

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 189

Country: Fiji

Part 1: Recent climate

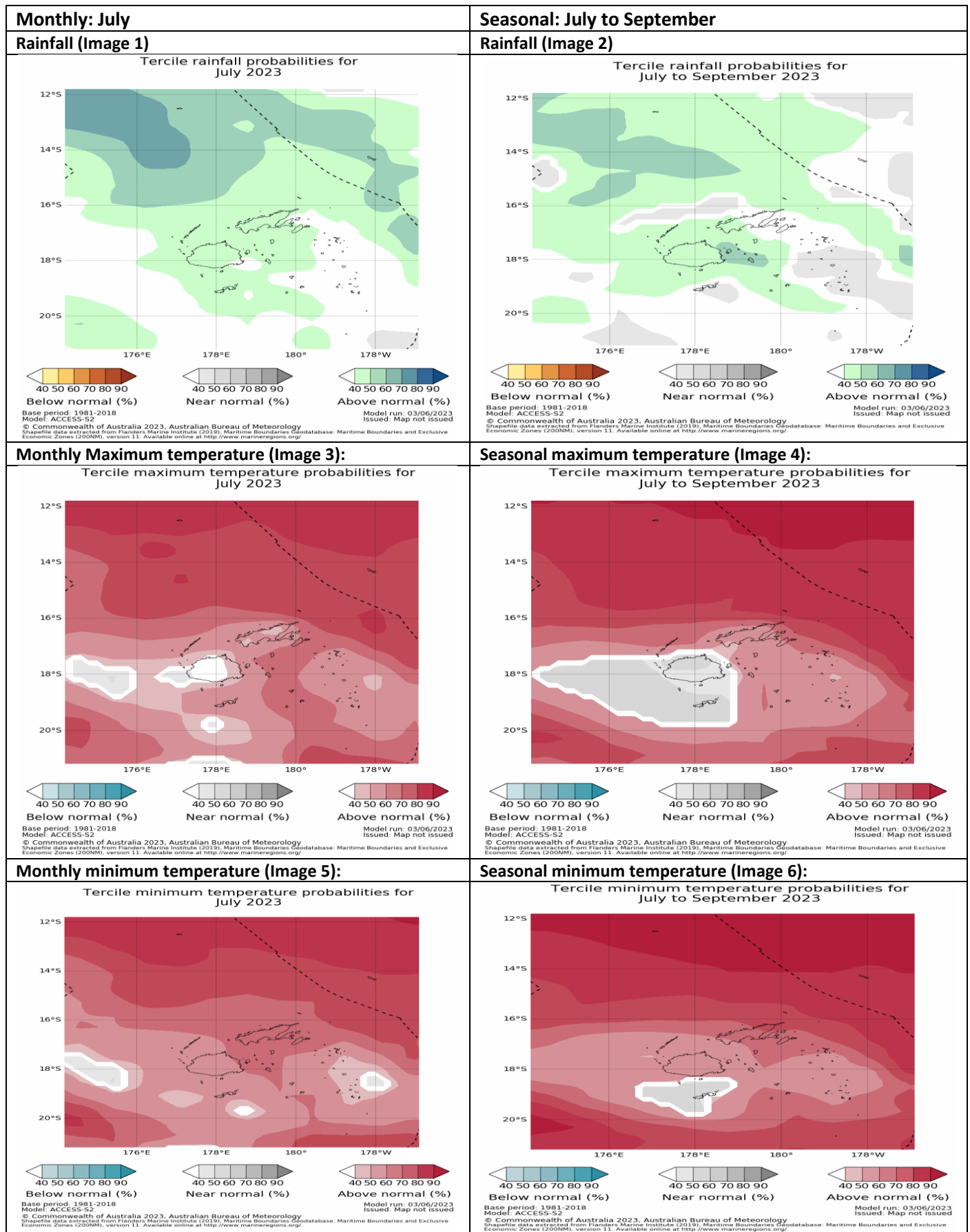
TABLE 1: Monthly Rainfall

Station (include data period)	Mar-2023	Apr-2023	May-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Western Division							
Penang Mill (1910-2023)	475.7	223.4	171.8	61.8	164.8	109.4	81/114
Lautoka Mill (1900-2023)	342.4	121.0	99.3	39.9	105.4	63.6	70/124
Nadi Airport (1942-2023)	360.2	113.6	136.9	42.7	107.0	72.7	62/81
Central Division							
Laucala Bay (Suva) (1942-2023)	157.2	163.9	197.7	175.5	260.3	199.6	40/82
Nausori Airport (1957-2023)	140.4	143.1	246.9	160.9	257.2	198.2	43/67
Tokotoko (Navua) (1945-2023)	228.0	87.5	150.5	184.4	320.6	254.3	17/79
Eastern Division							
