

# Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 197

Country: Fiji

## Part 1: Recent climate

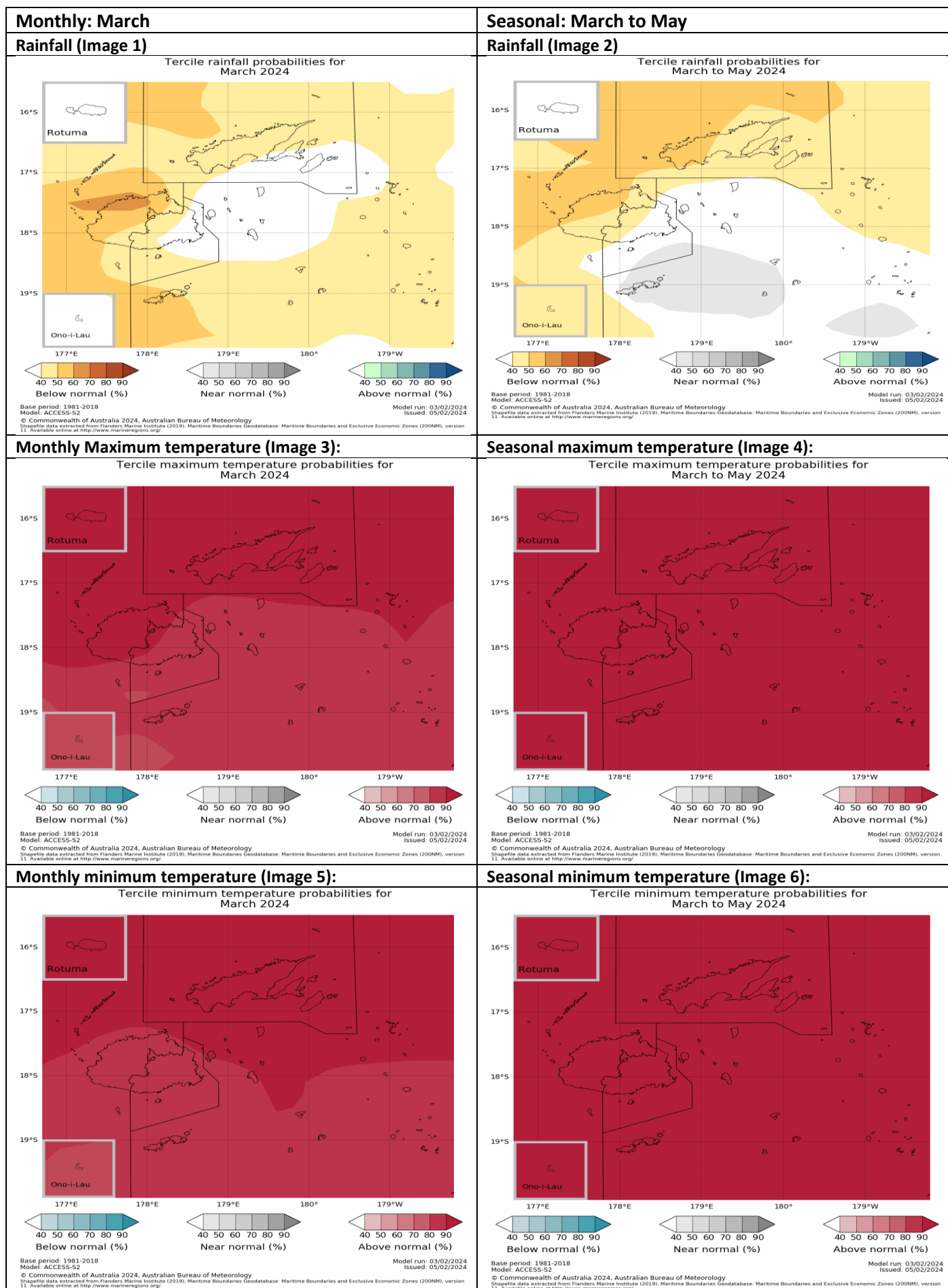
**TABLE 1: Monthly Rainfall**

Station (include data period)	Nov-2023	Dec-2023	Jan-2024				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
<b>Western Division</b>							
Penang Mill (1910-2024)	64.6	91.3	483.6	252.2	478.7	343.3	86/115
Lautoka Mill (1900-2024)	35.4	71.0	424.8	214.6	419.0	316.9	96/124
Nadi Airport (1942-2024)	41.1	57.7	389.9	226.5	366.8	304.8	57/83
<b>Central Division</b>							
Laucala Bay (Suva) (1942-2024)	200.1	144.4	621.0	255.1	401.9	321.6	<b>79/83</b>
Nausori Airport (1957-2024)	254.7	181.0	308.2	271.0	408.2	326.8	32/68
Tokotoko (Navua) (1945-2024)	763.0	304.5	530.5	288.1	409.5	342.8	67/78
<b>Eastern Division</b>							
Lakeba (1950-2024)	140.5	130.2	663.2	171.9	308.4	242.2	<b>73/74</b>
Vunisea (Kadavu) (1931-2024)	92.2	77.8	480.0	172.5	299.3	250.0	<b>82/88</b>
Ono-i-Lau (1943-2024)	79.4	37.8	253.2	130.7	230.4	184.4	58/76
<b>Northern Division</b>							
Labasa Airport (1946-2024)	91.5	273.9	252.5	236.9	461.0	369.5	25/66
Savusavu Airfield (1956-2024)	131.2	234.1	265.7	195.0	318.0	249.0	34/63
Udu Point (1946-2024)	99.5	208.3	346.3	241.7	400.1	333.5	41/75
Rotuma (1912-2024)	332.1	88.1	289.6	274.5	418.1	335.7	43/112

