

# Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 177

Country: Fiji

## Part 1: Recent climate

**TABLE 1: Monthly Rainfall**

Station (include data period)	Mar-2022	Apr-2022	May-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
<b>Western Division</b>							
Penang Mill (1910-2022)	568.0	257.4	120.5	61.7	165.4	108.2	66/113
Lautoka Mill (1900-2022)	595.4	264.9	56.9	39.1	107.1	64.1	49/123
Nadi Airport (1942-2022)	547.2	155.1	80.1	42.6	107.8	72.2	43/80
<b>Central Division</b>							
Laucala Bay (Suva) (1942-2022)	268.6	316.8	233.2	174.5	262.3	198.2	47/81
Nausori Airport (1957-2022)	230.2	159.7	264.2	160.8	253.0	196.7	46/66
Tokotoko (Navua) (1945-2022)	328.5	263.0	258.5	184.1	321.8	253.6	41/78
<b>Eastern Division</b>							
Lakeba (1950-2022)	272.2	258.1	38.3	82.4	171.2	108.3	8/72
Vunisea (Kadavu) (1931-2022)	453.0	146.2	165.4	111.2	210.6	144.8	52/86
Ono-i-Lau (1943-2022)	229.4	290.4	71.5	67.4	151.8	105.4	28/75
<b>Northern Division</b>							
Labasa Airport (1946-2022)	394.9	221.4	108.3	56.1	121.2	85.2	40/67
Savusavu Airfield (1956-2022)	345.7	270.7	136.0	118.8	200.8	155.1	28/64
Udu Point (1946-2022)	243.6	153.6	130.5	107.3	182.9	144.7	33/74
Rotuma (1912-2022)	182.5	131.0	230.1	219.6	341.1	275.0	39/109

**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 March to May 2022**

Station	Three-month Total	33%tile	67%tile	Median	Rank	
	Rainfall (mm)					
<b>Western Division</b>						
Penang Mill (1910-2022)	945.9	Above normal	659.7	912.0	777.8	79/112
Lautoka Mill (1900-2022)	917.2	Above normal	530.6	715.1	601.8	103/122
Nadi Airport (1942-2022)	782.4	Above normal	508.1	655.7	584.5	60/79
<b>Central Division</b>						
Laucala Bay (Suva) (1942-2022)	818.6	Below normal	823.8	1090.0	914.0	27/81
Nausori Airport (1957-2022)	654.1	Below normal	805.4	1059.9	916.8	<b>6/66</b>
Tokotoko (Navua) (1945-2022)	850.0	Below normal	931.4	1222.7	1029.9	17/78
<b>Eastern Division</b>						
Lakeba (1950-2022)	568.6	Normal	546.5	721.5	651.1	27/70
Vunisea (Kadavu) (1931-2022)	764.6	Above normal	637.9	763.7	719.3	57/85
Ono-i-Lau (1943-2022)	591.3	Normal	462.2	646.8	526.1	44/73
<b>Northern Division</b>						
Labasa Airport (1947-2022)	724.6	Normal	563.7	841.2	688.3	36/66
Savusavu Airfield (1957-2022)	752.4	Above normal	571.6	722.4	664.1	43/63
Udu Point (1946-2022)	527.7	Below normal	620.3	846.4	727.7	27/73
Rotuma (1912-2022)	543.6	Below normal	812.3	1010.8	947.4	<b>5/108</b>