Lakeba (1950-2023)	167.5	162.6	63.7	81.3	168.0	107.6	19/73
Vunisea (Kadavu) (1931-2023)	309.2	101.9	85.4	111.3	209.1	146.0	19/87
Ono-i-Lau (1943-2023)	172.4	71.3	73.0	69.3	150.5	103.6	30/76
Northern Division							
Labasa Airport (1946-2023)	307.8	89.5	164.8	58.1	120.5	85.5	55/68
Savusavu Airfield (1956-2023)	200.3	60.3	193.8	119.1	200.8	153.4	43/65
Udu Point (1946-2023)	239.9	131.7		110.6	177.5	144.4	
Rotuma (1912-2023)	321.1	197.6	261.2	222.3	340.0	271.8	49/110

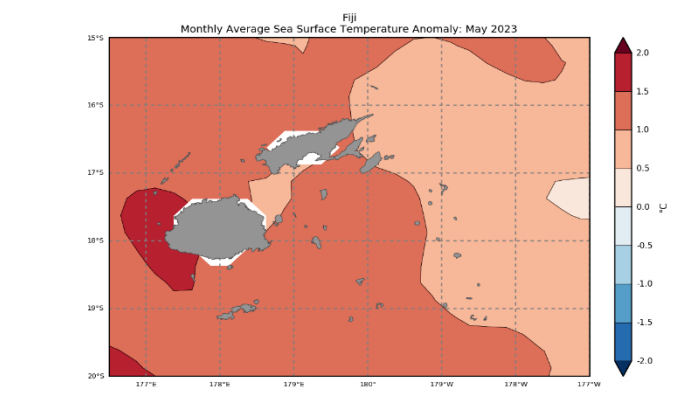
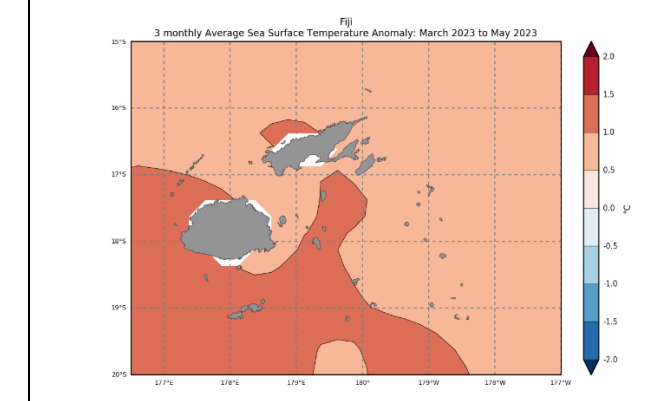
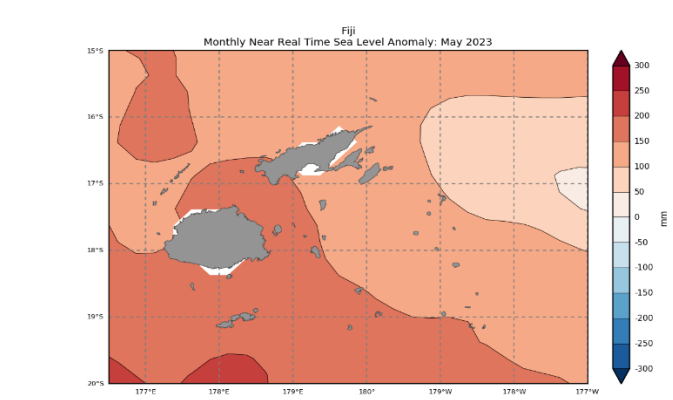
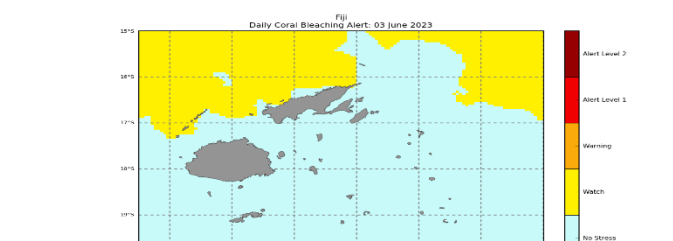
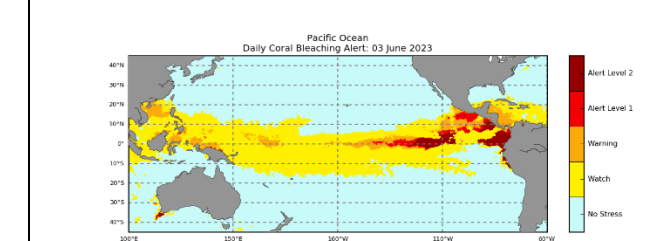
TABLE 2: Three-month Total Rainfall for March to May 2023

