

# Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 192

Country: Fiji

## Part 1: Recent climate

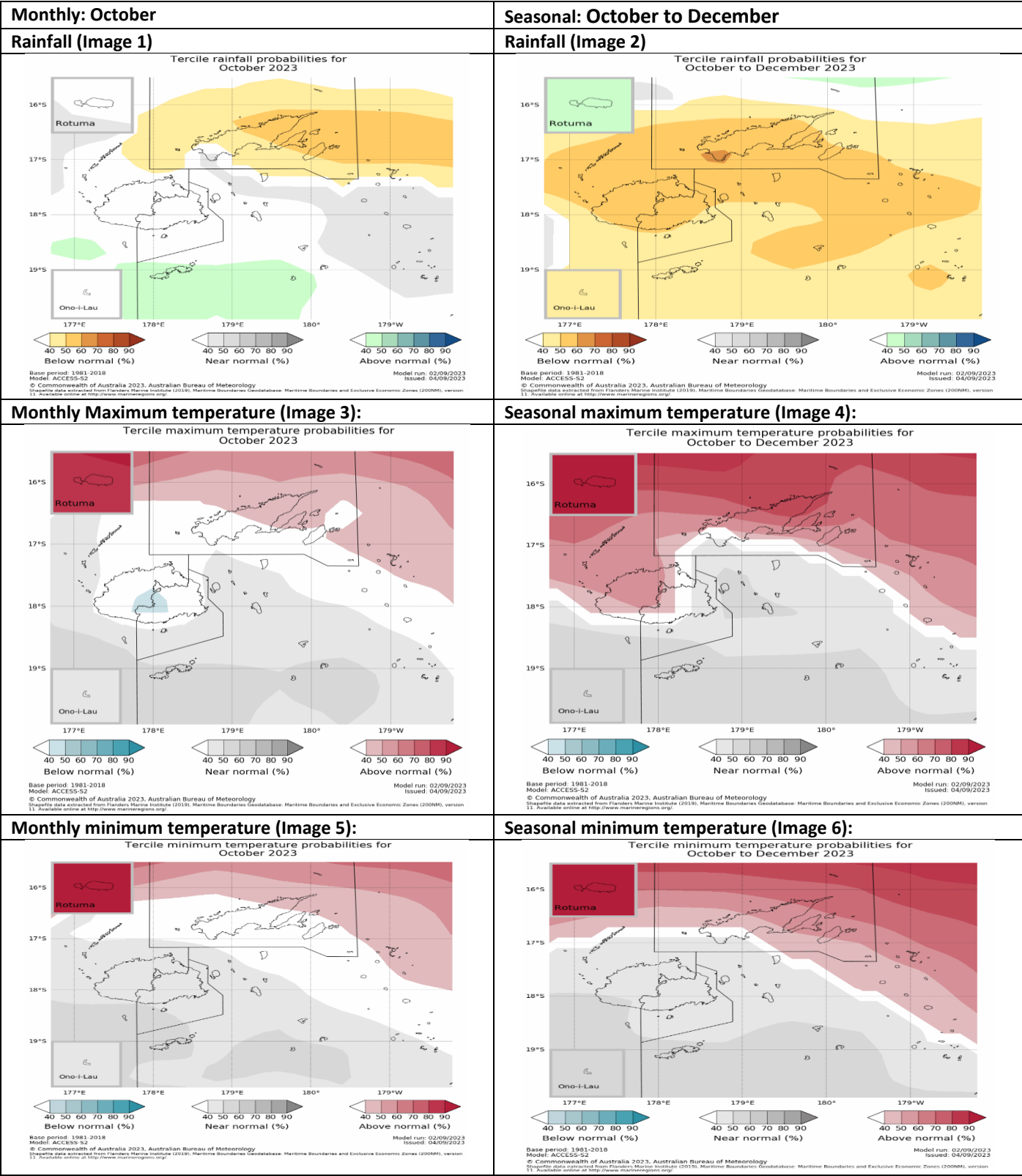
**TABLE 1: Monthly Rainfall**

Station (include data period)	Jun-2023	Jul-2023	Aug-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Western Division							
Penang Mill (1910-2023)	164.2	76.8	51.8	36.2	74.6	51.2	57/114
Lautoka Mill (1900-2023)	38.1	52.0	41.5	20.6	53.2	39.2	61/124
Nadi Airport (1942-2023)	86.7	49.6	134.2	23.8	61.2	48.5	72/82
Central Division							
Laucala Bay (Suva) (1942-2023)	314.5	234.3	306.1	90.9	149.3	125.2	73/82
Nausori Airport (1957-2023)	248.4	184.8	211.1	90.5	154.0	115.5	56/67
Tokotoko (Navua) (1945-2023)	203.2	272.5	268.0	131.3	204.7	169.1	61/79
Eastern Division							
Lakeba (1950-2023)	147.9	77.8	111.5	48.3	89.6	71.4	52/74
Vunisea (Kadavu) (1931-2023)	119.5	85.4	173.0	63.1	125.7	86.2	72/86
Ono-i-Lau (1943-2023)	92.0	58.0	148.0	54.0	107.4	88.0	59/76
Northern Division							
Labasa Airport (1946-2023)	103.9	27.2	58.7	13.7	61.0	42.0	42/67
Savusavu Airfield (1956-2023)	153.8	108.6	88.1	62.8	107.6	83.8	37/67
Udu Point (1946-2023)	154.5	67.0	398.0	45.6	105.4	86.0	74/74
Rotuma (1912-2023)	330.4	517.9	211.5	129.1	226.8	175.0	59/108

