

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 195

Country: Fiji

Part 1: Recent climate

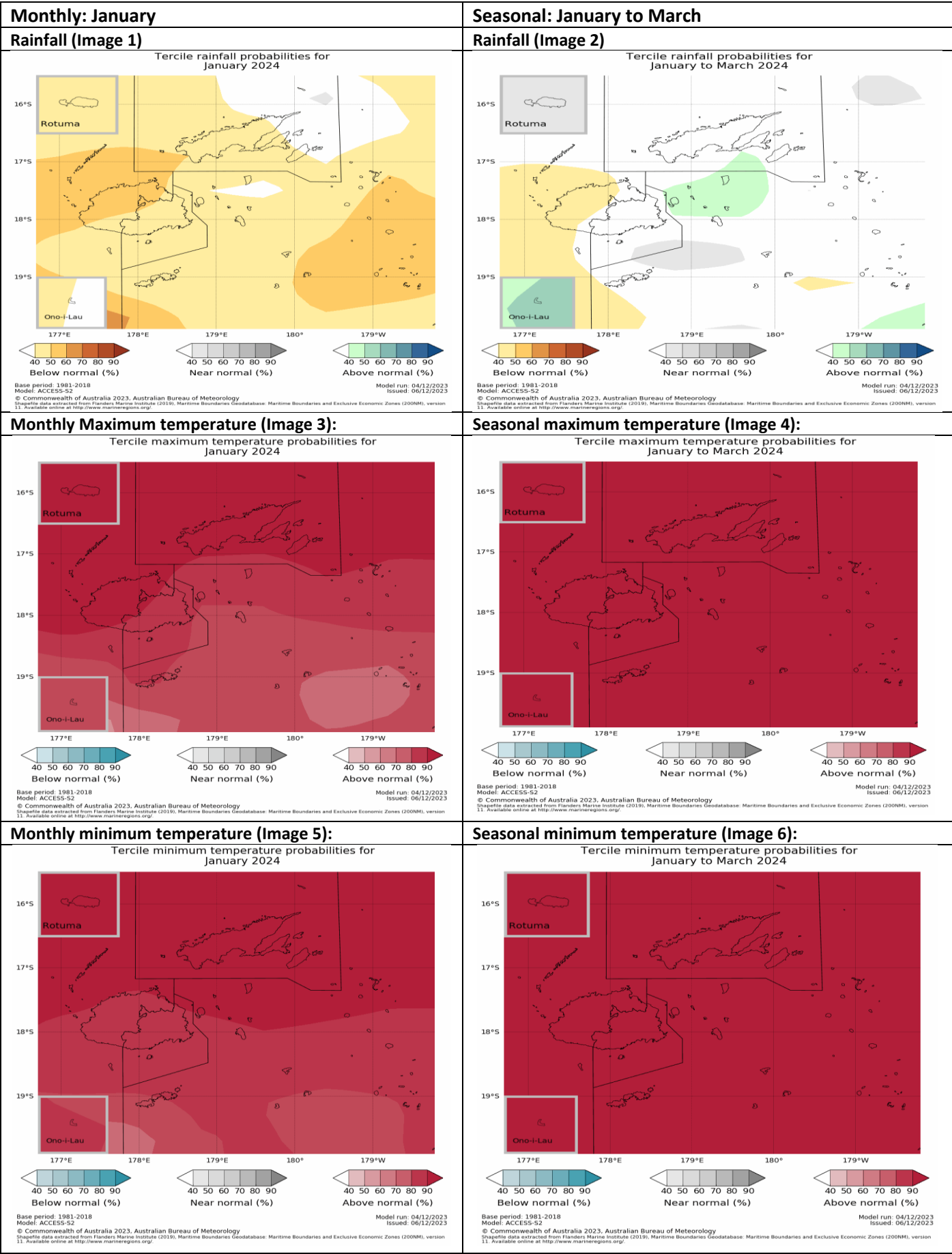
TABLE 1: Monthly Rainfall

Station (include data period)	Sep-2023	Oct-2023	Nov-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Western Division							
Penang Mill (1910-2023)	142.9	3.8	64.6	95.4	188.9	132.5	28/112
Lautoka Mill (1900-2023)	210.6	46.0	35.4	65.8	153.8	113.1	18124
Nadi Airport (1942-2023)	141.6	16.6	41.1	92.4	145.7	123.4	9/81
Central Division							
Laucala Bay (Suva) (1942-2023)	215.7	75.6	200.1	155.3	278.9	205.6	36/82
Nausori Airport (1957-2023)	153.6	49.0	254.7	193.0	300.5	227.0	39/68
Tokotoko (Navua) (1945-2023)	188.5	110.0	763.0	195.5	356.6	277.8	74/78
Eastern Division							
Lakeba (1950-2023)	29.5	7.0	140.5	71.9	165.4	115.6	43/75
Vunisea (Kadavu) (1931-2023)	134.5	0.7	92.2	94.3	164.9	108.9	32/77
Ono-i-Lau (1943-2023)	77.0	15.2	79.4	63.0	115.9	92.8	32/77
Northern Division							
Labasa Airport (1946-2023)	139.5	31.1	91.5	113.1	195.4	151.1	17/64
Savusavu Airfield (1956-2023)	173.2	9.7	131.2	127.3	208.1	166.2	23/65
Udu Point (1946-2023)	38.8	11.0	99.5	167.0	286.2	223.4	13/74
Rotuma (1912-2023)	78.6	467.4	332.1	237.1	353.8	286.7	67/110