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Western Division						
Penang Mill (1910-2023)	870.9	Normal	670.8	934.7	779.6	74/113
Lautoka Mill (1900-2023)	562.7	Normal	537.2	719.5	602.0	58/123
Nadi Airport (1942-2023)	610.7	Normal	508.6	658.7	585.2	43/80
Central Division						
Laucala Bay (Suva) (1942-2023)	518.8	Below normal	818.6	1076.7	912.7	3/82
Nausori Airport (1957-2023)	530.4	Below normal	803.4	1047.7	916.4	3/67
Tokotoko (Navua) (1945-2023)	466.0	Below normal	926.5	1219.9	1029.7	1/79
Eastern Division						
Lakeba (1950-2023)	393.8	Below normal	547.1	721.3	649.5	10/71
Vunisea (Kadavu) (1931-2023)	496.5	Below normal	640.2	764.3	719.7	14/86
Ono-i-Lau (1943-2023)	316.7	Below normal	462.2	643.8	527.0	9/74
Northern Division						
Labasa Airport (1947-2023)	562.1	Below normal	566.2	838.7	700.5	23/67
Savusavu Airfield (1957-2023)	454.4	Below normal	573.6	733.7	664.4	8/64
Udu Point (1946-2023)			621.4	844.3	723.0	
Rotuma (1912-2023)	779.9	Below normal	806.2	1005.5	945.8	33/109