**TABLE 2: Three-month Total Rainfall for November 2023 to January 2024**

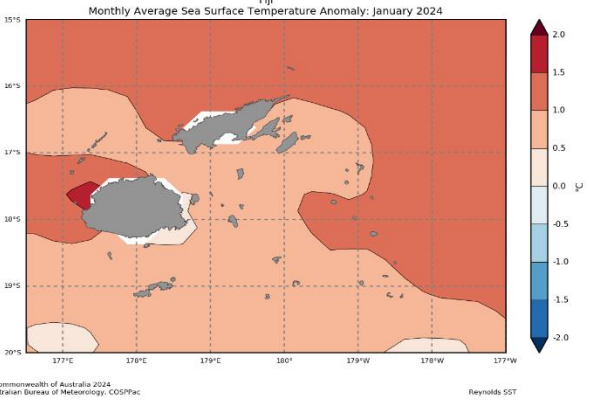
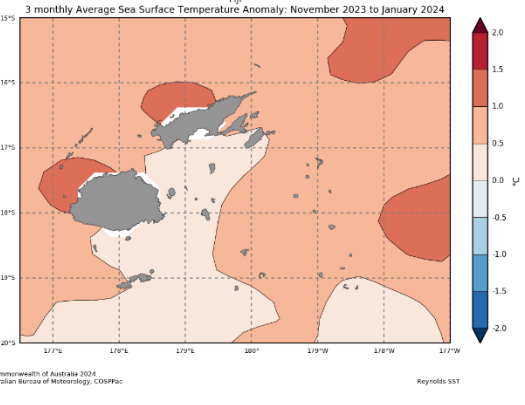
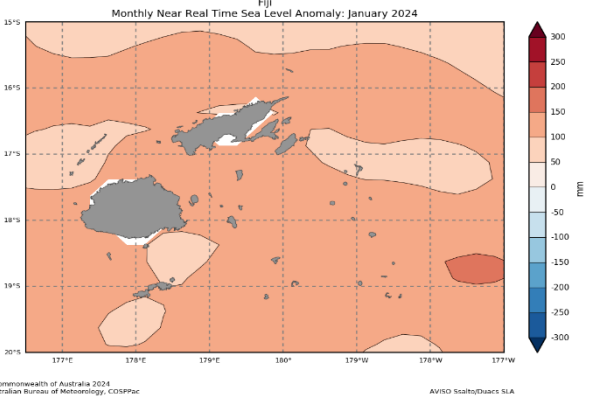
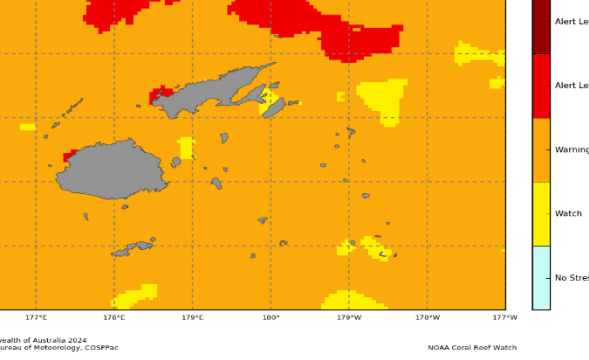
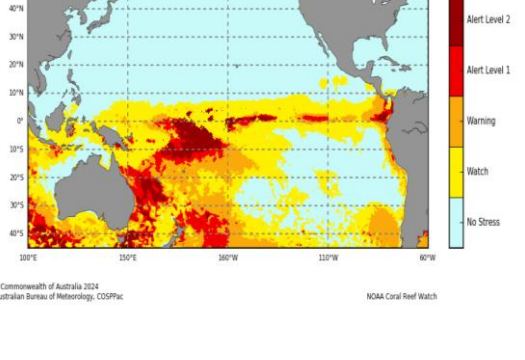
Station	Three-month Total	33%tile	67%tile	Median	Rank	
	Rainfall (mm)					
<b>Western Division</b>						
Penang Mill (1910-2024)	639.5	Normal	578.8	942.4	726.7	47/109
Lautoka Mill (1900-2024)	531.2	Normal	436.5	763.5	652.5	55/124
Nadi Airport (1942-2024)	488.7	Normal	427.9	775.5	676.4	32/81
<b>Central Division</b>						
Laucala Bay (Suva) (1942-2024)	965.5	Normal	706.6	1041.5	913.8	49/82
Nausori Airport (1957-2024)	743.9	Normal	742.5	1062.3	863.8	24/68
Tokotoko (Navua) (1945-2024)	1598.0	Above normal	848.7	1135.4	953.2	<b>74/76</b>
<b>Eastern Division</b>						
Lakeba (1950-2024)	933.9	Above normal	463.1	682.8	587.0	<b>67/74</b>
Vunisea (Kadavu) (1931-2024)	650.0	Normal	491.3	715.2	575.6	55/85
Ono-i-Lau (1943-2024)	370.4	Normal	368.2	515.7	455.4	27/73
<b>Northern Division</b>						
Labasa Airport (1947-2024)	617.9	Normal	565.0	928.6	666.6	25/61
Savusavu Airfield (1957-2024)	631.0	Normal	575.4	728.0	653.5	29/62
Udu Point (1946-2024)	654.1	Below normal	704.7	919.2	767.2	19/73
Rotuma (1912-2024)	709.8	Below normal	853.9	1072.6	967.0	19/108