TABLE 2: Three-month Total Rainfall for September to November 2023

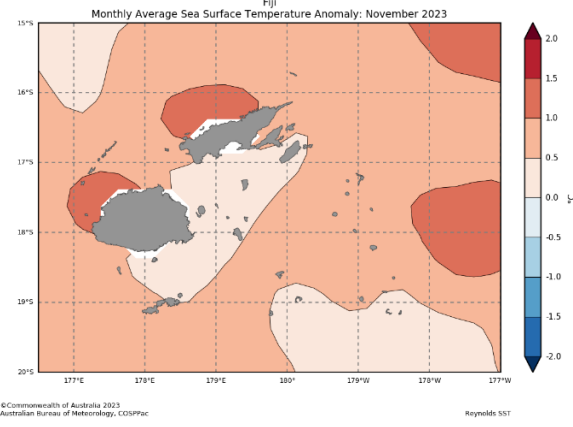
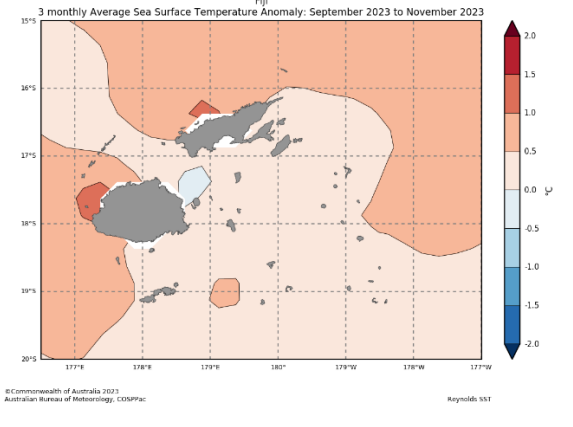
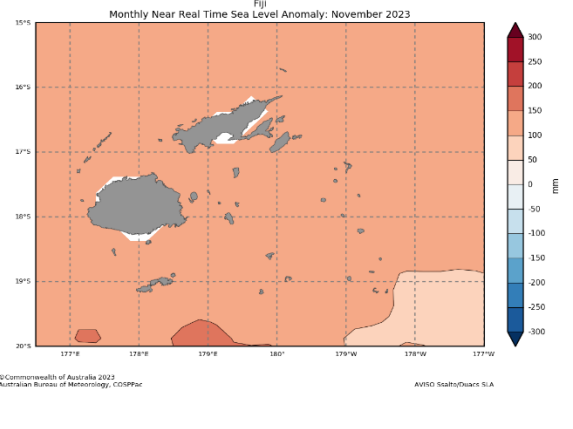
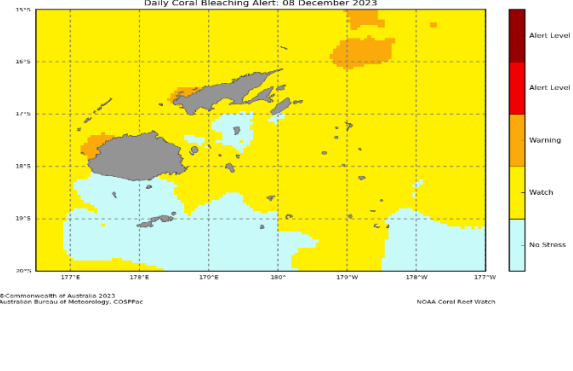
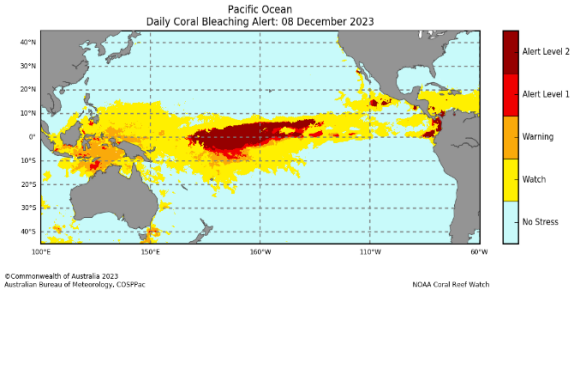
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Western Division						
Penang Mill (1910-2023)	211.3	Below normal	245.0	403.9	295.9	31/111
Lautoka Mill (1900-2023)	292.0	Normal	201.5	343.0	279.7	76/124
Nadi Airport (1942-2023)	199.3	Below normal	245.5	342.9	297.1	24/81
Central Division						
Laucala Bay (Suva) (1942-2023)	491.4	Normal	479.0	781.4	650.2	31/82
Nausori Airport (1957-2023)	457.3	Normal	453.5	742.5	610.1	23/67
Tokotoko (Navua) (1945-2023)	1061.5	Above normal	645.1	937.2	767.1	61/77
Eastern Division						
Lakeba (1950-2023)	177.0	Below normal	297.8	410.2	333.4	8/73
Vunisea (Kadavu) (1931-2023)	227.4	Below normal	344.7	448.9	408.2	14/83
Ono-i-Lau (1943-2023)	171.6	Below normal	213.4	391.3	299.4	14/75
Northern Division						
Labasa Airport (1947-2023)	262.1	Normal	259.0	378.5	307.7	22/61
Savusavu Airfield (1957-2023)	314.1	Below normal	370.7	507.4	424.3	14/64
Udu Point (1946-2023)	149.3	Below normal	405.0	603.8	503.5	4/73
Rotuma (1912-2023)	878.1	Normal	727.5	976.6	887.1	55/105