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Very Low:  $X < 0.0$

Low:  $0 \leq X < 5$

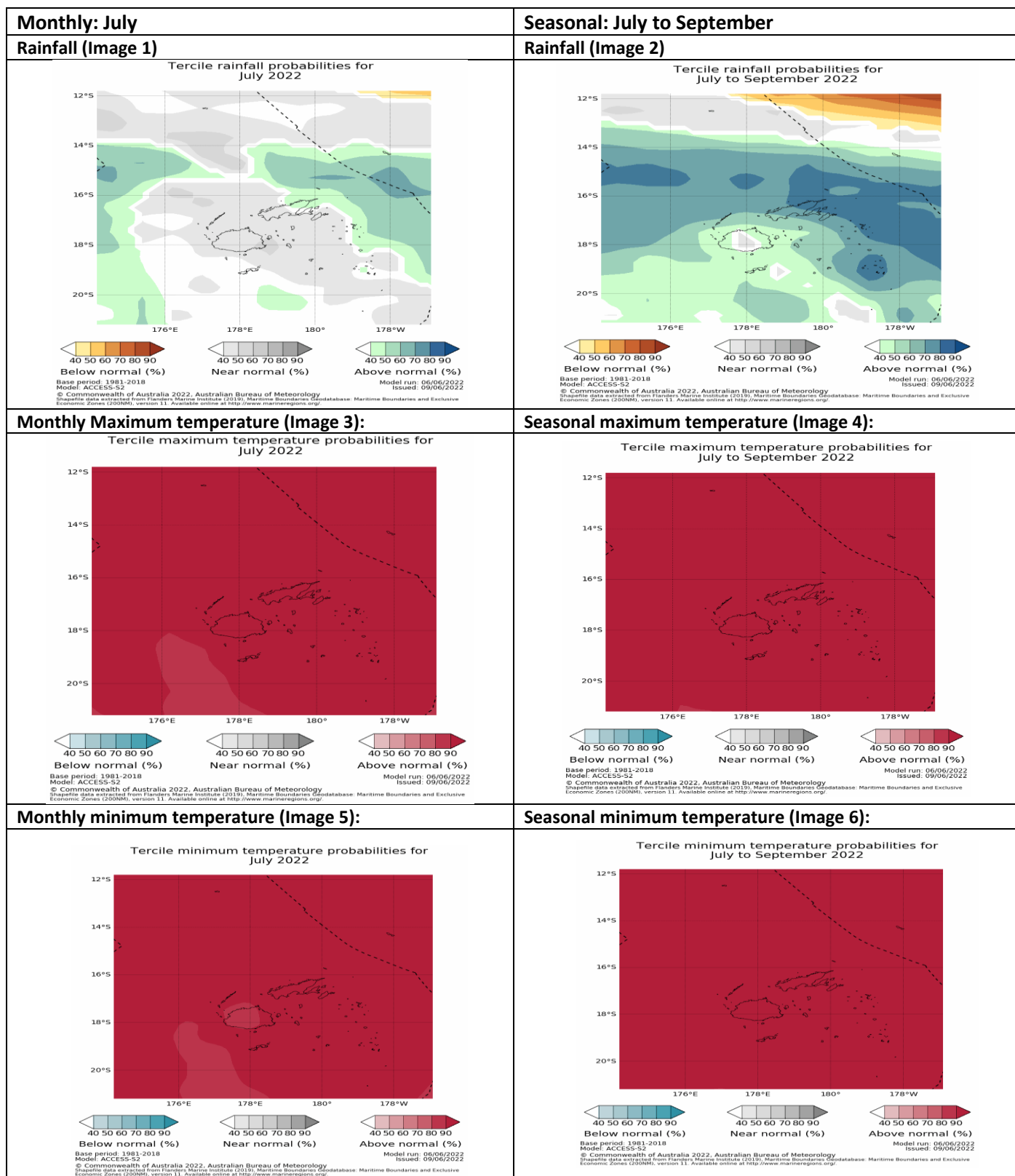
Moderate  $5 \leq X < 10$

Good:  $10 \leq X < 15$

High:  $15 \leq X < 25$

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# Part 1i. Monthly and Seasonal Outlooks for July and July to September 2022



## Part 2: Recent Ocean summary statement

### Monthly: May 2022

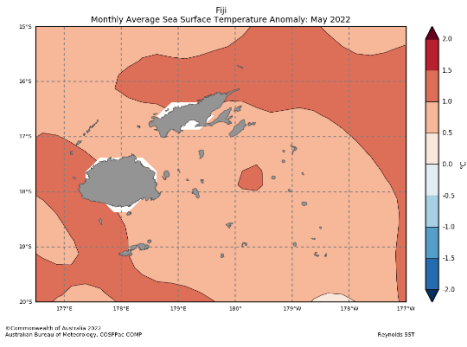
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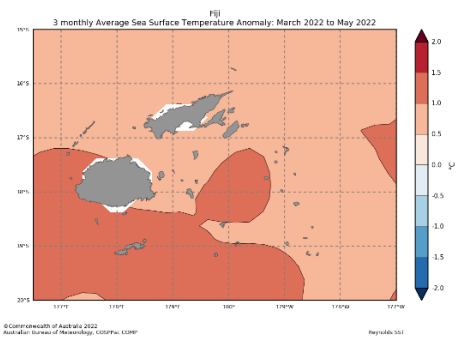
**Monthly: May**

