

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 187

Country: Fiji

Part 1: Recent climate

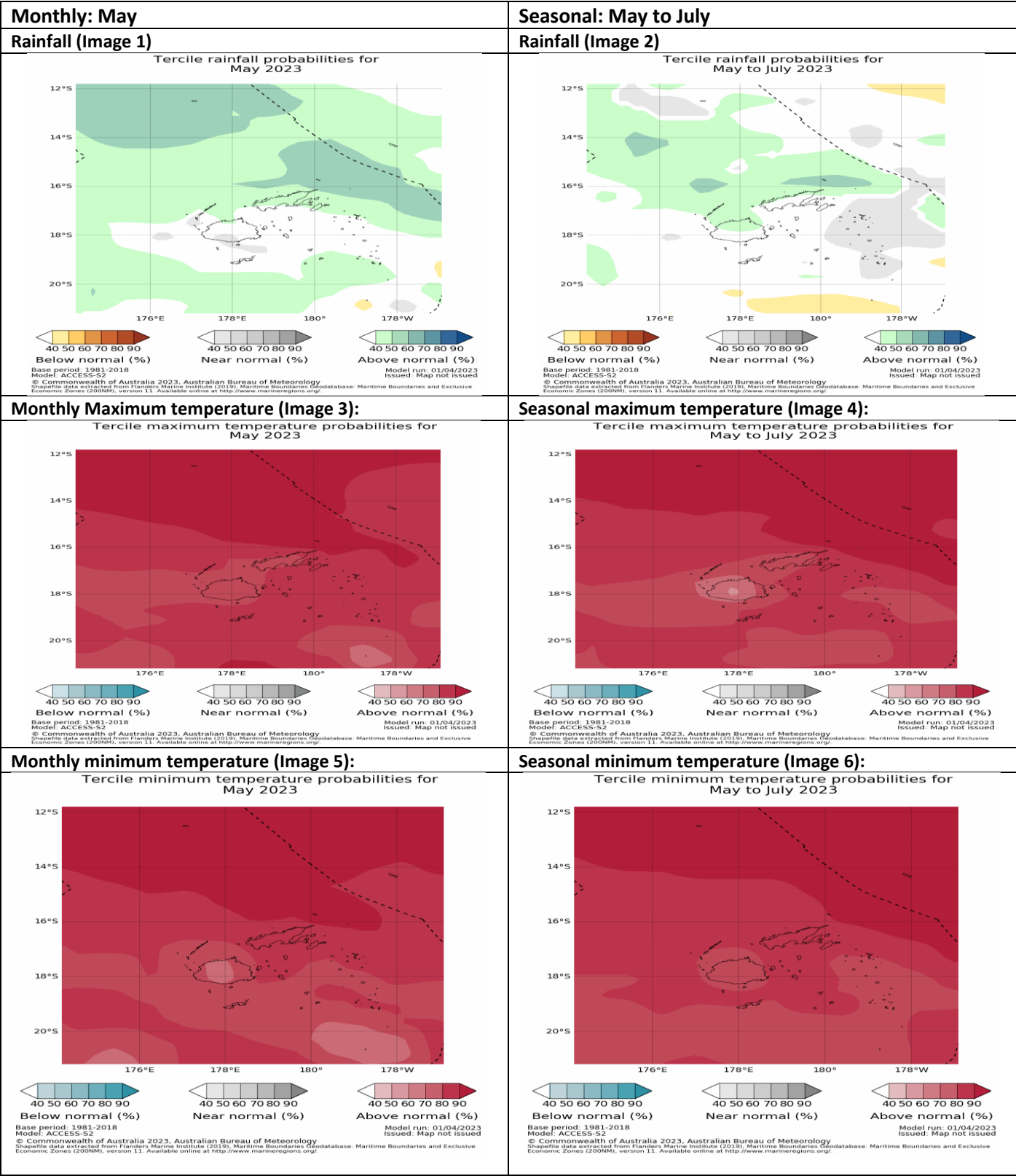
TABLE 1: Monthly Rainfall

Station (include data period)	Jan-2023	Feb-2023	Mar-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Western Division							
Penang Mill (1910-2023)	490.5	580.2	475.7	292.3	456.8	382.2	85/114
Lautoka Mill (1900-2023)	419.8	688.6	342.4	231.8	420.5	308.3	70/123
Nadi Airport (1942-2023)	711.9	643.7	360.2	258.3	417.2	321.2	50/80
Central Division							
Laucala Bay (Suva) (1942-2023)	378.9	425.3	157.2	297.5	433.3	343.3	8/82
Nausori Airport (1957-2023)	341.1	373.7	140.4	307.6	442.8	362.6	3/67
Tokotoko (Navua) (1945-2023)	294.5	294.0	228.0	318.2	438.9	378.0	12/79
Eastern Division							
Lakeba (1950-2023)	165.3	321.1	167.5	212.6	328.1	260.2	9/73
Vunisea (Kadavu) (1931-2023)			309.2	228.6	309.7	285.3	61/87
Ono-i-Lau (1943-2023)	167.1	334.0	172.4	170.7	294.4	229.4	27/76
Northern Division							
Labasa Airport (1946-2023)	369.5	548.0	307.8	264.1	421.9	329.4	30/67
Savusavu Airfield (1956-2023)	212.4	253.2	200.3	182.7	278.6	229.2	27/65
Udu Point (1946-2023)	286.7	315.7	239.9	257.1	361.8	301.2	23/76
