

# Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 173

Country: Fiji

## Part 1: Recent climate

**TABLE 1: Monthly Rainfall**

Station (include data period)	Nov-2021	Dec-2021	Jan-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Western Division							
Penang Mill (1910-2022)	132.1	499.3	994.2	243.7	462.5	331.0	110/113
Lautoka Mill (1900-2022)	142.1	438.6	776.2	211.2	410.8	314.0	118/122
Nadi Airport (1942-2022)	241.5	373.3	871.8	224.0	359.7	302.0	78/81
Central Division							
Laucala Bay (Suva) (1942-2022)	213.7	350.0	458.0	253.6	399.2	317.6	62/81
Nausori Airport (1957-2022)	200.7	391.7	564.3	264.3	407.5	324.1	59/66
Tokotoko (Navua) (1945-2022)	119.0	248.0	M	283.0	411.0	343.7	
Eastern Division							
Lakeba (1950-2022)	143.5	89.8	398.8	172.3	307.5	242.2	59/72
Vunisea (Kadavu) (1931-2022)	107.8	306.2	379.3	172.1	298.0	246.6	72/87
Ono-i-Lau (1943-2022)	82.0	143.5	M	130.4	230.7	186.6	
Northern Division							
Labasa Airport (1946-2022)	194.6	294.5	697.2	221.9	458.6	366.0	58/64
Savusavu Airfield (1956-2022)	M	M	M	184.7	318.0	249.0	
Udu Point (1946-2022)	418.7	267.3	622.9	233.7	397.0	333.5	66/73
Rotuma (1912-2022)	304.0	245.0	556.7	278.0	414.2	335.7	102/110

**NB: The X LEPS % score has been categorised as follows:**

Very Low:  $X < 0.0$

Low:  $0 \leq X < 5$

Moderate  $5 \leq X < 10$

Good:  $10 \leq X < 15$

High:  $15 \leq X < 25$

Very High:  $25 \leq X < 35$  Exceptional:  $X \geq 35$

**TABLE 2: Three-month Total Rainfall for November 2021 to January 2022**

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Western Division						
Penang Mill (1910-2022)	1625.6	Above normal	567.4	926.0	718.0	103/107
Lautoka Mill (1900-2022)	1356.9	Above normal	424.3	754.3	622.0	118/122
Nadi Airport (1942-2022)	1486.6	Above normal	426.2	751.1	650.8	78/79
Central Division						
Laucala Bay (Suva) (1942-2022)	1021.7	Normal	695.7	1048.4	913.8	51/80
Nausori Airport (1957-2022)	1156.7	Above normal	743.0	1056.9	863.8	55/66
Tokotoko (Navua) (1945-2022)			858.7	1140.1	953.2	
Eastern Division						
Lakeba (1950-2022)	632.1	Normal	464.2	684.5	587.0	42/72
Vunisea (Kadavu) (1931-2022)	793.3	Above normal	490.2	710.5	572.2	67/84
Ono-i-Lau (1943-2022)			366.2	515.4	452.0	
Northern Division						
Labasa Airport (1947-2022)	1186.3	Above normal	564.6	920.9	662.6	50/59
Savusavu Airfield (1957-2022)			573.6	745.0	658.7	
Udu Point (1946-2022)	1308.9	Above normal	693.3	918.0	763.4	66/71
Rotuma (1912-2022)	1105.7	Above normal	857.6	1070.8	967.0	78/106

