

Country: Fiji

Part 1: Recent climate

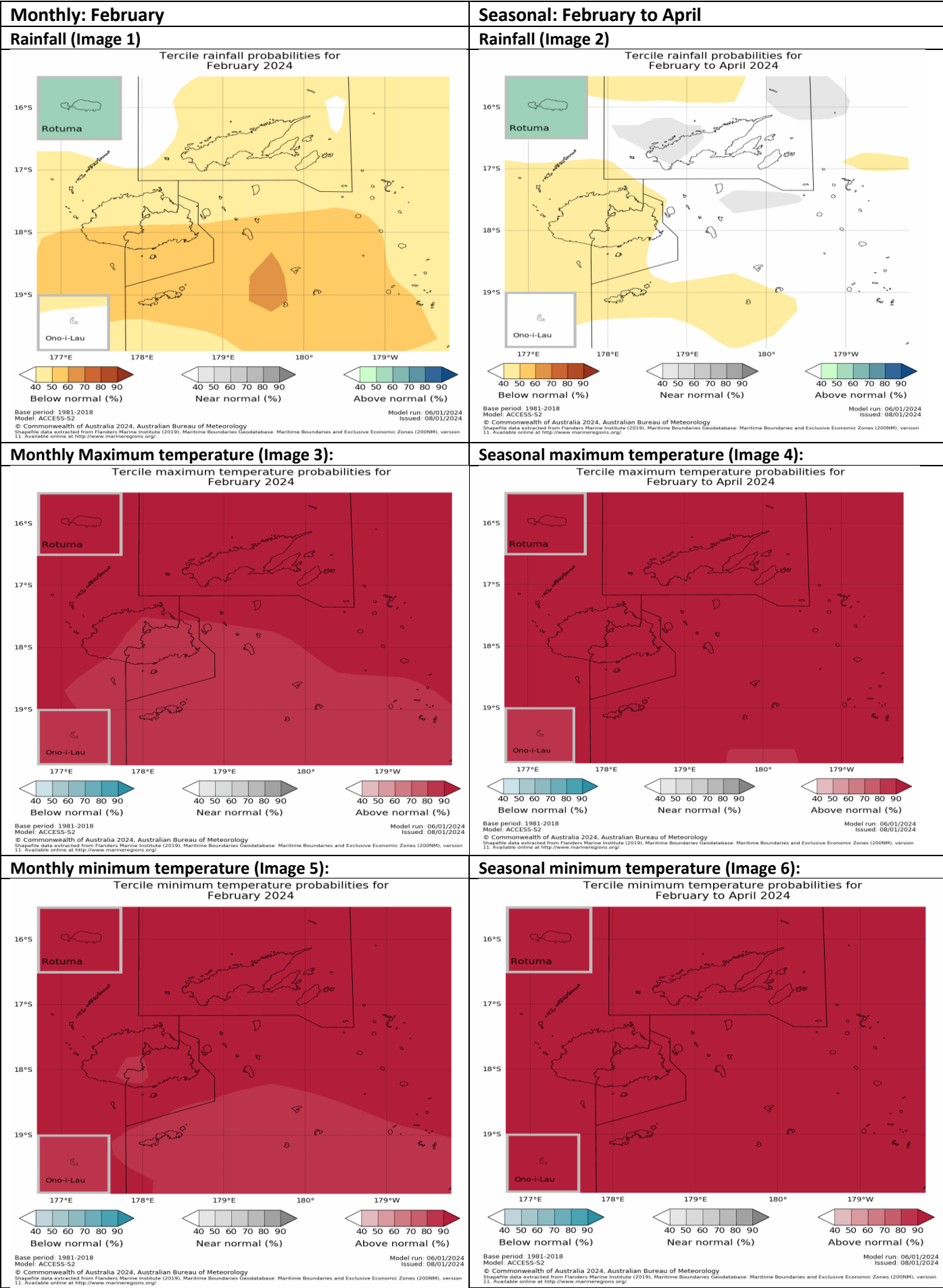
TABLE 1: Monthly Rainfall

Station (include data period)	Oct-2023	Nov-2023	Dec-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Western Division							
Penang Mill (1910-2024)	3.8	64.6	91.3	164.2	282.1	203.5	18/111
Lautoka Mill (1900-2024)	46.0	35.4	71.0	112.0	210.4	161.0	18/124
Nadi Airport (1942-2024)	16.6	41.1	57.7	122.7	247.2	186.5	12/82
Central Division							
Laucala Bay (Suva) (1942-2024)	75.6	200.1	144.4	213.7	341.3	270.6	10/82
Nausori Airport (1957-2024)	49.0	254.7	181.0	216.3	326.1	260.2	18/68
Tokotoko (Navua) (1945-2024)	110.0	763.0	304.5	228.8	399.5	286.6	43/78
Eastern Division							
Lakeba (1950-2024)	7.0	140.5	130.2	136.2	208.8	166.6	24/74
Vunisea (Kadavu) (1931-2024)	0.7	92.2	77.8	112.9	228.7	157.8	16/86
Ono-i-Lau (1943-2024)	15.2	79.4	37.8	87.1	172.6	116.4	10/76
Northern Division							
Labasa Airport (1946-2024)	31.1	91.5	273.9	151.0	281.2	210.7	43/65
Savusavu Airfield (1956-2024)	9.7	131.2	234.1	146.9	247.0	170.9	41/65
Udu Point (1946-2024)	11.0	99.5	208.3	189.3	309.9	267.2	28/74
Rotuma (1912-2024)	467.4	332.1	88.1	237.1	353.8	286.7	4/109

TABLE 2: Three-month Total Rainfall for October to December 2023

