

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 185

Country: Fiji

Part 1: Recent climate

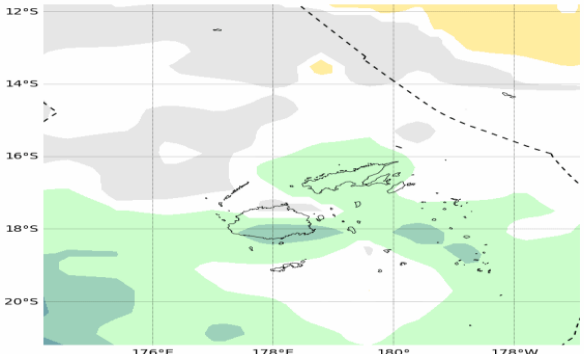
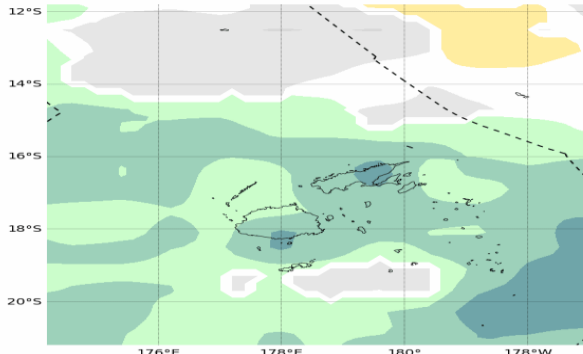
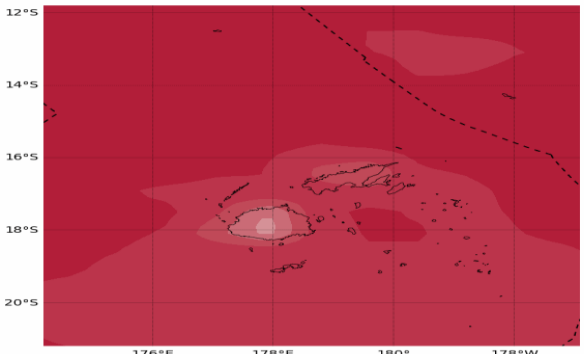
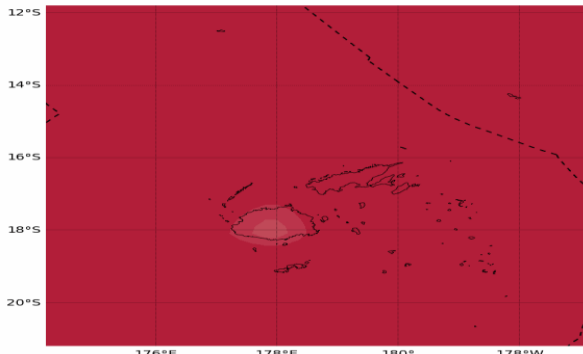
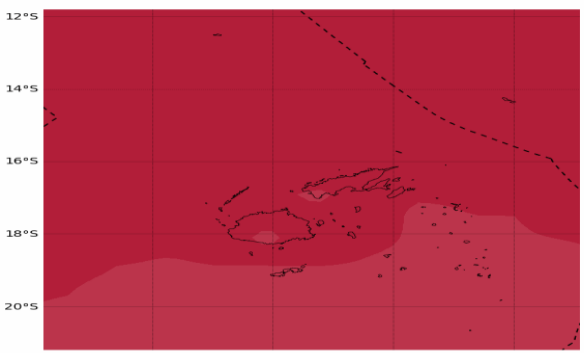
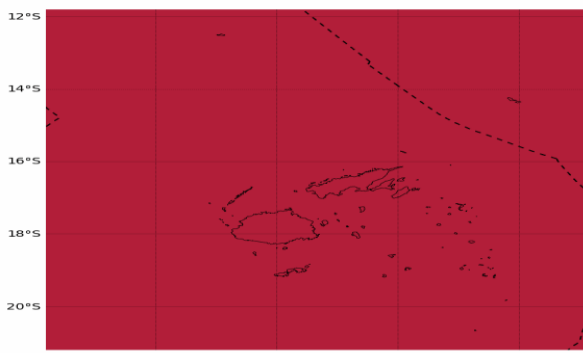
TABLE 1: Monthly Rainfall