**TABLE 2: Three-month Total Rainfall for June to August 2023**

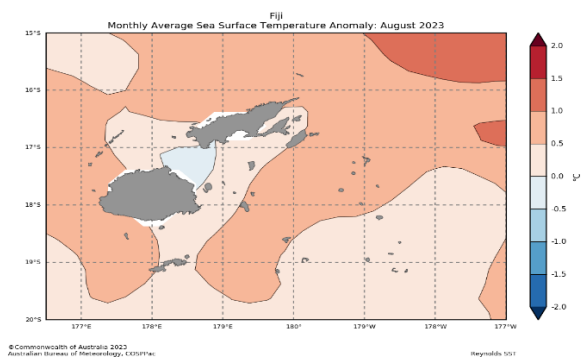
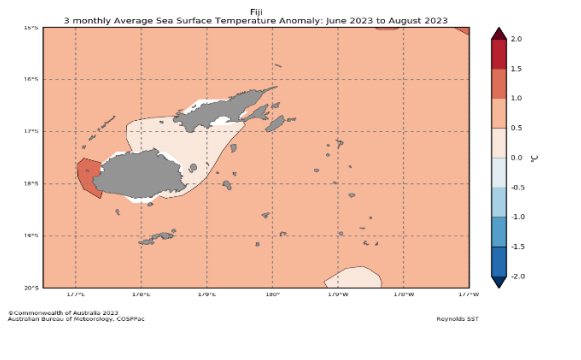
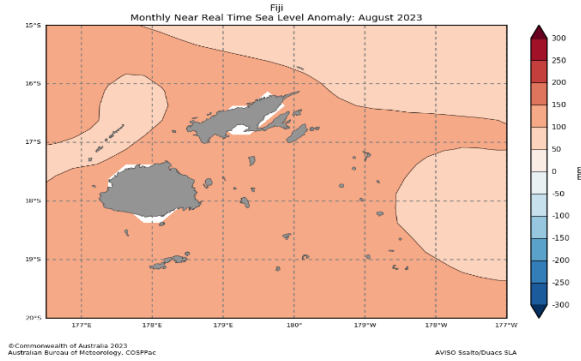
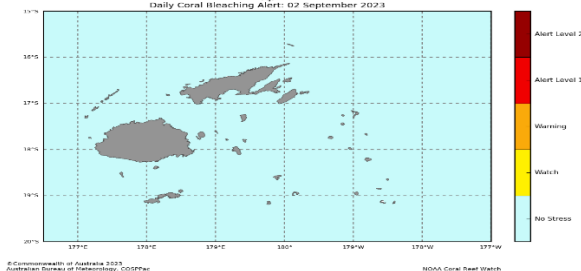
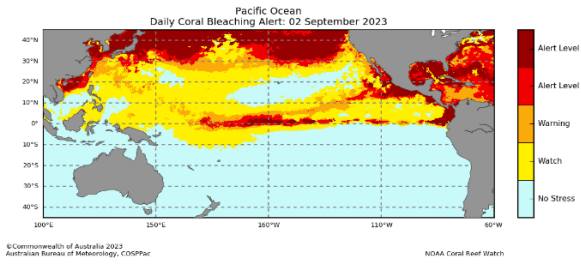
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Western Division						
Penang Mill (1910-2023)	292.8	Above normal	165.4	225.0	190.7	99/114
Lautoka Mill (1900-2023)	131.6	Normal	113.4	211.3	151.2	52/123
Nadi Airport (1942-2023)	270.5	Above normal	113.5	200.5	152.0	69/82
Central Division						
Laucala Bay (Suva) (1942-2023)	854.9	Above normal	359.8	507.9	435.8	79/82
Nausori Airport (1957-2023)	644.3	Above normal	337.2	495.1	420.7	58/67
Tokotoko (Navua) (1945-2023)	743.7	Above normal	469.9	644.7	549.4	60/77
Eastern Division						
Lakeba (1950-2023)	337.2	Above normal	183.9	296.4	270.1	57/72
Vunisea (Kadavu) (1931-2023)	377.9	Normal	284.5	418.6	354.2	52/84
Ono-i-Lau (1943-2023)	298.0	Normal	248.2	337.6	286.0	42/73
Northern Division						
Labasa Airport (1947-2023)	189.8	Above normal	108.5	174.7	145.3	46/66
Savusavu Airfield (1957-2023)	350.5	Normal	230.6	363.1	306.8	42/64
Udu Point (1946-2023)	619.5	Above normal	260.1	400.8	314.1	71/73
Rotuma (1912-2023)	1059.8	Above normal	585.6	818.0	701.5	99/106