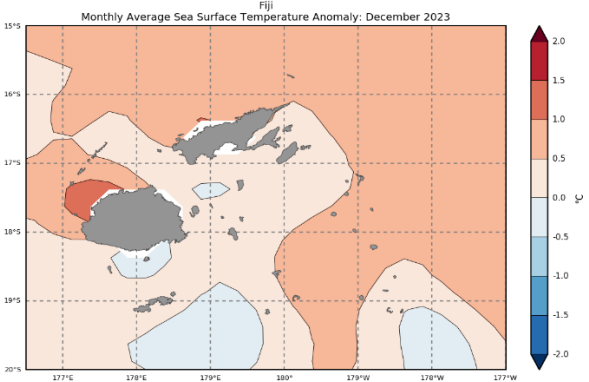
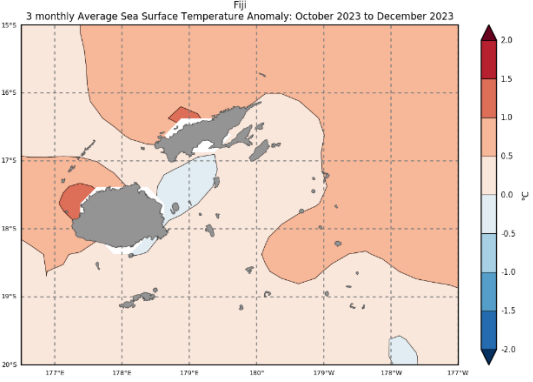
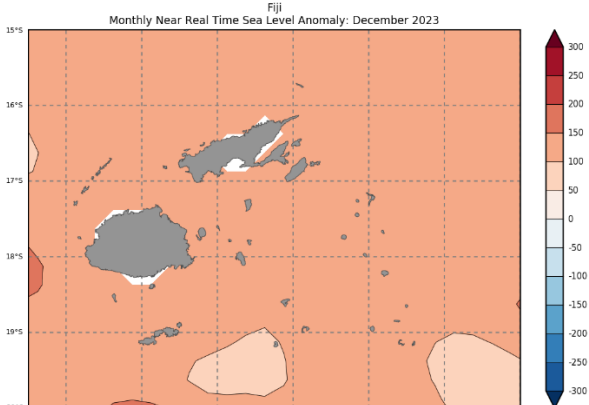
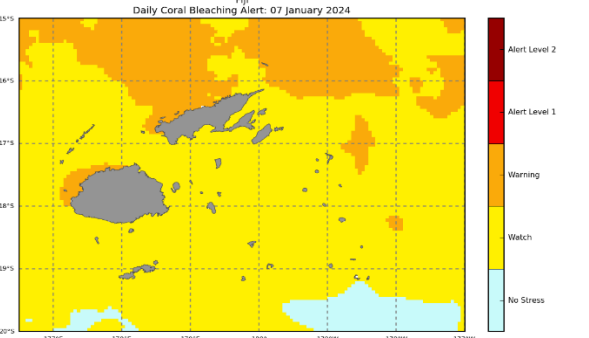
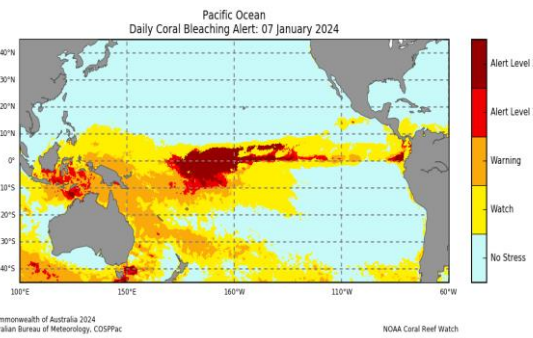
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Western Division						
Penang Mill (1910-2024)	159.7	Below normal	353.6	613.0	487.4	4/109
Lautoka Mill (1900-2024)	152.4	Below normal	297.6	446.4	360.6	12/124
Nadi Airport (1942-2024)	115.4	Below normal	335.1	497.1	381.3	4/81
Central Division						
Laucala Bay (Suva) (1942-2024)	420.1	Below normal	581.9	890.5	762.6	12/82
Nausori Airport (1957-2024)	484.7	Below normal	594.1	916.0	725.2	14/67
Tokotoko (Navua) (1945-20243)	1177.5	Above normal	755.4	1041.7	878.6	66/78
Eastern Division						
Lakeba (1950-2024)	277.7	Below normal	341.3	529.5	427.5	17/74
Vunisea (Kadavu) (1931-2024)	170.7	Below normal	319.0	536.2	472.2	4/83
Ono-i-Lau (1943-2024)	132.4	Below normal	228.4	416.9	348.3	8/76
Northern Division						
Labasa Airport (1947-2024)	396.5	Normal	361.4	611.6	483.2	25/61
Savusavu Airfield (1957-2024)	375.0	Below normal	427.0	637.3	523.7	15/64
Udu Point (1946-2024)	318.8	Below normal	554.7	756.5	636.8	5/73
Rotuma (1912-2024)	887.6	Normal	813.6	1062.4	948.3	41/107

