

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 191

Country: Fiji

Part 1: Recent climate

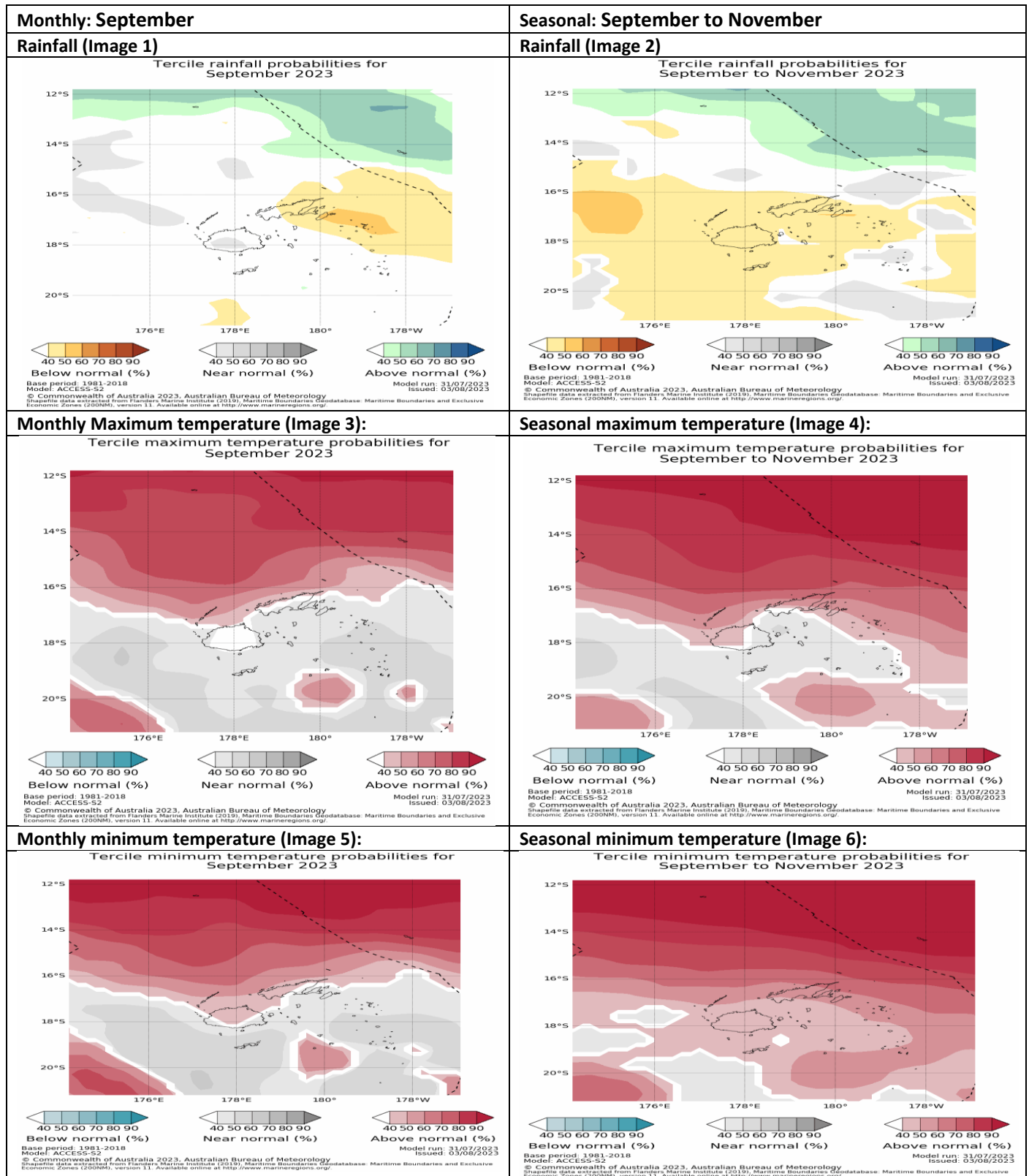
TABLE 1: Monthly Rainfall

Station (include data period)	May-2023	Jun-2023	Jul-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Western Division							
Penang Mill (1910-2023)	171.8	164.2	76.8	23.7	54.8	35.8	88/114
Lautoka Mill (1900-2023)	99.3	38.1	52.0	14.1	54.8	32.8	73/123
Nadi Airport (1942-2023)	136.9	86.7	49.6	14.4	61.0	32.7	51/82
Central Division							
Laucala Bay (Suva) (1942-2023)	197.7	314.5	234.3	89.0	157.8	120.7	70/82
Nausori Airport (1957-2023)	246.9	248.4	184.8	94.0	134.2	118.4	54/67
Tokotoko (Navua) (1945-2023)	150.5	203.2	272.5	138.1	209.0	170.9	64/78
Eastern Division							
Lakeba (1950-2023)	63.7	147.9	77.8	47.7	80.1	57.6	47/72
Vunisea (Kadavu) (1931-2023)	85.4	119.5	85.4	83.8	129.3	97.0	35/86
Ono-i-Lau (1943-2023)	73.0	92.0	58.0	59.4	104.1	74.7	26/76
Northern Division							
Labasa Airport (1946-2023)	164.8	103.9	27.2	23.1	46.1	33.3	27/68
Savusavu Airfield (1956-2023)	193.8	153.8	108.6	54.5	106.9	83.2	46/67
Udu Point (1946-2023)		154.5	67.0	62.3	101.0	81.1	28/74
Rotuma (1912-2023)	261.2	330.4	517.9	162.0	265.2	217.2	107/108