Part 1i. Monthly and Seasonal Outlooks for October and October to December 2023

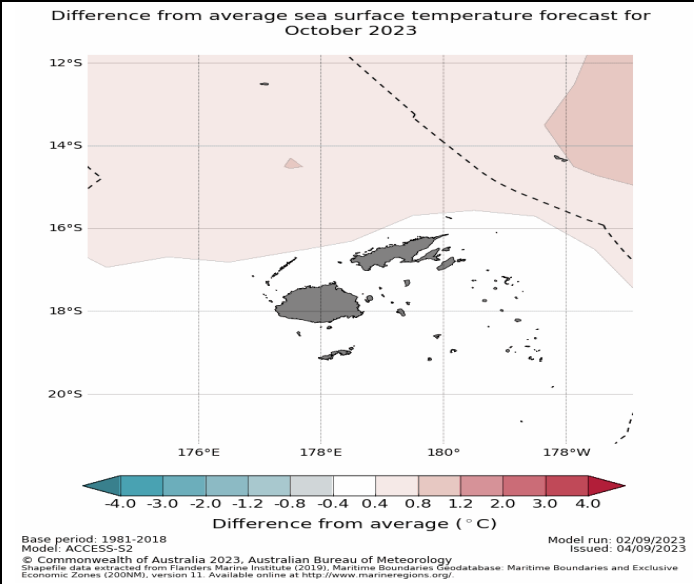
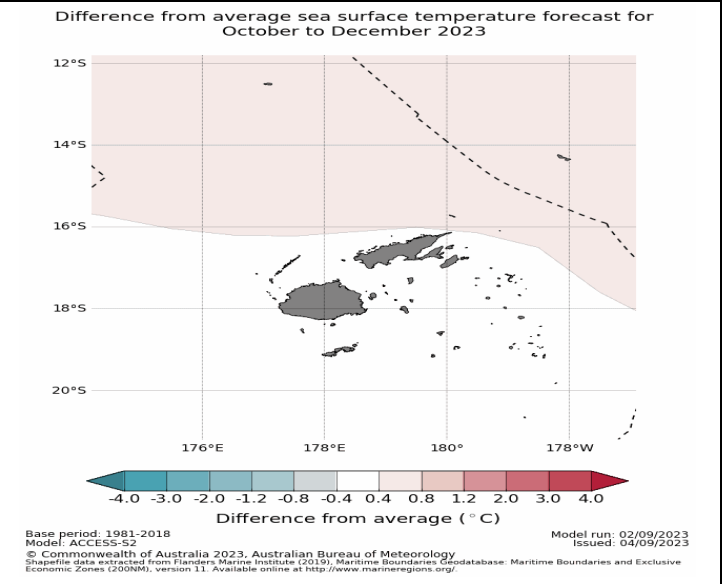