Part 1i. Monthly and Seasonal Outlooks for February and February to April 2024

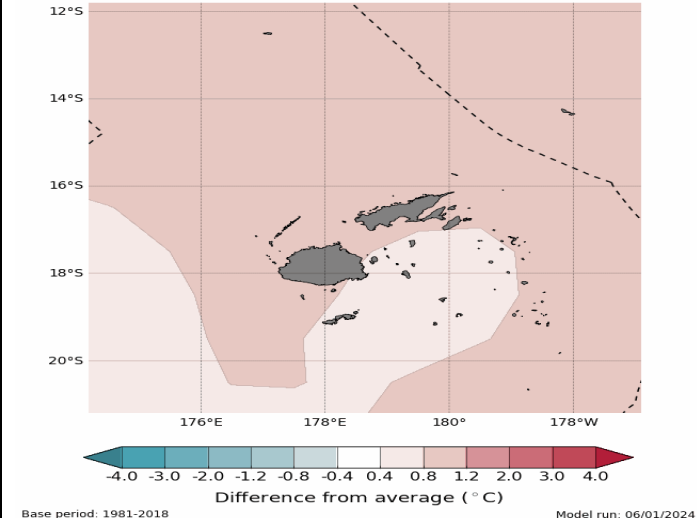
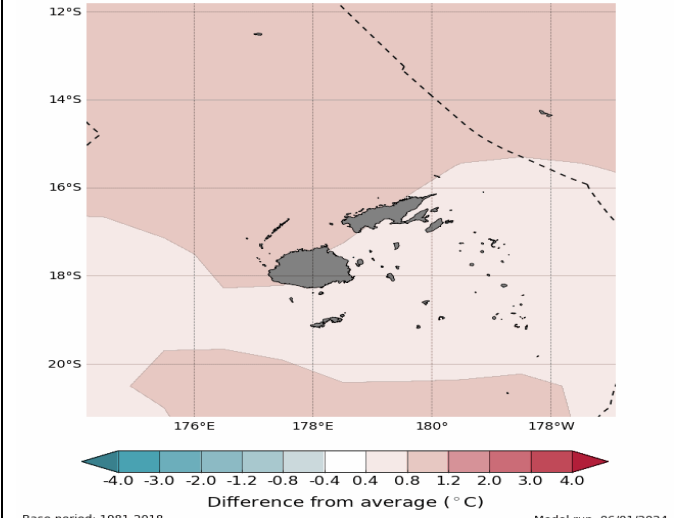