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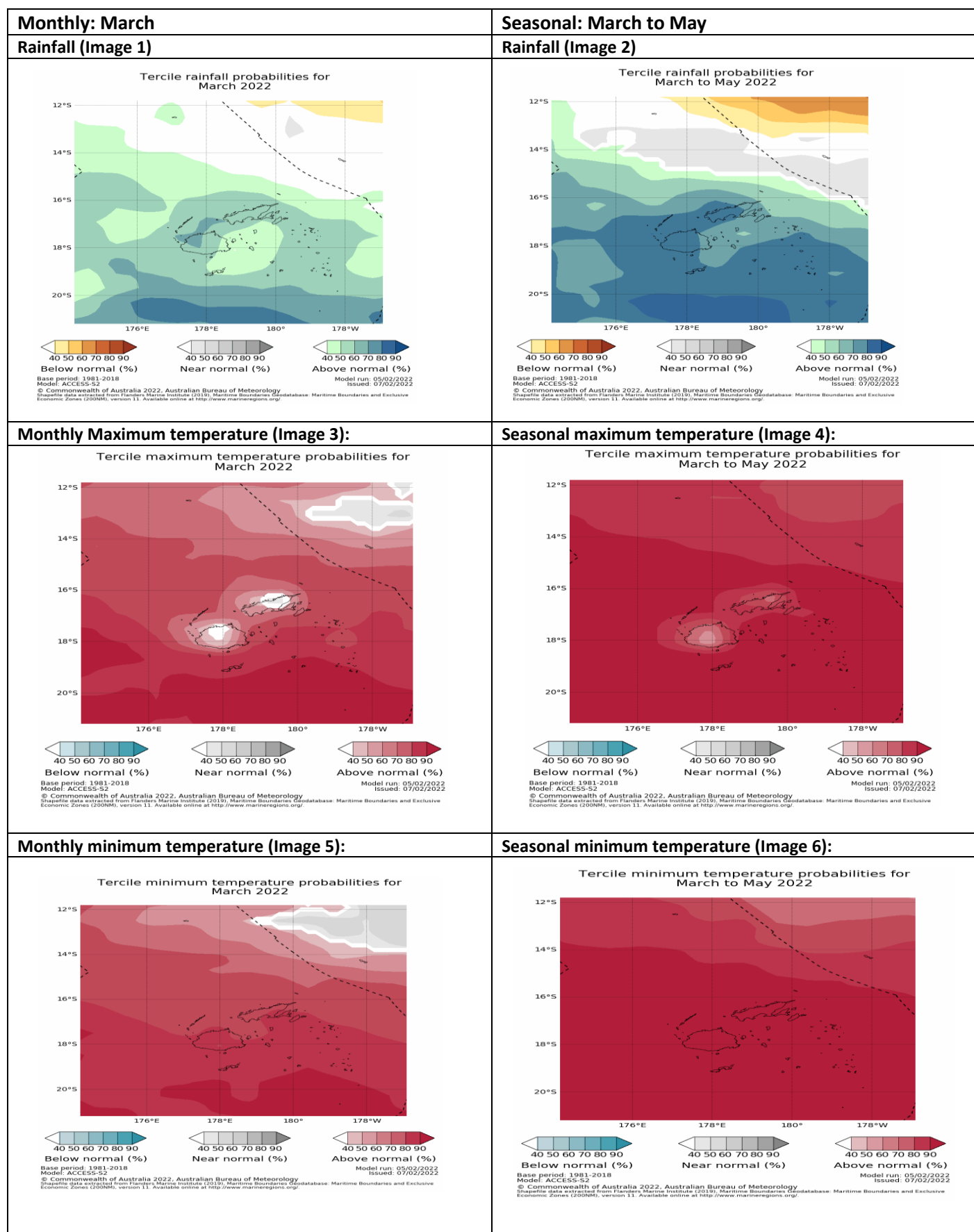
Moderate  $5 \leq X < 10$

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## Part 1i. Monthly and Seasonal Outlooks for March and March to May 2022



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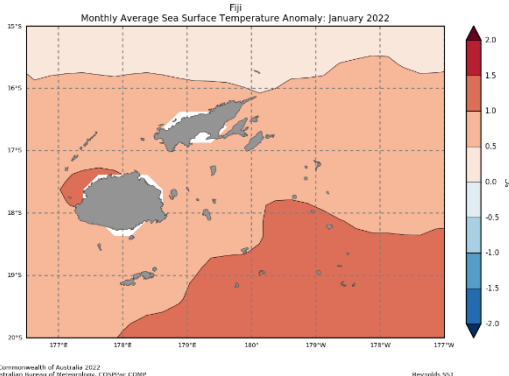
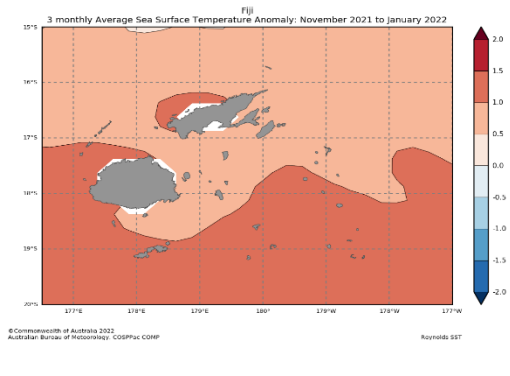
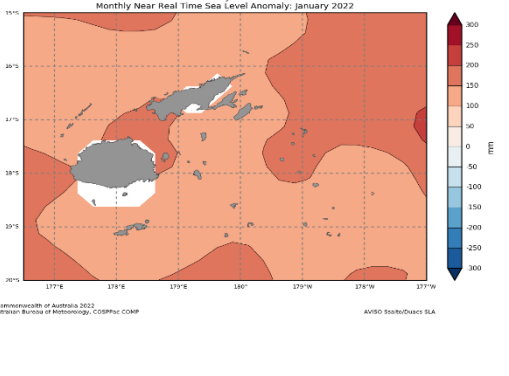
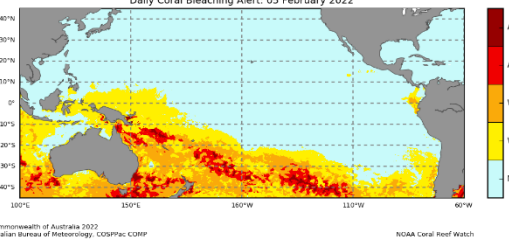
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## Part 2: Recent Ocean summary statement