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

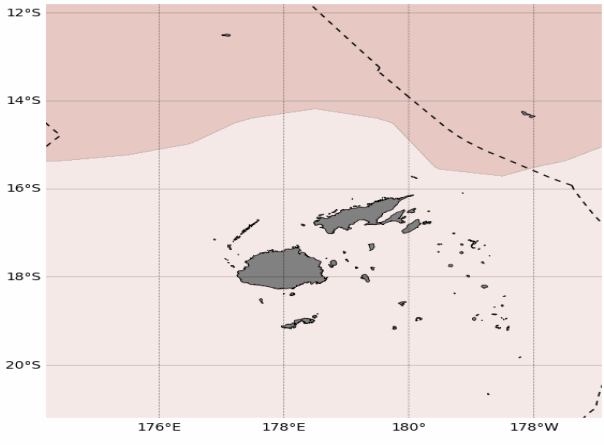
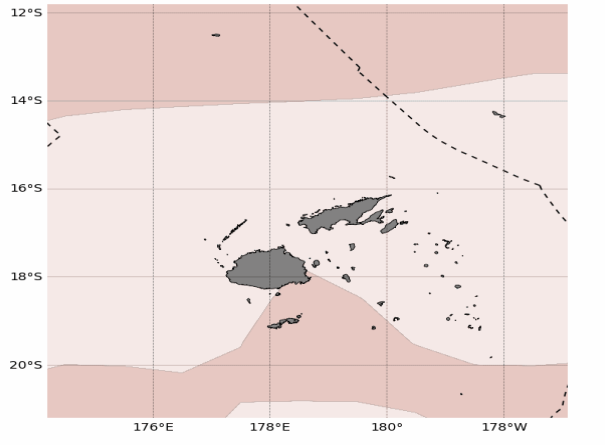
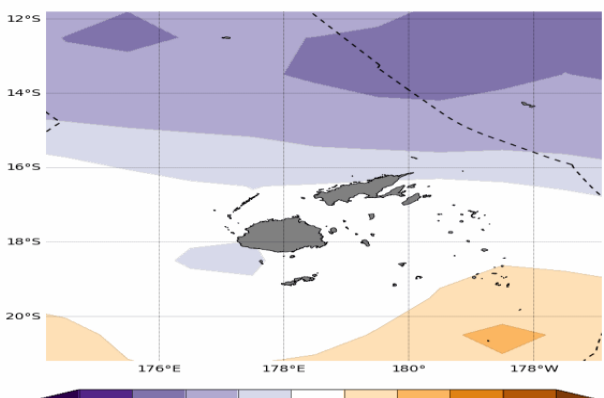
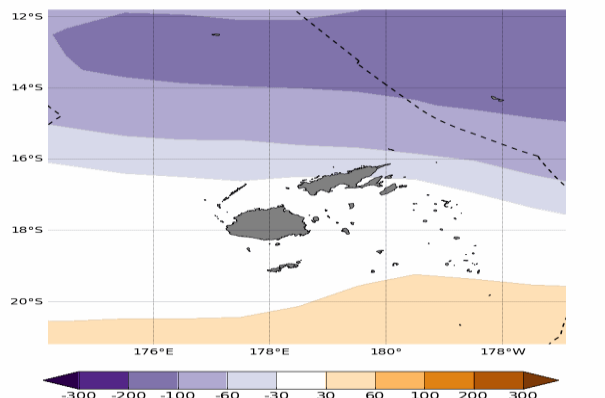
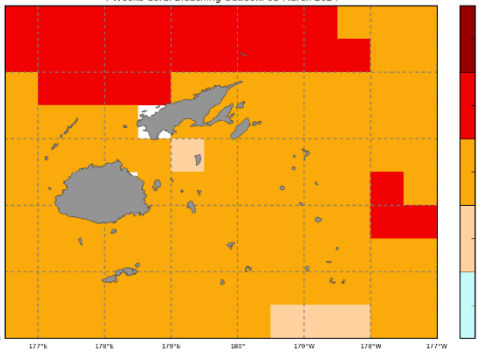
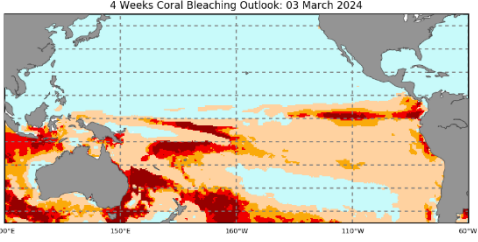