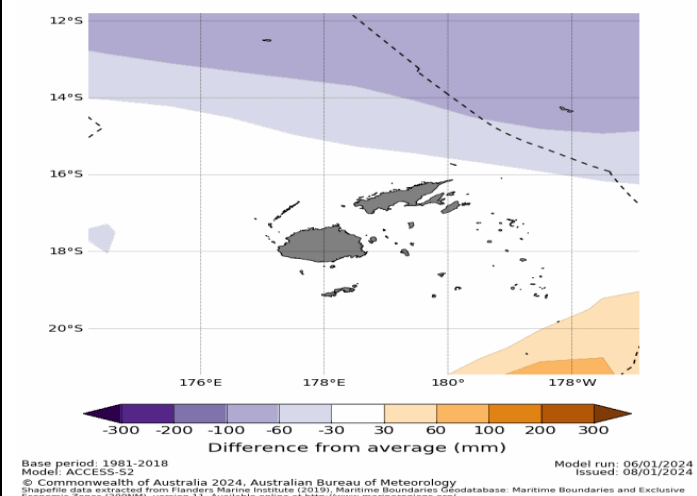
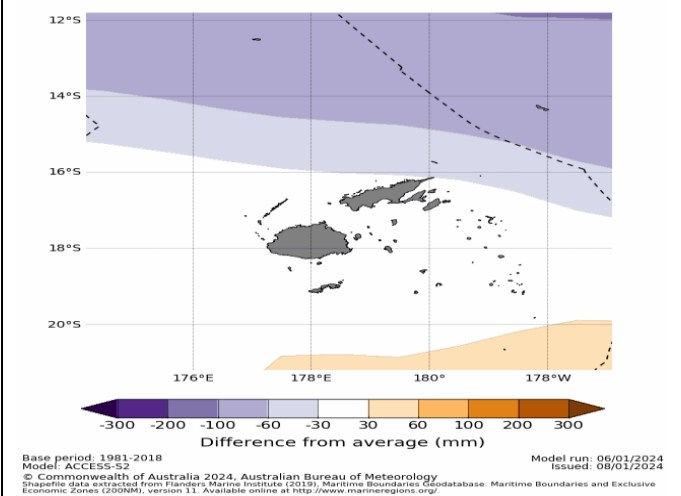
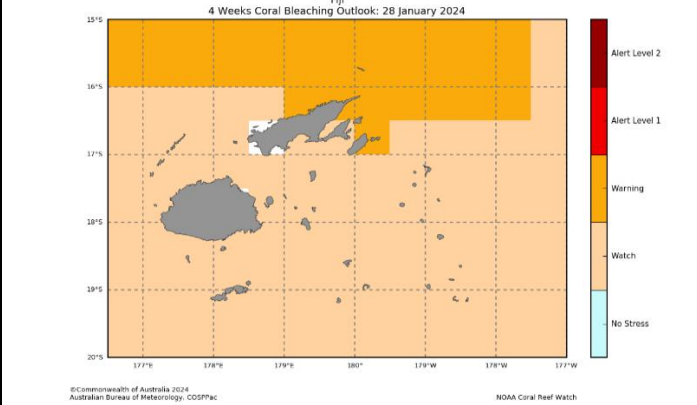
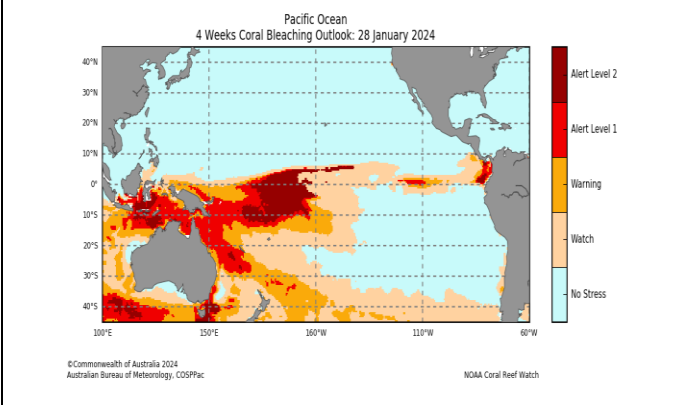