**Sea Surface Temperature (Image 1):**

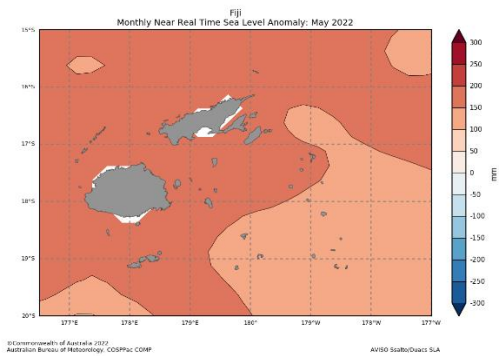


**Last three months: March to May 2022:**

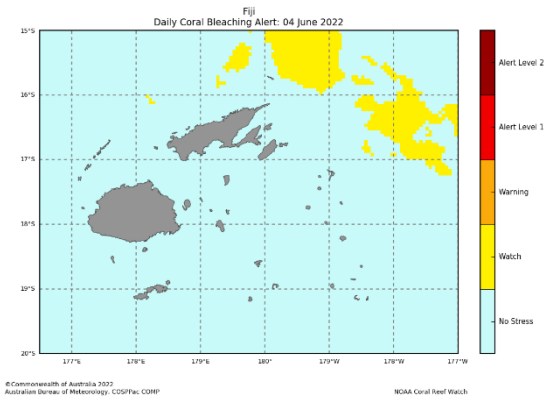
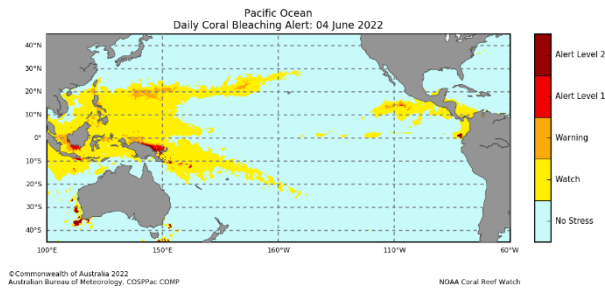
**Sea Surface Temperature (Image 4):**



**Sea level (Image 2):**



**Daily coral bleaching alert (Image 3):**



**Part 2i. Monthly and Seasonal Outlooks for July and July to September 2022**

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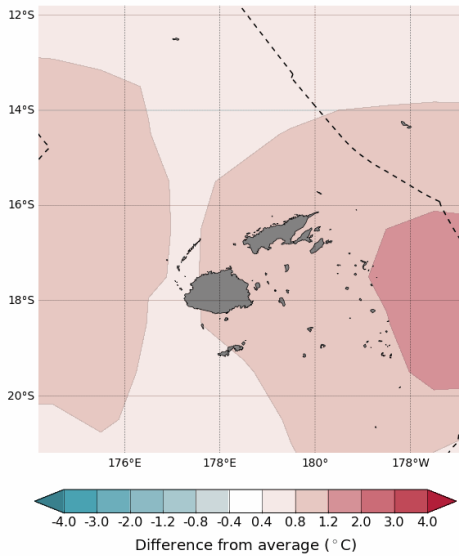
High:  $15 \leq X < 25$

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

**Monthly: July**

**Monthly sea surface temperature (Image 5):**

Difference from average sea surface temperature forecast for July 2022

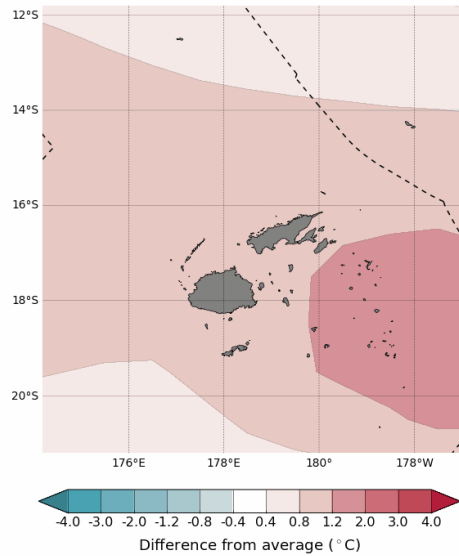


Base period: 1981-2018  
 Model: ACCESS-S2  
 © Commonwealth of Australia 2022, Australian Bureau of Meteorology  
 Shapefile data extracted from Flanders Marine Institute (2019). Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <http://www.marinerregions.org/>  
 Model run: 11/06/2022  
 Issued: 13/06/2022

**Seasonal: July to September**

**Seasonal sea surface temperature (Image 6):**

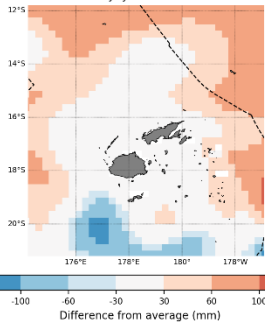
Difference from average sea surface temperature forecast for July to September 2022



Base period: 1981-2018  
 Model: ACCESS-S2  
 © Commonwealth of Australia 2022, Australian Bureau of Meteorology  
 Shapefile data extracted from Flanders Marine Institute (2019). Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <http://www.marinerregions.org/>  
 Model run: 11/06/2022  
 Issued: 13/06/2022

**Monthly sea level (Image 7):**

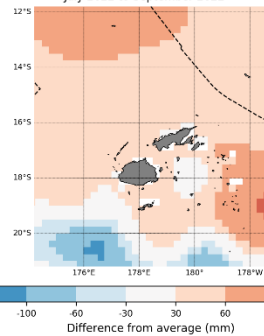
Difference from average sea surface height forecast for July 2022



