	**145**	

FLASH FLOODING: 13th, 15th, 16th, 17th, 19th, 21st, 25th and 30th

Heavy rainfall led to flash floods in low-lying areas and major rivers over most parts of the country, especially in the Western, Central, and Northern Divisions on the 13th, 15th, 16th, 17th, 19th, 21st, 25th, and 30th. Significant rainfall amounts were recorded as follows: 149.9mm in Labasa on the 16th, 193.5mm in Monasavu on the 16th, 195.6mm in Rarawai on the 16th, 142.6mm in Nadi on the 19th, 154.3mm in Laucala Bay (Suva) on the 19th, 196.2mm in Nausori on the 19th , 117.7mm in Lautoka on the 29th and 154.8mm in Penang (Rakiraki) on the 30th. Flash flooding resulted in road closures and inaccessibility in these areas, with a landslide reported at Dilkusha in Nausori on the 19th as a consequence of continuous heavy rain.

Figure a: Kings Road near Waisai Bridge on the 13th. Source: Fiji Roads Authority.

Figure b: Navula bridge, Saru, Lautoka *on the 15th. Source: Fiji Roads Authority.*

Figure c: Nadi Town on the 16th. Source: National Disaster Management Office.

Figure d: Landslide along Dilkusha in Nausori on the 19th. Source: National Disaster Management Office.

Figure e: Tavualevu Village, Tavua on the 21st. Source: National Disaster Management Office

Figure f: Vunitogolao Village, Rakiraki on the 30th. Source: National Disaster Management Office.