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

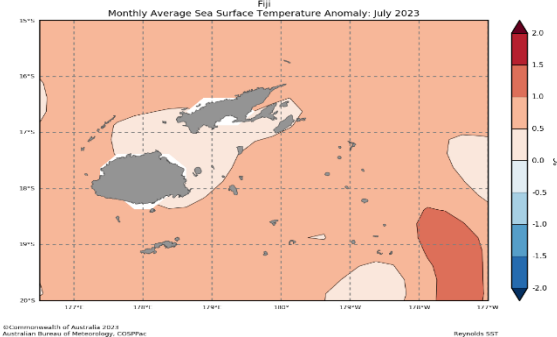
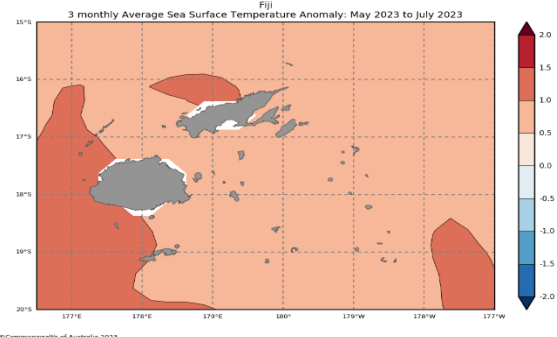
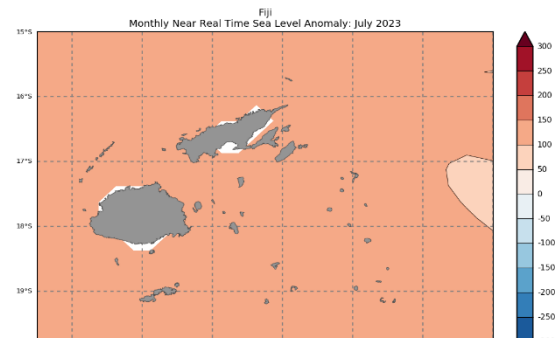
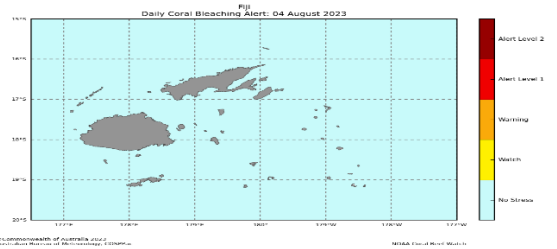
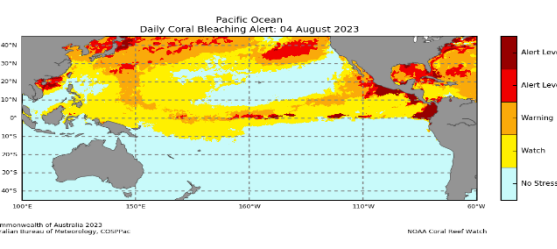
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Western Division						
Penang Mill (1910-2023)	412.8	Above normal	171.0	303.1	254.8	99/114
Lautoka Mill (1900-2023)	189.4	Normal	138.6	219.0	175.9	60/123
Nadi Airport (1942-2023)	273.2	Above normal	140.5	238.7	174.2	62/81
Central Division						
Laucala Bay (Suva) (1942-2023)	746.5	Above normal	444.1	614.5	509.5	68/82
Nausori Airport (1957-2023)	680.1	Above normal	430.4	580.1	500.6	54/67
Tokotoko (Navua) (1945-2023)	626.2	Normal	551.8	742.9	642.0	36/78
Eastern Division						
Lakeba (1950-2023)	289.4	Normal	247.0	363.6	317.6	32/71
Vunisea (Kadavu) (1931-2023)	290.3	Below normal	339.8	450.4	391.7	24/85
Ono-i-Lau (1943-2023)	223.0	Below normal	236.9	370.5	312.7	24/72
Northern Division						
Labasa Airport (1947-2023)	295.9	Above normal	166.1	262.5	203.5	51/67
Savusavu Airfield (1957-2023)	456.2	Above normal	299.5	440.3	364.6	43/63
Udu Point (1946-2023)			307.8	481.7	379.8	
Rotuma (1912-2023)	1109.5	Above normal	689.8	887.8	795.5	100/107