Part 1i. Monthly and Seasonal Outlooks for January and January to March 2024

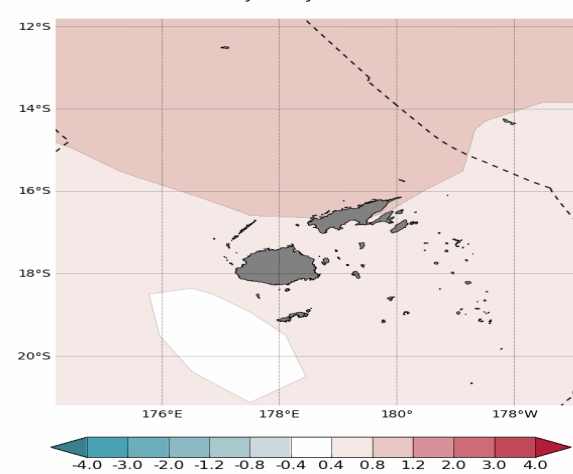
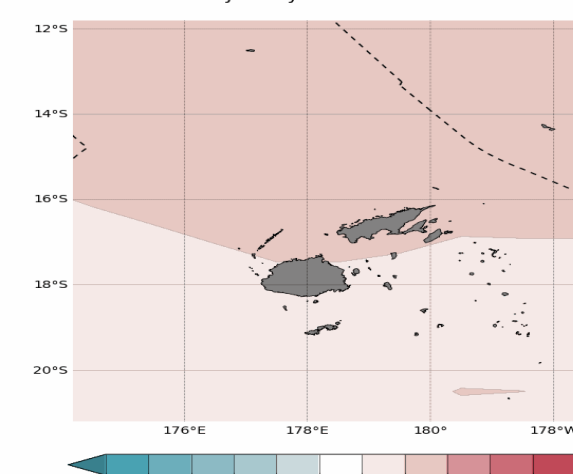
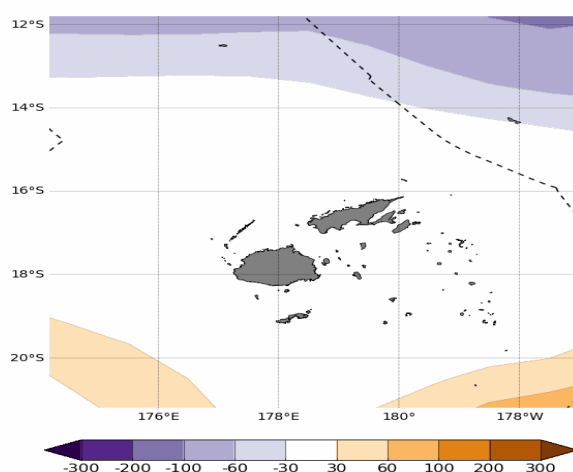
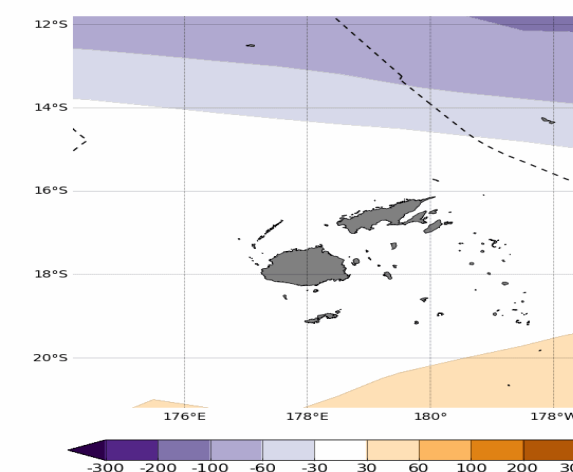
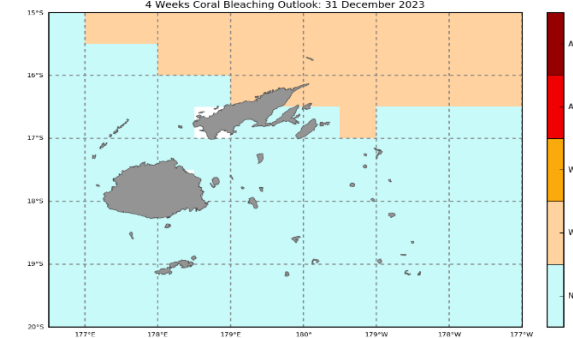
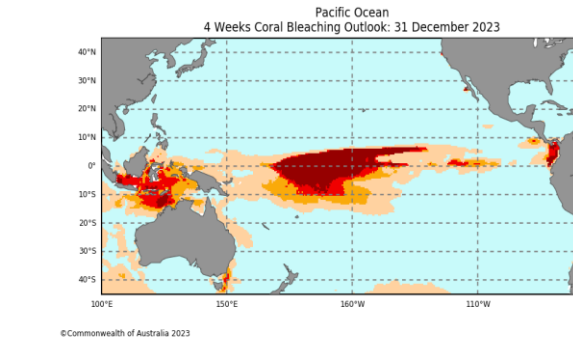