Station (include data period)	Nov-2022	Dec-2022	Jan-2023					
			Total (mm)	33%tile	67%tile	Median	Rank	
	Total (mm)	Total (mm)						Rainfall (mm)
Western Division								
Penang Mill (1910-2023)	82.9	509.6	490.5	246.2	476.0	340.2	87/114	
Lautoka Mill (1900-2023)	110.0	362.6	419.8	213.9	417.3	316.7	94/123	
Nadi Airport (1942-2023)	115.2	390.5	711.9	226.0	364.4	302.3	77/82	
Central Division								
Laucala Bay (Suva) (1942-2023)	116.5	221.3	378.9	254.1	404.7	319.9	54/82	
Nausori Airport (1957-2023)	198.2	157.7	341.1	267.7	409.7	325.5	38/67	
Tokotoko (Navua) (1945-2023)	139.5	139.0	294.5	283.0	411.0	343.7	26/77	
Eastern Division								
Lakeba (1950-2023)	153.9	141.7	165.3	172.6	309.1	244.8	23/73	
Vunisea (Kadavu) (1931-2023)	104.0			172.5	299.3	250.0		
Ono-i-Lau (1943-2023)	79.5	506.2	167.1	130.4	230.7	186.6	36/75	
Northern Division								
Labasa Airport (1946-2023)	162.2	296.8	369.5	231.7	463.5	370.0	33/65	
Savusavu Airfield (1956-2023)	184.8	198.9	212.4	190.1	319.0	253.8	23/62	
Udu Point (1946-2023)	237.3	237.9	286.7	235.0	403.1	334.9	35/74	
Rotuma (1912-2023)	173.5	206.9	168.1	281.5	421.9	336.4	10/111	