Rotuma (1912-2023)	168.1	205.5	321.1	273.2	401.8	326.4	52/110

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

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Western Division						
Penang Mill (1910-2023)	1546.4	Above normal	1040.2	1266.9	1133.0	97/114
Lautoka Mill (1900-2023)	1450.8	Above normal	870.9	1169.1	1029.1	107/123
Nadi Airport (1942-2023)	1715.8	Above normal	838.6	1150.5	940.6	76/80
Central Division						
Laucala Bay (Suva) (1942-2023)	961.4	Normal	858.6	1071.6	996.4	35/82
Nausori Airport (1957-2023)	855.2	Below normal	893.5	1077.4	998.0	19/67
Tokotoko (Navua) (1945-2023)	816.5	Below normal	917.4	1197.3	1057.3	12/77
Eastern Division						
Lakeba (1950-2023)	653.9	Below normal	659.7	896.6	767.7	24/72
Vunisea (Kadavu) (1931-2023)			677.7	876.6	789.1	
Ono-i-Lau (1943-2023)	673.5	Normal	485.7	751.3	619.5	45/73
Northern Division						
Labasa Airport (1947-2023)	1225.3	Normal	954.4	1305.0	1109.2	35/64
Savusavu Airfield (1957-2023)	665.9	Below normal	669.4	855.5	780.7	20/60
Udu Point (1946-2023)	842.3	Normal	817.6	1047.6	982.4	28/74
Rotuma (1912-2023)	694.7	Below normal	891.1	1154.6	1043.5	6/110