# Part 2: Recent Ocean Observation

## Monthly/Three months: January 2024 and November 2023 to January 2024

Monthly: January 2024	Last three months: November 2023 to January 2024:
<p><b>Sea Surface Temperature (Image 1):</b></p>  <p>Monthly Average Sea Surface Temperature Anomaly: January 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>Reynolds SST</p>	<p><b>Sea Surface Temperature (Image 4):</b></p>  <p>3 monthly Average Sea Surface Temperature Anomaly: November 2023 to January 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>Reynolds SST</p>
<p><b>Sea level (Image 2):</b></p>  <p>Monthly Near Real Time Sea Level Anomaly: January 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>AVISO SeaWiFS/SeaWiFS SLA</p>	
<p><b>Daily coral bleaching alert (Image 3):</b></p>  <p>Daily Coral Bleaching Alert: 04 February 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	 <p>Pacific Ocean Daily Coral Bleaching Alert: 04 February 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

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

Monthly: March	Seasonal: March to May
<p><b>Monthly sea surface temperature (Image 5):</b></p> <p>Difference from average sea surface temperature forecast for March 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Shapefile data extracted from Flinders 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: 03/02/2024 Issued: 05/02/2024</p>	<p><b>Seasonal sea surface temperature (Image 6):</b></p> <p>Difference from average sea surface temperature forecast for March to May 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Shapefile data extracted from Flinders 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: 03/02/2024 Issued: 05/02/2024</p>
<p><b>Monthly sea level (Image 7):</b></p> <p>Difference from average sea surface height forecast for March 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Shapefile data extracted from Flinders 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: 03/02/2024 Issued: 05/02/2024</p>	<p><b>Seasonal sea level (Image 8):</b></p> <p>Difference from average sea surface height forecast for March to May 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Shapefile data extracted from Flinders 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: 03/02/2024 Issued: 05/02/2024</p>
<p><b>4-week Coral Bleaching (Image 9):</b></p> <p>Fiji 4 Weeks Coral Bleaching Outlook: 03 March 2024</p>  <p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 03 March 2024</p>  <p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

## Summary Statement

### Monthly and last three months: January 2024/November 2023 to January 2024 statement

For January 2023, rainfall was *above normal* across the Western and Eastern Divisions, Suva, and Navua. The Northern Division, Nausori and Rotuma registered *near-normal* rainfall. Lakeba, Suva, and Vunisea recorded their second, fifth and seventh wettest January in 74, 83 and 88 years of record, respectively.

For November 2023 to January 2024, *above normal* rainfall was recorded at Navua and Lakeba, while *near-normal* was recorded across Western Division, Suva, Nausori, Vunisea, Ono-i-Lau, Labasa and Savusavu. *Below normal* rainfall was registered at Udu Point and Rotuma. Navua and Lakeba recorded their third and eighth wettest November to January in 76 and 74 years of record, respectively.