TABLE 2: Three-month Total Rainfall for November 2022 to January 2023

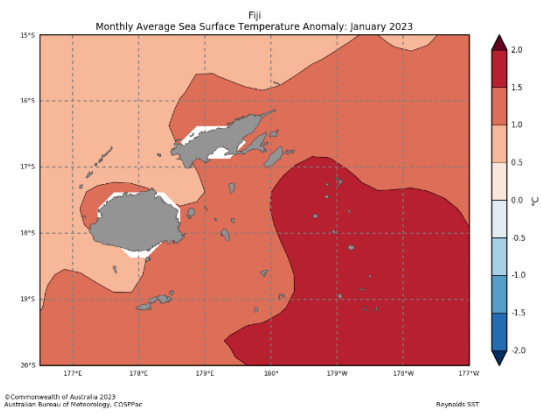
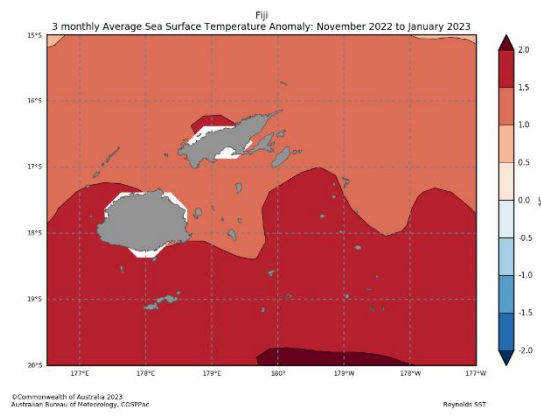
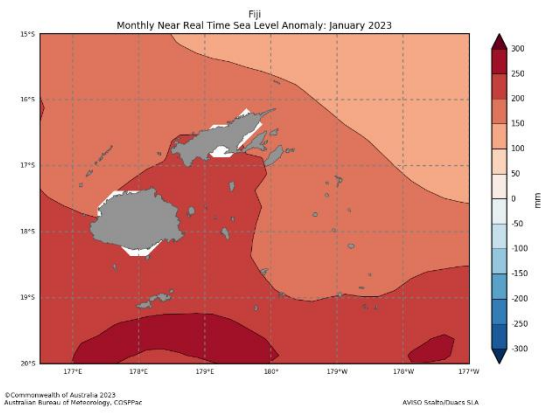
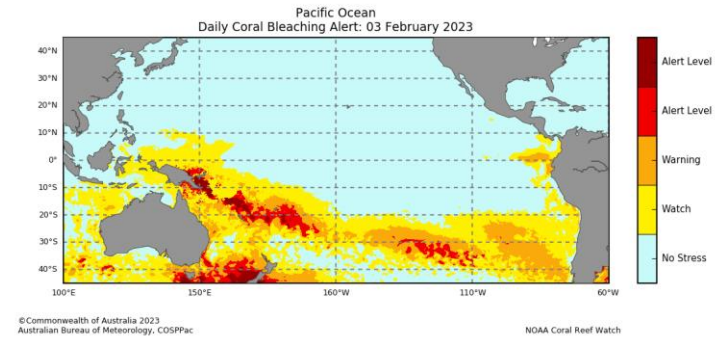
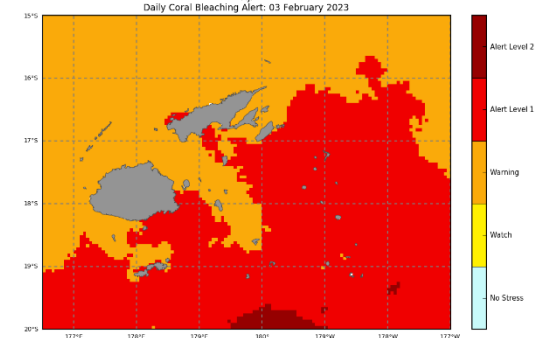
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Western Division						
Penang Mill (1910-2023)	1083.0	Above normal	573.1	932.6	722.2	87/108
Lautoka Mill (1900-2023)	892.4	Above normal	430.4	758.1	637.2	98/123
Nadi Airport (1942-2023)	1217.6	Above normal	427.1	759.5	663.6	76/80
Central Division						
Laucala Bay (Suva) (1942-2023)	716.7	Normal	703.0	1045.0	917.0	30/81
Nausori Airport (1957-2023)	697.0	Below normal	743.6	1070.7	868.4	19/67
Tokotoko (Navua) (1945-2023)	573.0	Below normal	858.7	1140.1	953.2	5/75
Eastern Division						
Lakeba (1950-2023)	460.9	Below normal	464.5	683.7	587.5	24/73
Vunisea (Kadavu) (1931-2023)			491.3	715.2	575.6	
Ono-i-Lau (1943-2023)	752.8	Above normal	366.2	515.4	452.0	68/72
Northern Division						
Labasa Airport (1947-2023)	828.5	Normal	564.8	936.2	666.6	38/60
Savusavu Airfield (1957-2023)	596.1	Normal	573.6	745.0	658.7	26/61
Udu Point (1946-2023)	761.9	Normal	704.1	920.4	772.6	35/72
Rotuma (1912-2023)	548.5	Below normal	859.0	1074.5	968.5	3/107

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

Monthly: March	Seasonal: March to May
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for March 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapelite data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinerregions.org/</p> <p>Model run: 30/01/2023 Issued: 02/02/2023</p>	<p>Tercile rainfall probabilities for March to May 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapelite data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinerregions.org/</p> <p>Model run: 30/01/2023 Issued: 02/02/2023</p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for March 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapelite data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinerregions.org/</p> <p>Model run: 30/01/2023 Issued: 02/02/2023</p>	<p>Tercile maximum temperature probabilities for March to May 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapelite data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinerregions.org/</p> <p>Model run: 30/01/2023 Issued: 02/02/2023</p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for March 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapelite data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinerregions.org/</p> <p>Model run: 30/01/2023 Issued: 02/02/2023</p>	<p>Tercile minimum temperature probabilities for March to May 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapelite data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinerregions.org/</p> <p>Model run: 30/01/2023 Issued: 02/02/2023</p>