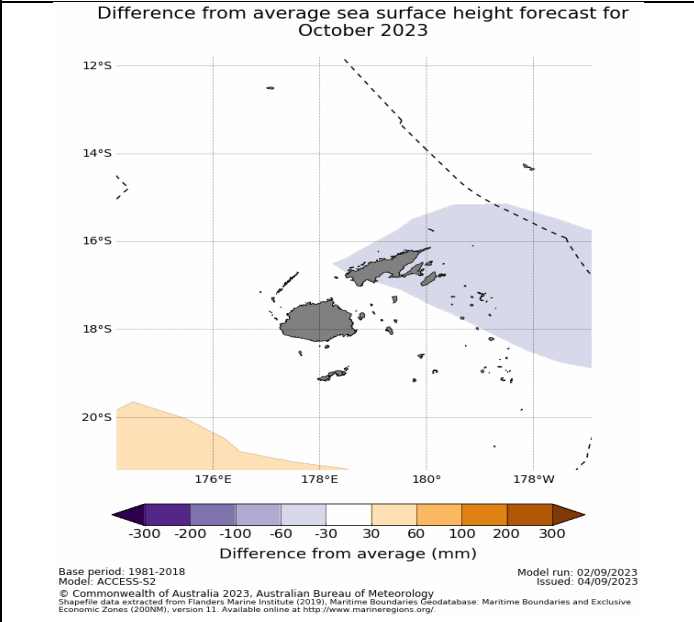
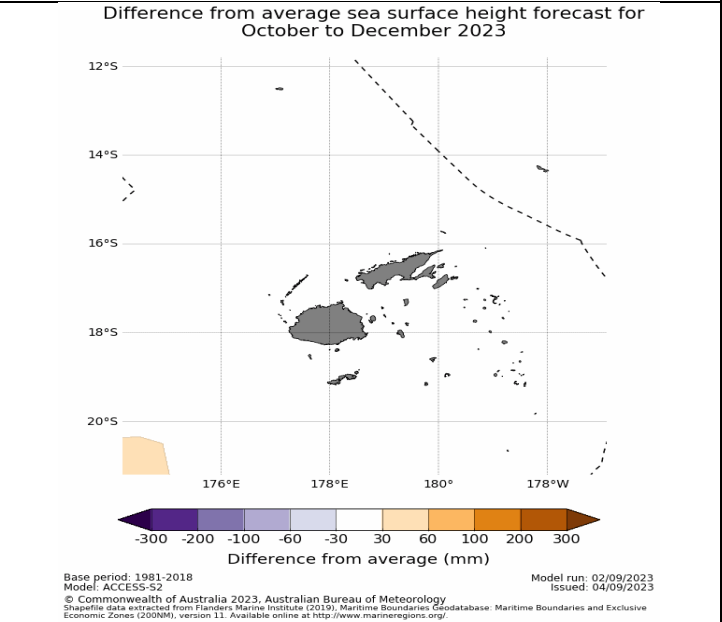
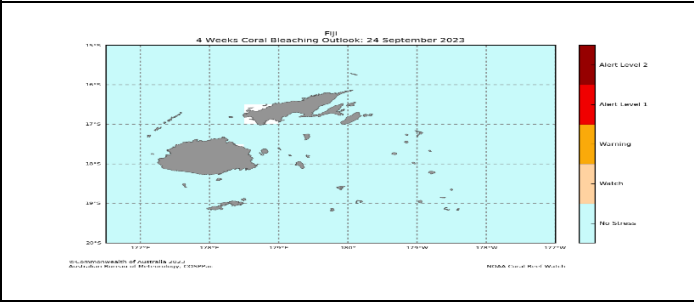
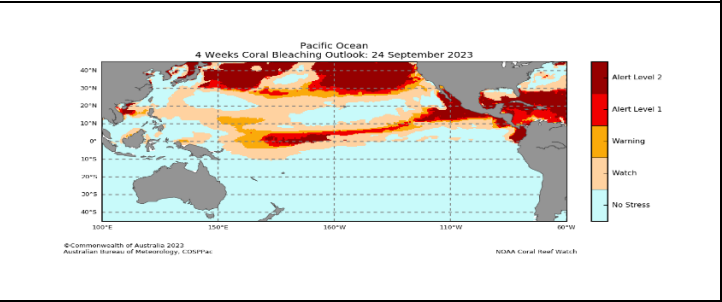