© Commonwealth of Australia 2022  
 Bureau of Meteorology  
 Model: ACCESS-S2  
 Base Period: 1981-2018  
 Model Run: 28/05/2022  
 Issued: 07/06/2022

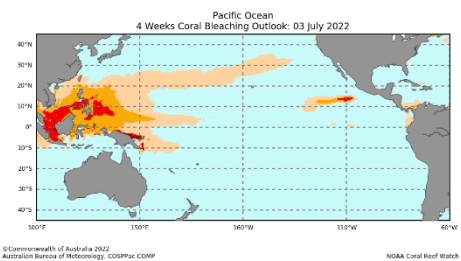
**Seasonal sea level (Image 8):**

Difference from average sea surface height forecast for July 2022 to September 2022

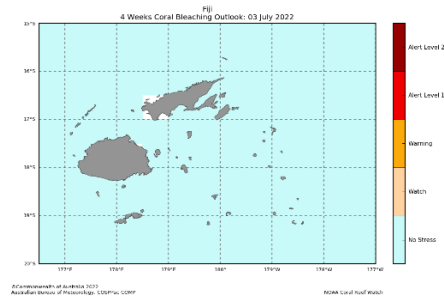


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 Bureau of Meteorology  
 Model: ACCESS-S2  
 Base Period: 1981-2018  
 Model Run: 28/05/2022  
 Issued: 07/06/2022

**4-week Coral Bleaching (Image 9):**



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 Australian Bureau of Meteorology, CO2PPac CORP  
 NOAA Coral Reef Watch



© Commonwealth of Australia 2022  
 Australian Bureau of Meteorology, CO2PPac CORP  
 NOAA Coral Reef Watch

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## Summary Statement

### Monthly and last three months: May 2022/March to May 2022 statement (Highly significant changes)

For May 2022, *above normal* rainfall was recorded at Nausori Airport. *Near normal* rainfall was registered across Western and Northern Divisions, Laucala Bay (Suva), Tokotoko (Navua), Vunisea (Kadavu), Ono-i-Lau and Rotuma. Lakeba was the lone station that recorded *below normal* rainfall.

*Above normal* rainfall was recorded across Western Division, Vunisea (Kadavu), and Savusavu Airfield for March to May 2022 period, while *near normal* rainfall was registered at Lakeba, Ono-i-Lau and Labasa Airport. *Below normal* rainfall was recorded across Central Division, Udu Point and Rotuma. Nausori Airport recorded its sixth driest March to May period in 66 years of record, while Rotuma recorded its fifth driest March to May period in 108 years of record.

## Part 1i. Monthly and Seasonal Outlooks for July and July to September 2022

The rainfall outlook for Fiji for July is likely to be *near normal*.

The rainfall outlook for Northern Division of Fiji for July to September 2022 is very likely to be *above normal*, while *above normal* rainfall is likely for Western and Central Division. *Near normal* rainfall is likely for Rotuma.

Both maximum and minimum temperatures for Fiji for July and July to September 2022 are very likely to be *above normal*.

## Part 2: Recent Ocean summary statement

### Monthly and last three months: May/March to May 2022 (Highly significant changes)

Most of the Fiji Waters experienced above average SST in May 2022. Significant warm SSTs of 1.0 to 1.5°C above average were experienced around northern Vanua Levu, Western Viti Levu, Mamanuca Group and Vatulele.

For the March to May 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 around western Viti Levu, Kadavu and parts of the southern Lau Group.

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

Coral bleaching alert status at 'Watch' level for waters northeast of Vanua Levu.

## Part 2i. Monthly and Seasonal Outlooks for July and July to September 2022

### Ocean Variable statement (Highly significant changes)

The SST outlook for Fiji Waters shows a significant temperature difference of 0.8-2.0°C *above normal* for July and July to September 2022.

The outlook for Rotuma shows a significant sea level difference of 0.06-0.1m *above normal* for July and July to September 2022. With Lau Group also showing above normal sea level difference of 0.06-0.1m for July to September 2022.

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Coral bleaching outlook for the next four weeks reveal no thermal stress.

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

Product	Date: May 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Fiji Climate Summary	06/05/22	General Public	140	106	34
EAR Watch	13/05/22	Humanitarian partners	122	96	26
Fiji Climate Outlook	31/05/22	General public	124	93	31
Climate Outlook for Monasavu	30/05/22	Energy Fiji Limited	13	13	-
ENSO Update	24/05/22	General Public	142	116	26
Fiji Early Action Rainfall NMS Workshop	18-19/05/22	FMS Officers	6	3	3
Meteorological Data Request	01/05/22 to 31/05/22	A range of stakeholders	53	37	16
<b>Total</b>			<b>600</b>	<b>464</b>	<b>136</b>

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