Part 2: Recent Ocean Observation

Monthly/Three months: November and September to November 2023

Monthly: November	Last three months: September to November 2023:
Sea Surface Temperature (Image 1): <div></div>	Sea Surface Temperature (Image 4): <div></div>
Sea level (Image 2): <div></div>	
Daily coral bleaching alert (Image 3): <div></div>	<div></div>

Part 2i. Monthly and Seasonal Outlooks for January and January to March 2024

Monthly: January	Seasonal: January to March
<p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for January 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimeresources.org/</p> <p>Model run: 04/12/2023 Issued: 06/12/2023</p>	<p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for January to March 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimeresources.org/</p> <p>Model run: 04/12/2023 Issued: 06/12/2023</p>
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for January 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimeresources.org/</p> <p>Model run: 04/12/2023 Issued: 06/12/2023</p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for January to March 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimeresources.org/</p> <p>Model run: 04/12/2023 Issued: 06/12/2023</p>
<p>4-week Coral Bleaching (Image 9):</p> <p>Fiji 4 Weeks Coral Bleaching Outlook: 31 December 2023</p>  <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 31 December 2023</p>  <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

Summary Statement

Monthly and last three months: November 2023/September to November 2023 statement

For November 2023, rainfall was *below normal* across Western Division, at Vunisea, Labasa and Udu Point, apart from Suva, Nausori, Lakeba, Ono-i-Lau, Savusavu and Rotuma where *near-normal* was recorded, and Navua which recorded above normal. Nadi recorded its driest ninth November in 81 years of record. Navua recorded its fifth wettest November in 78 years.

For September to November 2023, *above normal* rainfall was recorded at Navua, while *near-normal* was recorded at Lautoka, Laucala Bay, Nausori, Labasa and Rotuma. *Below normal* rainfall was registered across Eastern Division Penang, Nadi, Savusavu and Udu Point. Udu Point and Lakeba recorded their fourth and eighth driest September to November in 73 years of record, respectively.

Part 1i. Monthly and Seasonal Outlooks for January and January to March 2024

Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for January 2024 is likely to be *below normal* for most parts of the Fiji Group. For January to March 2024 the rainfall is likely to be *below normal* for most parts of the Western Division, *near normal* for Rotuma, *above normal* for parts of Lomaiviti Group and there's little guidance for the remaining parts of Fiji.

Both maximum and Minimum temperatures for Fiji for January 2024 and January to March 2024 is likely to be *above normal* across the Fiji Group.

Part 2: Recent Ocean summary statement

Monthly and last three months: November 2023/September to November 2023

November ocean temperatures were 0.5°C to 1.5°C above normal for most parts of Fiji, while temperatures were *near normal* for Taveuni, Lomaiviti Group and Beqa.

Averaged over September to November, ocean temperatures West of Viti levu, North of Viti Levu were 1.0°C to 1.5°C *above normal*, while temperatures were *near normal* for remaining parts of Fiji.

November sea levels around Fiji were 100mm to 200mm above normal.

Coral bleaching alert is at 'Watch' for majority of the Fiji Waters.

Part 2i. Monthly and Seasonal Outlooks for January and January to March 2024

Ocean Variable statement

January ocean temperature are predicted to be 0.4 to 0.8°C *above normal*.

Averaged over January to March 2024, ocean temperatures are predicted to be 0.4 to 0.8°C *above normal*.

Monthly sea surface heights for January are likely to be 30 to 60mm *below normal* for Rotuma, while remaining parts of the Fiji group are likely to be *near normal*.