Part 2: Recent Ocean Observation

Monthly/Three months: August and June to August 2023

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

Part 2i. Monthly and Seasonal Outlooks for October and October to December 2023

Monthly: October	Seasonal: October to December
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for October 2023</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 <a href="http://www.marinerregions.org/">http://www.marinerregions.org/</a></p> <p>Model run: 02/09/2023 Issued: 04/09/2023</p>	<p>Difference from average sea surface temperature forecast for October to December 2023</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 <a href="http://www.marinerregions.org/">http://www.marinerregions.org/</a></p> <p>Model run: 02/09/2023 Issued: 04/09/2023</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for October 2023</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 <a href="http://www.marinerregions.org/">http://www.marinerregions.org/</a></p> <p>Model run: 02/09/2023 Issued: 04/09/2023</p>	<p>Difference from average sea surface height forecast for October to December 2023</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 <a href="http://www.marinerregions.org/">http://www.marinerregions.org/</a></p> <p>Model run: 02/09/2023 Issued: 04/09/2023</p>
4-week Coral Bleaching (Image 9):	
<p>4 Weeks Coral Bleaching Outlook: 24 September 2023</p>  <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, CSIRO</p> <p>NOAA Coral Reef Watch</p>	<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 24 September 2023</p>  <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, CSIRO</p> <p>NOAA Coral Reef Watch</p>

## Summary Statement

### Monthly and last three months: August 2023/June to August 2023 statement

For August 2023, *above normal* rainfall was recorded across Central and Eastern Divisions, plus Nadi and Udu Point, while *near-normal* rainfall was recorded at Penang, Lautoka, Labasa, Savusavu, and Rotuma. Udu Point recorded its wettest August in 74 years of record.

For June to August 2023, *above normal* rainfall was recorded across the Central Division, and at Penang, Nadi, Lakeba, Labasa, Udu Point, and Rotuma, while *near-normal* rainfall was recorded at Lautoka, Vunisea, Ono-i-Lau, and Savusavu. Udu Point, Laucala Bay, and Rotuma recorded their third, fourth, and eighth wettest June to August period in 73, 82, 106 years of record, respectively.

## Part 1i. Monthly and Seasonal Outlooks for October and October to December 2023

### Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for October is likely to be *below normal* across Vanua Levu, and *above normal* for Kadavu and parts of the Moala group. *Near-normal* rainfall is likely for parts of the northern and southern Lau Group, while in remaining parts of the country, the outlook offers little guidance.

The rainfall for October to December is likely or very likely to be *below normal* across the Fiji group, while *above normal* rainfall is likely for Rotuma.

Maximum temperatures for Fiji for October are likely to be *above normal* for northern parts of Vanua Levu and Lau Group, and Rotuma, *near-normal* for Viwa, Vatulele, Beqa, southern parts of Yasawa group and most parts of the Eastern Division. In remaining parts of Fiji, the outlook offers little guidance. Minimum temperatures for October are likely to be *above normal* for the far northeast of Vanua Levu, the northern Lau Group, and Rotuma, *near-normal* for the Western, Central and most parts of the Eastern Division, while there is little guidance for the remaining parts of Fiji.