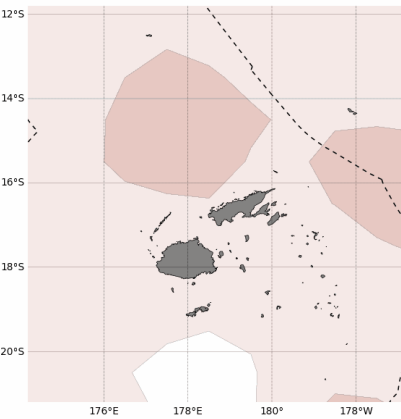
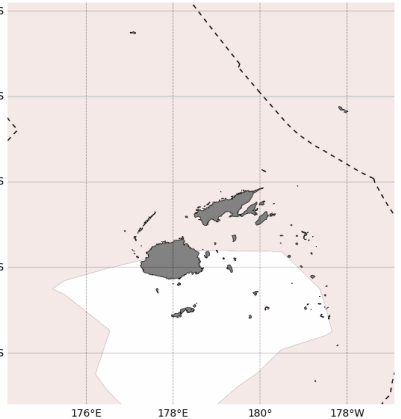
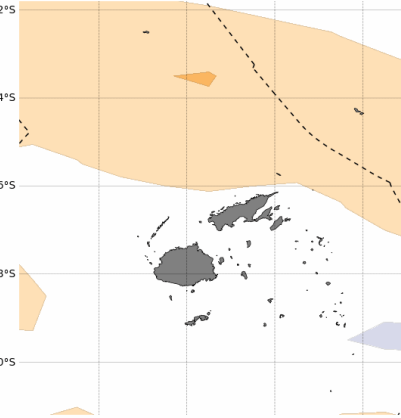
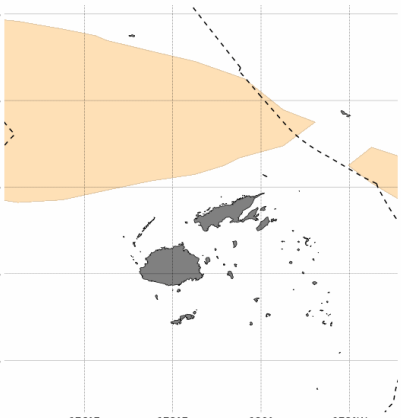
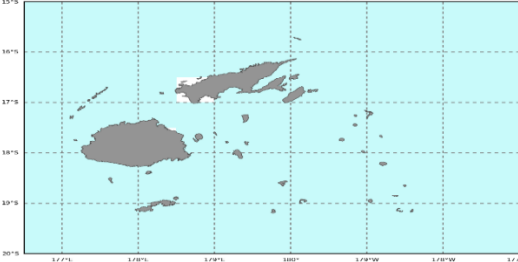
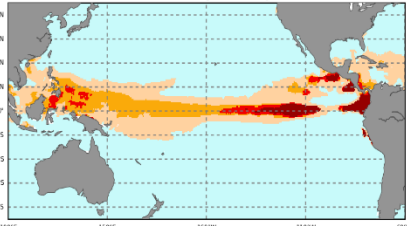
Part 1i. Monthly and Seasonal Outlooks for July and July to September 2023



Monthly/Three months: May and March to May 2023

Monthly: May	Last three months: March to May 2023:
<p>Sea Surface Temperature (Image 1):</p>  <p>Fiji Monthly Average Sea Surface Temperature Anomaly: May 2023</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>Reynolds SST</p>	<p>Sea Surface Temperature (Image 4):</p>  <p>Fiji 3 monthly Average Sea Surface Temperature Anomaly: March 2023 to May 2023</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>Reynolds SST</p>
<p>Sea level (Image 2):</p>  <p>Fiji Monthly Near Real Time Sea Level Anomaly: May 2023</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>AVISO Ssalto/duacs SLA</p>	
<p>Daily coral bleaching alert (Image 3):</p>  <p>Fiji Daily Coral Bleaching Alert: 03 June 2023</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	 <p>Pacific Ocean Daily Coral Bleaching Alert: 03 June 2023</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