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

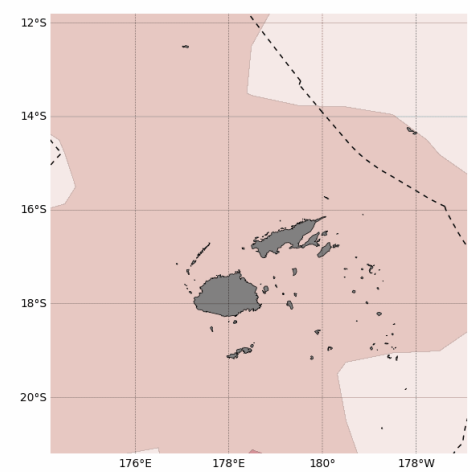
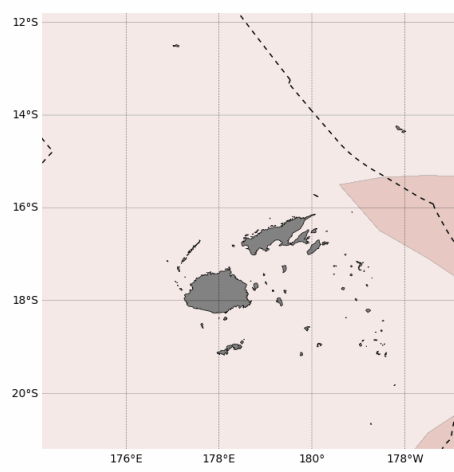
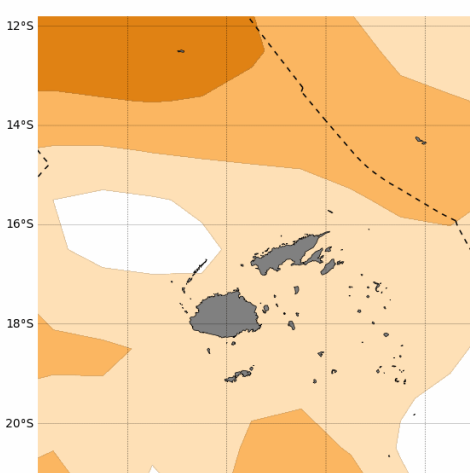
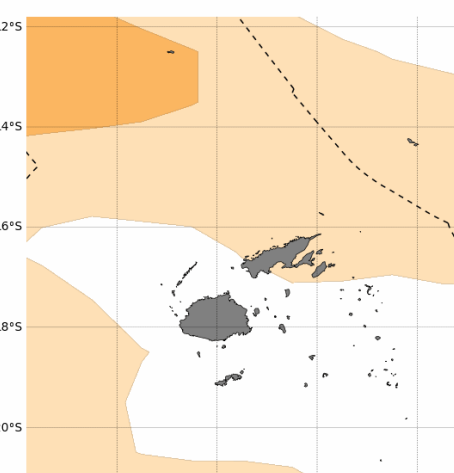


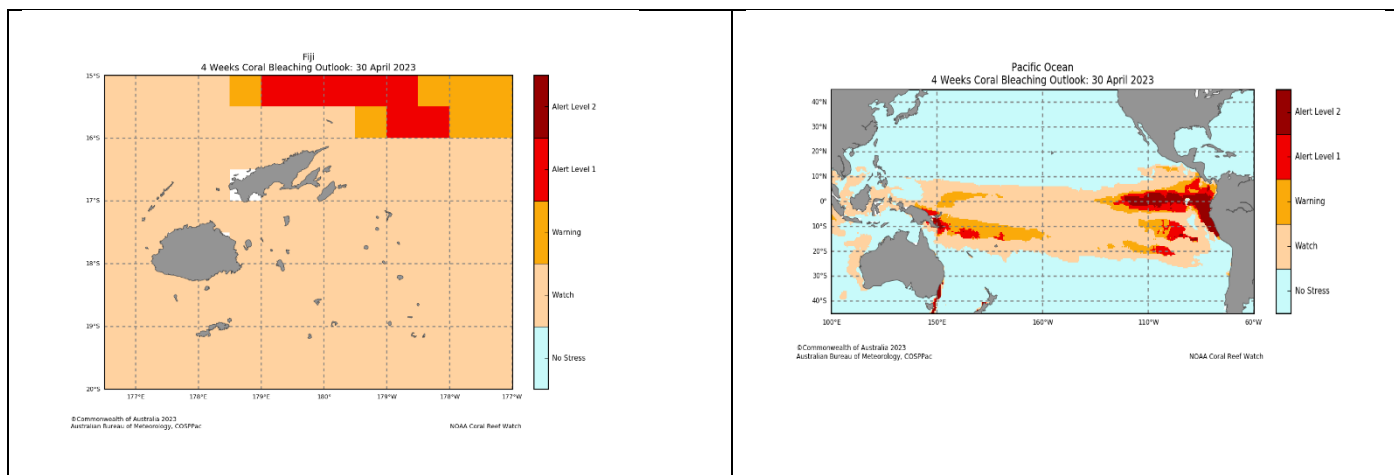
Part 2: Recent Ocean Observation

Monthly/Three months: March and January to March 2023

Monthly: March	Last three months: January to March 2023:
<div>Sea Surface Temperature (Image 1):</div> <div><p>Fiji</p><p>Monthly Average Sea Surface Temperature Anomaly: March 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>	<div>Sea Surface Temperature (Image 4):</div> <div><p>Fiji</p><p>3 monthly Average Sea Surface Temperature Anomaly: January 2023 to March 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>
<div>Sea level (Image 2):</div> <div><p>Fiji</p><p>Monthly Near Real Time Sea Level Anomaly: March 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>AVISO SeaLandsat SLA</p></div>	
<div>Daily coral bleaching alert (Image 3):</div> <div><p>Fiji</p><p>Daily Coral Bleaching Alert: 02 April 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>	<div><p>Pacific Ocean</p><p>Daily Coral Bleaching Alert: 02 April 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 May and May to July 2023