**Monthly: January 2022**

Monthly: January	Last three months: November 2021 to January 2022:
<p><b>Sea Surface Temperature (Image 1):</b></p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP Reynolds SST</p>	<p><b>Sea Surface Temperature (Image 4):</b></p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP Reynolds SST</p>
<p><b>Sea level (Image 2):</b></p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP AVISO SeaWiFS/QuikSCAT SLA</p>	
<p><b>Daily coral bleaching alert (Image 3):</b></p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP NOAA Coral Reef Watch</p>	

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Part 2i. Monthly and Seasonal Outlooks for March and March to May 2022

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 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapfile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimesegions.org/">http://www.maritimesegions.org/</a></p> <p>Model run: 07/02/2022 Issued: 09/02/2022</p>	<p>Difference from average sea surface temperature forecast for March to May 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapfile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimesegions.org/">http://www.maritimesegions.org/</a></p> <p>Model run: 07/02/2022 Issued: 09/02/2022</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for March 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/01/2022 Issued: 02/02/2022</p>	<p>Difference from average sea surface height forecast for March 2022 to May 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/01/2022 Issued: 02/02/2022</p>
4-week Coral Bleaching (Image 9):	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 27 February 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, CSIRO, CORP</p> <p>NOAA Coral Reef Watch</p>	

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## Summary Statement

### Monthly and last three months: January 2022/November 2021 to January 2022 statement (Highly significant changes)

For January 2022, *above normal* rainfall was recorded across all divisions in Fiji. Penang Mill and Lautoka Mill recorded their fourth and fifth wettest January, in 113 and 122 years of record, respectively. Nadi Airport, Nausori Airport and Labasa Airport recorded their fourth, eighth and seventh wettest January, in 81, 66 and 64 years of record, respectively. Udu Point and Rotuma recorded their eighth and ninth wettest January, in 73 and 110 years of record, respectively. Rainfall data is not available for Savusavu Airfield, Ono-i-Lau and Navua.

*Above normal* rainfall was recorded in the Western Division, Northern Division, Nausori Airport, Vunisea (Kadavu) and Rotuma for November 2021 to January 2022 period. *Near normal* rainfall was received at Laucala Bay (Suva) and Lakeba. Penang Mill, Lautoka Mill and Nadi Airport recorded their seventh, fifth and second wettest November to January, in 107, 122 and 79 years of record.

## Part 1i. Monthly and Seasonal Outlooks for March and March to May 2022

### Monthly /Seasonal rainfall and temperature Outlook statements (Highly significant changes)

The rainfall outlook for Fiji for March is likely to be *above normal*.

The rainfall outlook for Fiji for March to May 2022 is very likely to be *above normal*, except for Rotuma with little guidance as the chances of *above normal*, *normal* and *below normal* rainfall are similar.

The maximum and minimum temperatures for Fiji for March and March to May 2022 are very likely to be *above normal*.

## Part 2: Recent Ocean summary statement

### Monthly and last three months: January/November 2021 to January 2022 (Highly significant changes)

Most of the Fiji Waters experienced above average SST in January 2022. Significant warm SSTs of 1.0 to 1.5°C above average were experienced on the eastern side of Viti Levu and in some parts of the Lau Group.

For the November 2021 to January 2022 period, above average SSTs were experienced in most of the Fiji Waters, significant warmer SSTs of 1.0 to 1.5°C above average were experienced on the western side of Viti Levu and Vanua Levu, Kadavu and across the Lau Group.

The sea level anomaly across Fiji in January 2022 was significantly higher than normal, with waters around northeastern and parts of western Viti Levu, southwestern Vanua Levu, and northern Lau Group in the range of 150 to 200 mm above average.

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## Part 2i. Monthly and Seasonal Outlooks for March and March to May 2022

### Ocean Variable statement *(Highly significant changes)*

The SST outlook for Kadavu and parts of southern Lau Group shows a significant temperature difference of 0.8-1.2°C above normal for March and March to May 2022.

The outlook for Rotuma shows a significant sea level difference of 0.06-0.2m above normal for March and March to May 2022.

Coral bleaching is at Alert Level 1 for the Fiji Group for the next four weeks.

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

Product	Date: January 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Fiji Climate Summary	11/01/22	General Public	140	106	34
EAR Watch	11/01/22	Humanitarian partners	122	96	26
Fiji Climate Outlook	31/01/22	General public	124	93	31
Climate Outlook for Monasavu	31/01/22	Energy Fiji Limited	13	13	-
Fiji Ocean Outlook	20/01/22	A number of key ocean related stakeholders	36	29	7
ENSO Update	25/01/22	General Public	142	116	26
Fiji Sugarcane Climate Outlook	02/02/22	Sugar Industry stakeholders	77	60	17
Meteorological Data Request	01/01/22 to 31/01/22	A range of stakeholders	44	40	4
<b>Total</b>			<b>698</b>	<b>553</b>	<b>145</b>

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