For October to December 2023, maximum temperatures are likely to be *above normal* across the Western and Northern Divisions, and northern parts of the Lau Group and Rotuma, while for the remaining parts of Fiji, *near-normal* temperatures are likely. Minimum temperatures for October to November 2023 are likely to be above normal for Northern Division, northern Lau Group, and Rotuma, while for the remaining parts of Fiji, *near-normal* temperatures are likely.

## Part 2: Recent Ocean summary statement

### Monthly and last three months: August 2023/June to August 2023

August ocean temperatures around Fiji were 0.0°C to 1.0°C above normal.

Averaged over June to August, ocean temperatures around most of Fiji were 0.0°C to 1.0°C above normal. Above normal SST anomalies 1.0 to 1.5°C along the western coast of Viti Levu and Mamanuca island group.

August sea levels around Fiji were 50mm to 150mm above normal.

Coral bleaching alert is at 'No Stress' for Fiji Waters.

## Part 2i. Monthly and Seasonal Outlooks for October and October to December 2023

### Ocean Variable statement

October and averaged over October to December, ocean temperatures around Fiji are predicted to be 0.4 to 0.8°C above normal for Rotuma. The remaining parts of Fiji are likely to be near normal ocean temperatures.

The monthly sea surface heights are likely to be 30 to 60mm below normal for Vanua Levu and northern Lau Group, while remaining parts of the Fiji group are likely to be near normal. Seasonal sea surface heights are likely to be near normal across the Fiji Group.

Coral bleaching outlook forecasts no thermal stress for Fiji.

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

Product	Date: August 2023	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
Fiji Climate Summary	08/08/2023	General Public	140	106	34	
EAR Watch	11/08/2023	Humanitarian partners	122	96	26	
Fiji Climate Outlook	31/08/2023	General public	124	93	31	
Climate Outlook for Monasavu	30/08/2023	Energy Fiji Limited	13	13	-	
Fiji Ocean Outlook	18/08/2023	A number of key ocean related stakeholders	36	29	7	
Fiji Sugarcane Rainfall Outlook	31/08/2023	Sugar Industry stakeholders	77	60	17	
Meteorological Data Request	1/08/2023-31/08/2023	A range of stakeholders	42	34	8	
Sixth Pacific Meteorological Council Meeting and Third Pacific Ministerial Meeting on Meteorology	14/08/2023-18/08/2023	Meteorological Directors and Ministers and Donor partners	200			
<b>Total</b>			<b>754</b>	<b>431</b>	<b>123</b>	



## Sixth Pacific Meteorological Council Meeting and Third Pacific Ministerial Meeting on Meteorology

14<sup>th</sup> to 18<sup>th</sup> August 2023



Figure 1: Participants of the Sixth Pacific Meteorological Council (PMC-6) Meeting on 14<sup>th</sup> August, 2023, at Sofitel Resort and Spa, Nadi.



Figure 2: Acting Director of Fiji Meteorological Service, Mr. Bipen Prakash (on the right) appointed Chair for PMC-6.



Figure 3: Presentations being done during PMC-6.



Figure 4: Ministers in charge of Meteorology and other high level dignitaries attending the Third Pacific Ministerial Meeting on Meteorology (PMMM-3) on 18<sup>th</sup> August, 2023 at at Sofitel Resort and Spa, Nadi.





*Figure 5: Minister for Public Works, Meteorological Service and Transport, Honourable. Ro Filipe Tuisawau (on the left) speaking during the Third Pacific Ministerial Meeting on Meteorology (PMMM-3).*



*Figure 6: Secretary General of the World Meteorological Organisation, Professor Petteri Taalas, accorded with traditional i-Taukei welcoming ceremony during PMMM-3.*

### **Flash Flooding in the Central Division – 15<sup>th</sup> to 16<sup>th</sup> August 2023**



*Figure 7: Flash flooding in Rewa on 15th August, 2023. Source: Fiji Roads Authority.*



*Figure 8: Traffic congestion due to flash flooding in Suva on 15th August, 2023. Source: Fiji Roads Authority.*