Part 2: Recent Ocean Observation

Monthly/Three months: January 2023 and November 2022 to January 2023

<p>Monthly: January</p>	<p>Last three months: November 2022 to January 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 March and March to May 2023

Monthly: March	Seasonal: March to May
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for March 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 http://www.maritimerregions.org/</p> <p>Model run: 11/02/2023 Issued: 13/02/2023</p>	<p>Difference from average sea surface temperature forecast for March to May 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 http://www.maritimerregions.org/</p> <p>Model run: 11/02/2023 Issued: 13/02/2023</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for March 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 http://www.maritimerregions.org/</p> <p>Model run: 11/02/2023 Issued: 13/02/2023</p>	<p>Difference from average sea surface height forecast for March to May 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 http://www.maritimerregions.org/</p> <p>Model run: 11/02/2023 Issued: 13/02/2023</p>
4-week Coral Bleaching (Image 9):	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 26 February 2023</p> <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Fiji 4 Weeks Coral Bleaching Outlook: 26 February 2023</p> <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

Summary Statement

Monthly and last three months: January 2023/November 2022 to January 2023 statement

For January 2023, *above normal* rainfall was registered across the Western Division. *Near-normal* rainfall was recorded across Central and Northern Division and at Ono-i-Lau. *Below normal* rainfall was recorded at Lakeba and Rotuma. Nadi Airport registered its sixth wettest January in 82 years of record, while Rotuma registered its tenth driest January in 111 years of record.

For November 2022 to January 2023, *normal* to *above normal* rainfall was recorded across Fiji, except for Nausori Airport, Tokotoko (Navua), Lakeba and Rotuma which recorded *below normal* rainfall. Nadi Airport and Ono-i-Lau registered their fifth wettest November to January in 80 years and 72 years of record, respectively. Rotuma and Tokotoko (Navua) their third and fifth driest November to January in 107 years and 75 years of record, respectively.

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

Monthly /Seasonal rainfall and temperature Outlook statements

Fiji's March and March to May 2023 rainfall is likely to be *above normal*, except for Rotuma where near-normal rainfall is likely.

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

Part 2: Recent Ocean summary statement

Monthly and last three months: January 2023/November 2022 to January 2023

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

Averaged over November to January, ocean temperatures around Fiji were 1.0 to 2.0°C above normal.

January sea levels around Fiji were 150mm to 250mm above normal.

Coral bleaching alert is at '*Alert Level 1*' for most of the Fiji Waters.

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

Ocean Variable statement

March ocean temperatures around Fiji are predicted to be 0.4 to 1.2°C above normal.

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

March sea levels around Fiji are predicted to be 30mm to 100mm above normal.

Averaged over March to May, sea levels around Fiji are predicted to be 30mm to 100mm above normal.

Coral bleaching outlook for the next four weeks is at '*Alert Level 2*' for most of the Fiji waters.

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
Fiji Climate Summary	09/01/23	General Public	140	106	34
EAR Watch	11/01/23	Humanitarian partners	122	96	26
Fiji Climate Outlook	31/01/23	General public	124	93	31
Climate Outlook for Monasavu	31/01/23	Energy Fiji Limited	13	13	-
Fiji Ocean Outlook	20/01/23	A number of key ocean related stakeholders	36	29	7
ENSO Update	25/01/23	General Public	142	116	26
Fiji Sugarcane Climate Outlook	31/01/23	Sugar Industry stakeholders	77	60	17
Meteorological Data Request	01/01/23 to 31/01/23	A range of stakeholders	27	18	9
Total			681	531	150