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

### Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for March 2024 is likely to be *below normal* for most parts of the Fiji Group, apart from some parts in Central Division, Lomaiviti Group, Taveuni, Ono-i-Lau and Rotuma where the outlook offers little guidance. For March to May 2024, rainfall is likely to be *below normal* for the Western and Northern Divisions and some parts of Central Division, northern Lau Group, and *near-normal* rainfall is likely for Kadavu. There is little guidance for remaining parts of Fiji.

Maximum and minimum temperatures for Fiji for March 2024 and averaged over March to May 2024 are very likely to be *above normal* across the Fiji Group.

## Part 2: Recent Ocean summary statement

### Monthly and last three months: January 2024/November 2023 to January 2024

January ocean temperatures around Fiji were 0.5°C to 2.0°C above normal.

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

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

There is a coral bleaching '*Alert Level 1*' for a small region west of Viti Levu and northwest of Vanua Levu.

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

### Ocean Variable statement

March ocean temperature are predicted to be 0.4 to 1.2°C *above normal*.

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

Monthly sea surface heights for March are likely to be 60 to 200mm *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 outlook is predicted to be at '*Alert Level 1*' for waters north of Vanua Levu and some parts of eastern Lau Group for the next four weeks and at '*Warning*' for the rest of the Fiji waters.

## IN BRIEF for Teleconference

- For January 2023, rainfall was normal to *above normal* across Fiji. For November 2023 to January 2024, rainfall was mainly near-normal *above normal* rainfall at Navua and Lakeba, while *near-normal* was recorded across Western Division, Suva, Nausori, Vunisea, Ono-i-Lau, Labasa and Savusavu. *Below normal* rainfall was registered at Udu Point and Rotuma.
- The rainfall outlook generally indicates below average is most likely in March and for the total rainfall over March to May. T
- SSTs were above normal for January and November to January. The outlook predicts above normal SSTs for the next one and three months.
- Sea-surface heights (SSH) were *above normal* for January. Below normal sea surface heights for northern half of Fiji's exclusive economic zone are predicted for March and March to May.  
There is a coral bleaching '*Alert Level 1*' for a small region west of Viti Levu and northwest of Vanua Levu. Coral bleaching outlook predicts '*Alert Level 1*' for waters north of Vanua Levu and eastern Lau group.

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

Product	Date: January 2023	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
Fiji Climate Summary	08/01/2024	General Public	140	106	34	
EAR Watch	09/01/2024	Humanitarian partners	122	96	26	
Fiji Climate Outlook	31/01/2024	General public	124	93	31	
Climate Outlook for Monasavu	31/01/2024	Energy Fiji Limited	13	13	-	
Fiji Ocean Outlook	19/01/2024	A number of key ocean related stakeholders	36	29	7	
Fiji Sugarcane Rainfall Outlook	02/02/2024	Sugar Industry stakeholders	77	60	17	
ENSO Update	25/01/2024	General Public	142	116	26	
Meteorological Data Request	1/01/2024- 31/01/2024	A range of stakeholders	42	38	4	
<b>Total</b>			<b>696</b>	<b>551</b>	<b>145</b>	

**FLASH FLOODING: 15<sup>th</sup> -16<sup>th</sup>, 20<sup>th</sup> - 22<sup>nd</sup> and 25<sup>th</sup>**

Heavy rainfall led to flash floods in low-lying areas of the Central Division on the 15<sup>th</sup>, 16<sup>th</sup>, 20<sup>th</sup>, 21<sup>st</sup>, and 22<sup>nd</sup>, as well as in the Central and Western Divisions on the 25<sup>th</sup>. Flash flooding resulted in road closures and inaccessibility in these areas, with a landslide reported at Kula Street in Samabula on the 20<sup>th</sup> as a consequence of continuous heavy rain.



*Figure C: Vatuwaqa, Suva on the 20<sup>th</sup>. Source: National Disaster Management Office.*



*Figure D: Landslide at Kula Street in Samabula on the 20<sup>th</sup>. Source: National Disaster Management Office.*



*Figure E: Waisa Bridge on the 21<sup>st</sup>. Source: National Disaster Management Office.*



*Figure F: Namaqumaqua Crossing, Navua on the 22<sup>nd</sup>. Source: Fiji Roads Authority.*



*Figure G: Wainibuka crossing, Colata Cocoa Road on the 25<sup>th</sup>. Source: Fiji Roads Authority.*