Part 2: Recent Ocean Observation

Monthly/Three months: December and October to December 2023

<p>Monthly: December</p> <p>Sea Surface Temperature (Image 1):</p> <div><p>Fiji</p><p>Monthly Average Sea Surface Temperature Anomaly: December 2023</p><p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>	<p>Last three months: October to December 2023:</p> <p>Sea Surface Temperature (Image 4):</p> <div><p>Fiji</p><p>3 monthly Average Sea Surface Temperature Anomaly: October 2023 to December 2023</p><p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>
<p>Sea level (Image 2):</p> <div><p>Fiji</p><p>Monthly Near Real Time Sea Level Anomaly: December 2023</p><p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p><p>AVISO SeaWiFS/Quicks SLA</p></div>	
<p>Daily coral bleaching alert (Image 3):</p> <div><p>Fiji</p><p>Daily Coral Bleaching Alert: 07 January 2024</p><p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>	<div><p>Pacific Ocean</p><p>Daily Coral Bleaching Alert: 07 January 2024</p><p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>

Part 2i. Monthly and Seasonal Outlooks for February and February to April 2024

Monthly: February	Seasonal: February to April
<p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for February 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, 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: 06/01/2024 Issued: 08/01/2024</p>	<p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for February to April 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, 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: 06/01/2024 Issued: 08/01/2024</p>
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for February 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, 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: 06/01/2024 Issued: 08/01/2024</p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for February to April 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, 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: 06/01/2024 Issued: 08/01/2024</p>
<p>4-week Coral Bleaching (Image 9):</p> <p>Fiji 4 Weeks Coral Bleaching Outlook: 28 January 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: 28 January 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: December 2023/October to December 2023 statement

For December 2023, rainfall was *below normal* across the Western and Eastern Divisions, Suva, Nausori, and Rotuma. The Northern Division and Navua posted *near-normal* rainfall. Rotuma recorded its fourth driest December in 109 years of record.

For October to December 2023, *above normal* rainfall was recorded at Navua, while *near-normal* was recorded at Labasa. *Below normal* rainfall was registered across Western and Eastern Divisions, Suva, Nausori, Savusavu, and Udu Point. Penang, Nadi and Vunisea all recorded their fourth driest October to December in 109, 81 and 83 years of record, respectively. Udu Point and Ono-i-Lau recorded their fifth and eighth driest October to December in 73 and 76 years of record, respectively.

Part 1i. Monthly and Seasonal Outlooks for February and February to April 2024

Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for February 2024 is likely to be *below normal* for most parts of the Fiji Group, apart from Rotuma where *above normal* rainfall is likely, and Ono-i-Lau where there is little guidance. For February to April 2024, rainfall is likely to be *below normal* for the Western and Central Divisions, *above normal* for Rotuma, but there is little guidance for remaining parts of Fiji.

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

Part 2: Recent Ocean summary statement

Monthly and last three months: December 2023/October to December 2023

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

Averaged over October to December, ocean temperatures West of Viti Levu and North of Vanua Levu were 1.0°C to 1.5°C *above normal*, while temperatures were *near normal* for remaining parts of Fiji.

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

Coral bleaching alert is at 'Watch' for majority of the Fiji Waters, while 'Warning' is in place for waters West of Viti Levu and North of Vanua Levu.