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



Part 2: Recent Ocean Observation

Monthly/Three months: July and May to July 2023

Monthly: July	Last three months: May to July 2023::
Sea Surface Temperature (Image 1): <div><p>Fiji Monthly Average Sea Surface Temperature Anomaly: July 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>	Sea Surface Temperature (Image 4): <div><p>Fiji 3 monthly Average Sea Surface Temperature Anomaly: May 2023 to July 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>
Sea level (Image 2): <div><p>Fiji Monthly Near Real Time Sea Level Anomaly: July 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>AVISO SeaLandsat SIA</p></div>	
Daily coral bleaching alert (Image 3): <div><p>Fiji Daily Coral Bleaching Alert: 04 August 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>	<div><p>Pacific Ocean Daily Coral Bleaching Alert: 04 August 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>

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

Monthly: September	Seasonal: September to November
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<div><p>Difference from average sea surface temperature forecast for 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.maritimesg.org/</p><p>Model run: 31/07/2023 Issued: 02/08/2023</p></div>	<div><p>Difference from average sea surface temperature forecast for September to November 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.maritimesg.org/</p><p>Model run: 31/07/2023 Issued: 02/08/2023</p></div>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<div><p>Difference from average sea surface height forecast for 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.maritimesg.org/</p><p>Model run: 31/07/2023 Issued: 02/08/2023</p></div>	<div><p>Difference from average sea surface height forecast for September to November 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.maritimesg.org/</p><p>Model run: 31/07/2023 Issued: 02/08/2023</p></div>
4-week Coral Bleaching (Image 9):	
<div><p>4 Weeks Coral Bleaching Outlook: 27 August 2023</p><p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p><p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPac</p></div>	<div><p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 27 August 2023</p><p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p><p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPac</p></div>

Summary Statement

Monthly and last three months: July 2023/May to July 2023 statement

For July 2023, *above normal* rainfall was recorded across Central Division, at Penang Mill, Savusavu Airfield and Rotuma, *near-normal* rainfall was recorded at Lautoka Mill, Nadi Airport, Lakeba, Vunisea and Udu Point, while *below normal* rainfall was registered at Ono-i-Lau. Rotuma recorded its second wettest July in 108 years of record.

For May to July 2023, *above normal* rainfall was recorded at Penang Mill, Nadi Airport, Laucala Bay (Suva), Nausori Airport, Labasa Airport, Savusavu Airfield and Rotuma, *near-normal* rainfall was recorded at Lautoka Mill, Tokotoko (Navua) and Lakeba, while *below normal* rainfall was registered at Vunisea and Ono-i-Lau. Rotuma recorded its eighth wettest May to July period in 108 years of record.

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

Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for September is likely to be *below normal* for most of Vanua Levu, Taveuni, and Qamea Islands, plus parts of the northern Lau Group, while *above normal* is likely for Rotuma. In remaining parts of the country, the outlook offers little guidance.

The rainfall for September to November is likely to be *below normal* for Viti Levu, Vanua Levu, Viwa, the Yasawa and Mamanuca, Lomaiviti, and Moala Groups, Taveuni and parts of the northern Lau Group. Near-normal rainfall is likely for parts of the southern Lau Group, while *above normal* rainfall is likely for Rotuma. In remaining parts of the country, the outlook offers little guidance.

Both maximum and minimum temperatures for Fiji for September and averaged over September to November 2023 are very likely to be *near-normal*, except for some parts of Viti Levu, Vanua Levu and southern Lau Group where *above normal* temperatures are likely.

Part 2: Recent Ocean summary statement

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

July ocean temperatures around Fiji were 0.5 to 1.0°C above normal.

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

July sea levels around Fiji were 100mm to 150mm above normal.

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

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

Ocean Variable statement

September and averaged over September and November, ocean temperatures around Fiji are predicted to be 0.4 to 0.8°C above normal for northern parts of Yasawa Group, Vanua Levu and Rotuma. 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 across the Fiji Group.

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: July 2023	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
Fiji Climate Summary	7/07/2023	General Public	140	106	34	
EAR Watch	11/07/2023	Humanitarian partners	122	96	26	
Fiji Climate Outlook	31/07/2023	General public	124	93	31	
Climate Outlook for Monasavu	28/07/2023	Energy Fiji Limited	13	13	-	
Fiji Ocean Outlook	19/07/2023	A number of key ocean related stakeholders	36	29	7	
Fiji Sugarcane Rainfall Outlook	31/07/2023	Sugar Industry stakeholders	77	60	17	
Meteorological Data Request	1/07/2023-31/07/2023	A range of stakeholders	35	31	4	
Total			547	428	119	