Part 2i. Monthly and Seasonal Outlooks for July and July to September 2023

Monthly: July	Seasonal: July to September
<p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for July 2023</p>  <p>Difference from average (°C)</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.maritimerregions.org/</p> <p>Model run: 03/06/2023 Issued: 05/06/2023</p>	<p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for July to September 2023</p>  <p>Difference from average (°C)</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.maritimerregions.org/</p> <p>Model run: 03/06/2023 Issued: 05/06/2023</p>
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for July 2023</p>  <p>Difference from average (mm)</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.maritimerregions.org/</p> <p>Model run: 03/06/2023 Issued: 05/06/2023</p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for July to September 2023</p>  <p>Difference from average (mm)</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.maritimerregions.org/</p> <p>Model run: 03/06/2023 Issued: 05/06/2023</p>
<p>4-week Coral Bleaching (Image 9):</p> <p>Fiji</p> <p>4 Weeks Coral Bleaching Outlook: 25 June 2023</p>  <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Pacific Ocean</p> <p>4 Weeks Coral Bleaching Outlook: 25 June 2023</p>  <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</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: May 2023/March to May 2023 statement

For May 2023, *above normal* rainfall was recorded at Penang Mill, Nadi Airport and Labasa Airport, *near-normal* rainfall was registered at Lautoka Mill, Laucala Bay (Suva), Nausori Airport, Ono-i-Lau, Savusavu Airfield and Rotuma, while *below normal* rainfall was recorded at Tokotoko (Navua), Lakeba and Vunisea.

For March to May 2023, *near-normal* rainfall was recorded across the Western Division, while *below normal* rainfall was recorded across Central, Eastern and Northern Divisions, and at Rotuma. Tokotoko (Navua), Nausori Airport and Laucala Bay, Savusavu Airfield and Ono-i-Lau recorded their driest, third driest, eighth driest and ninth driest in 79, 67 and 82, 64, and 74 years of record, respectively.

Part 1i. Monthly and Seasonal Outlooks for July and July to September 2023

Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for July is likely to be *above normal* for Western, Central and Northern Divisions, and Lomaiviti Group. In Lau Group the outlook offers little guidance.

The rainfall for July to September is likely to be *above normal* for Western and Central Divisions, Lomaiviti Group, and some parts of Northern Division. *Near-normal* rainfall is likely for Kadavu plus the Central and southern Lau Group. In remaining parts of the country, the outlook offers little guidance.

Both maximum and minimum temperatures for Fiji for July and averaged over July to September 2023 are very likely to be *above normal*, except for some parts of Viti Levu and Kadavu where the outlook offers little guidance.

Part 2: Recent Ocean summary statement

Monthly and last three months: May 2023/March to May 2023

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

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

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

Coral bleaching alert is at 'Watch' for Yasawa Islands and waters north of Vanua Levu.

Part 2i. Monthly and Seasonal Outlooks for July and July to September 2023

Ocean Variable statement

July ocean temperatures around Fiji are predicted to be 0.4 to 1.2°C above normal.

Averaged over July to September, ocean temperatures are predicted to be 0.4 to 0.8°C above normal for northern Viti Levu, Vanua Levu and Yasawa Islands. The remaining parts of Fiji are predicted to experience near normal ocean temperatures.

The monthly and seasonal sea surface heights are likely to be near normal for majority of Fiji with exception around Rotuma predicted to be 30-60mm above normal for July.

Coral bleaching outlook for the next four weeks is at 'No Stress' for most of the Fiji waters.

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

Product	Date: May 2023	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
Fiji Climate Summary	5/05/2023	General Public	140	106	34	
EAR Watch	8/05/2023	Humanitarian partners	122	96	26	
Fiji Climate Outlook	31/05/2023	General public	124	93	31	
Climate Outlook for Monasavu	30/05/2023	Energy Fiji Limited	13	13	-	
Fiji Ocean Outlook	19/05/2023	A number of key ocean related stakeholders	36	29	7	
Fiji Sugarcane Rainfall Outlook	31/05/2023	Sugar Industry stakeholders	77	60	17	
ENSO Update	25/05/23	General Public	142	116	26	
Sub-regional ROK-PI CLiPs 2 Climate Prediction Tools Training	01/05/- 05/05	Pacific Island National Meteorological Services	18	16	2	
Meteorological Data Request	1/05/2023- 31/05/2023	A range of stakeholders	42	34	8	
Total			714	563	151	