Part 2i. Monthly and Seasonal Outlooks for February and February to April 2024

Ocean Variable statement

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

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

Monthly sea surface heights for February are likely to be 100 to 200mm *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 100 to 200mm *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 ‘*Warning*’ for waters North of Vanua Levu for the next four weeks and at ‘*Watch*’ for the rest of the Fiji waters.

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

Product	Date: December 2023	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
Fiji Climate Summary	08/12/2023	General Public	140	106	34	
EAR Watch	12/12/2023	Humanitarian partners	122	96	26	
Fiji Climate Outlook	29/12/2023	General public	124	93	31	
Climate Outlook for Monasavu	28/12/2023	Energy Fiji Limited	13	13	-	
Annual Climate Summary	20/12/2023	General Public	140	106	34	
Fiji Ocean Outlook	20/12/2023	A number of key ocean related stakeholders	36	29	7	
Fiji Sugarcane Rainfall Outlook	09/01/2023	Sugar Industry stakeholders	77	60	17	
ENSO Update	24/11/2023	General Public	142	116	26	
Sixth National Climate Outlook Forum	06/12/2023- 07/12/2023	Ministry of Agriculture, Tailevu Dairy, Future Farms Pte Limited, Fiji Dairy Pte Limited, Sujose Nursery, FRIEND, Fiji Disabled Peoples Federation, Fiji Crop and Livestock Council, femLINKpacific, Ministry of Forestry, Ministry of Trade, Cooperatives, Small and Medium Enterprises, Mineral Resources Department,	33	16	17	Feedback on Fiji Agrometeorological Bulletin: Simplify the technical information. Use of infographics to communicate the messages clearly. Add seasonal crop calendar summary. Capacity building training for farmers and farm field officers to interpret the product. Inclusion of weather pattern information for pest and disease control.

		Biosecurity Authority of Fiji, Ministry of Health, SPC, Model Town Charitable Trust, FBC, Fiji TV				Vernacular translation of the bulletin. Produce videos of the bulletin so that it can be understood by the farmers.
Meteorological Data Request	1/12/2023-31/12/2023	A range of stakeholders	30	25	5	
Total			857	660	197	

Fiji's Sixth National Climate Outlook Forum: 6th to 7th December 2023



Figure 1: Participants of Fiji's Sixth National Climate Outlook Forum.



Figure 2: The Deputy Secretary of Operation for Ministry of Public Works, Transport and Meteorological Services, Mr. George Tavo, being garlanded at the opening session.



Figure 3: Mr. Saimone Delabaka, from Biosecurity Authority of Fiji providing their groups feedback on Fiji's Agrometeorological Bulletin.



Figure 4: Mr. Sanjeev Kumar Mani, from Ministry of Agriculture providing their groups feedback on Fiji's Agrometeorological Bulletin.



Figure 5: Acting Principal Scientific Officer (Climatology), Ms. Arieta Daphne, presenting on the achievements of past NCOFs.



Figure 6: Scientific Officer (Climatology), Mr. Jasneel Chandra, giving a brief summary of 2022/23 Tropical Cyclone Season.



Figure 7: Scientific Officer (Climatology, Ms. Shweta Shiwangni, presenting on Fiji's climate outlook for the wet season.



Figure 8: Technical Officer (I), Mr. Atish Kumar, giving a tour to the participants of the Laucala Bay station.



Figure 9: Mr. GuoFu Luo presents on the weather and climate needs of the agriculture sector.



Figure 10: Participants of the forum giving feedback on the services provided by Fiji Meteorological Services.

Flash Flooding: 17th and 18th December 2023



Figure 11: Vehicle queued up at Galoa Bridge on the 18th December. Source: National Disaster Management Office



Figure 12: Flash flooding in Galoa on the 18th December. Source: National Disaster Management Office



Figure 13: Nakorovou Village Road inundated with flood waters on the 18th December. Source: Fiji Roads Authority



Figure 14: Waivunu Road closed to all traffic due to flash flooding on the 18th December. Source: Fiji Roads Authority

Landslide: 18th December 2023



Figure 15: Landslide along Queens after Nakorovou on the 18th December. Source: Fiji Roads Authority