Seasonal sea surface heights are likely to be 60 to 100mm *below normal* for Rotuma, while remaining parts of the Fiji group are likely to be *near normal*.

Coral bleaching outlook is predicted to be at 'Watch' for Waters north of Viti Levu for the next four weeks.

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

Product	Date: November 2023	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
Fiji Climate Summary	08/11/2023	General Public	140	106	34	
EAR Watch	9/11/2023	Humanitarian partners	122	96	26	
Fiji Climate Outlook	30/11/2023	General public	124	93	31	
Climate Outlook for Monasavu	30/11/2023	Energy Fiji Limited	13	13	-	
Fiji Ocean Outlook	20/11/2023	A number of key ocean related stakeholders	36	29	7	
Fiji Sugarcane Rainfall Outlook	31/11/2023	Sugar Industry stakeholders	77	60	17	
ENSO Update	24/11/2023	General Public	142	116	26	
Sugarcane Farmers Engagement Workshop	20-30/11/2023	Fiji Sugar Corporation, Sugar Research Institute of Fiji, Sector Assistants, Field Officers, Farm Advisors and Farmers	177	139	38	
Meteorological Data Request	1/11/2023-30/11/2023	A range of stakeholders	35	27	9	
Total			867	679	188	

Flash Flooding: 13th and 17th



Figure 12a: Fallen tree at Moala Street, Samabula on the 13th November. Source: Fiii Roads Authority.



Figure 12b: Vatuwaqa Crossing, Serea on the 13th November. Source: National Disaster Management



Figure 12c: Nakorovou Crossing, Tailevu. Source: National Disaster Manaaement Office



Figure 12d: Bureta Bridge in Ovalauv on the 13th November. Source: National Disaster Management



Figure 12e: Qauia, Lami on the 13th November. Source: National Disaster Manaaement Office



Figure 12f: Lovoni Village on Ovalau on the 13th November. Source: National Disaster Management Office



Figure 12g: Marata Village, Wailoku on the 13th



Figure 12h: Waiyanitu crossing 1 in Navua on the 28th November. Source: Fiji Roads Authority



Figure 12i: Vakabalea Road in Navua on the 28th November. Source: Fiii Roads Authority



Figure 12j: Landslide on Queens Road near Nakorovou Hill on the 28th November. Source: Fiji Roads Authority



Figure 12k: Tokotoko back road, Navua on the 28th November. Source: Fijivillage



Figure 12l: Waidradra road, Navua on the 28th November. Source: Fijivillage



Figure 12m: Wainadoi, Navua on the 28th November. Source: Fijivillage

Figure 12n: Calia, Navua on the 28th November. Source: Fijivillage

Tropical Cyclone Mal: 13th and 16th



Figure 13e: Nawau, Queens Road. Source: Fiji Roads Authority.



Figure 13f: Main Road at Barotu Primary School. Source: Fiji Roads Authority.



Figure 13g: Kind road after Naiborebore. Source: Fiji Roads Authority.



Figure 13h: Nabukaluka Delailasakau Road, Central Division. Source: Fiji Roads Authority.



Figure 13i: Wainibokasi Road, Central Division. Source: Fiii Roads Authority.



Figure 13j: Verata Road in Tailevu. Source: National Disaster Manaagement Office.



Figure 13k: Prince Road, near Colo-I-Suva. Source: Fiji Roads Authority.



Figure 13l: Kings road Rakiraki near Rokovuaka. Source: Fiji Roads Authority.



Figure 13m: Korovuto Road, Ba. Source: Fiji Roads Authority.



Figure 13n: Balabala Crescent Road. Source: Fiji Roads Authority.



Figure 13o: Vaivai Road, Lautoka CH6005. Source: Fiji Roads Authority.



Figure 13p: Pender Street, Suva. Source: Fiji Roads Authority.



Figure 13q: Landslide at Vataleka in Wailoku. Source: National Disaster Management Office.



Figure 13r: Landslide at Vataleka in Wailoku. Source: National Disaster Management Office.