Monthly: May	Seasonal: May to July
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for May 2023</p>  <p>-4.0 -3.0 -2.0 -1.2 -0.8 -0.4 0.4 0.8 1.2 2.0 3.0 4.0</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: 10/04/2023 Issued: 12/04/2023</p>	<p>Difference from average sea surface temperature forecast for May to July 2023</p>  <p>-4.0 -3.0 -2.0 -1.2 -0.8 -0.4 0.4 0.8 1.2 2.0 3.0 4.0</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: 10/04/2023 Issued: 12/04/2023</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for May 2023</p>  <p>-300 -200 -100 -60 -30 30 60 100 200 300</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: 10/04/2023 Issued: 12/04/2023</p>	<p>Difference from average sea surface height forecast for May to July 2023</p>  <p>-300 -200 -100 -60 -30 30 60 100 200 300</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: 10/04/2023 Issued: 12/04/2023</p>
4-week Coral Bleaching (Image 9):	



Summary Statement

Monthly and last three months: March 2023/January to March 2023 statement

For March 2023, *above normal* rainfall was registered at Penang Mill. *Near-normal* rainfall was recorded at Lautoka Mill, Nadi Airport, Vunisea (Kadavu), Ono-i-Lau, Labasa Airport, Savusavu Airfield and Rotuma. *Below normal* rainfall was recorded across Central Division, Lakeba and Udu Point. Nausori Airport, Laucala Bay (Suva) and Lakeba registered their third, and eighth and ninth driest March in 67, 82 and 73 years of record, respectively.

For January to March 2023, *above normal* rainfall was recorded in the Western Division, but *near-normal* to *below normal* totals were observed elsewhere. Nadi Airport registered its fifth wettest January to March in 80 years of record, while Rotuma recorded its sixth driest.

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

Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for May is likely to be *above normal* over Vanua Levu, Taveuni, Yasawa Group, parts of the northern and southern Lau Group, and Rotuma. In Viti Levu, Kadavu, Lomaiviti Group and Central Lau Group, the outlook offers little guidance.

The rainfall for May to July is likely to be *above normal* over western Viti Levu, western Vanua Levu, Yasawa Group, and Rotuma. *Near normal* rainfall is likely for Lau Group. In remaining parts of the country, the outlook offers little guidance.

Both maximum and minimum temperatures for Fiji for May and May to July 2023 are very likely to be *above normal*.

Part 2: Recent Ocean summary statement

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

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

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

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

Coral bleaching alert is at '*Alert Level 2*' for most of the Fiji Waters.

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

Ocean Variable statement

May ocean temperatures around Fiji are predicted to be 0.8 to 1.2°C above normal. Averaged over May to July, ocean temperatures around Fiji are predicted to be 0.4 to 0.8°C near normal.

May sea levels around Fiji are predicted to be 30mm to 60mm near normal, while Rotuma is predicted to be 100-200mm above normal.

Averaged over May to July, sea levels around most of Fiji are predicted to be -30mm to 60mm near normal, and Rotuma is predicted to be 60-100mm above normal.

Coral bleaching outlook for the next four weeks is at 'Watch' for most of the Fiji waters.

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

Product	Date: March 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Fiji Climate Summary	07/03/23	General Public	140	106	34
EAR Watch	10/03/23	Humanitarian partners	122	96	26
Fiji Climate Outlook	31/03/22	General public	124	93	31
Climate Outlook for Monasavu	31/03/23	Energy Fiji Limited	13	13	-
Fiji Ocean Outlook	20/03/23	A number of key ocean related stakeholders	36	29	7
ENSO Update	27/30/23	General Public	142	116	26
Fiji Sugarcane Rainfall Outlook	29/03/22	Sugar Industry stakeholders	77	60	17
Meteorological Data Request	01/03/23 to 31/03/23	A range of stakeholders	43	34	9
Total			697	547	150