

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 176

Country: Fiji

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Feb-2022	Mar-2022	Apr-2022				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Western Division							
Penang Mill (1910-2022)	679.2	568.0	257.4	179.1	284.9	212.0	72/112
Lautoka Mill (1900-2022)	700.0	595.4	264.9	123.3	240.4	166.4	97/123
Nadi Airport (1942-2022)	623.0	547.2	155.1	111.8	209.4	152.0	41/80
Central Division							
Laucala Bay (Suva) (1942-2022)	241.9	268.6	316.8	262.3	376.5	327.0	37/81
Nausori Airport (1957-2022)	231.3	230.2	159.7	263.3	390.4	336.7	8/66
Tokotoko (Navua) (1945-2022)	148.5	328.5	263.0	304.3	461.6	358.4	19/78
Eastern Division							
Lakeba (1950-2022)	278.8	272.2	258.1	132.9	256.9	179.1	47/70
Vunisea (Kadavu) (1931-2022)	253.3	453.0	146.2	162.8	280.3	240.7	27/87
Ono-i-Lau (1943-2022)	329.4	229.4	290.4	103.2	226.2	181.2	65/75
Northern Division							
Labasa Airport (1946-2022)	536.8	394.9	221.4	150.6	279.9	235.7	31/67
Savusavu Airfield (1956-2022)	M	345.7	270.7	142.3	280.4	215.4	41/65
Udu Point (1946-2022)	353.1	243.6	153.6	193.7	300.9	236.3	21/73
Rotuma (1912-2022)	427.0	182.5	131.0	205.9	303.2	257.1	12/110

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 February to April 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
<i>Western Division</i>						
Penang Mill (1910-2022)	1504.6	Above normal	838.0	1131.4	1015.1	104/112
Lautoka Mill (1900-2022)	1560.3	Above normal	748.2	952.7	835.5	117/122
Nadi Airport (1942-2022)	1325.3	Above normal	682.3	950.1	808.6	72/79
<i>Central Division</i>						
Laucala Bay (Suva) (1942-2022)	827.3	Below normal	845.8	1057.7	938.6	24/81
Nausori Airport (1957-2022)	621.2	Below normal	896.2	1046.4	972.2	4/66
Tokotoko (Navua) (1945-2022)	740.0	Below normal	998.8	1214.3	1111.2	9/77
<i>Eastern Division</i>						
Lakeba (1950-2022)	809.1	Normal	649.1	827.6	708.8	44/70
Vunisea (Kadavu) (1931-2022)	852.5	Above normal	644.3	838.0	755.3	60/86
Ono-i-Lau (1943-2022)	849.2	Above normal	479.5	744.4	595.9	63/73
<i>Northern Division</i>						
Labasa Airport (1947-2022)	1153.1	Above normal	765.3	1126.2	1022.4	44/65
Savusavu Airfield (1957-2022)			638.9	827.3	694.9	
Udu Point (1946-2022)	750.3	Below normal	782.6	1013.6	851.6	37/73
Rotuma (1912-2022)	740.5	Below normal	866.6	1076.2	995.6	18/109

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Part 1i. Monthly and Seasonal Outlooks for June and June to August 2022

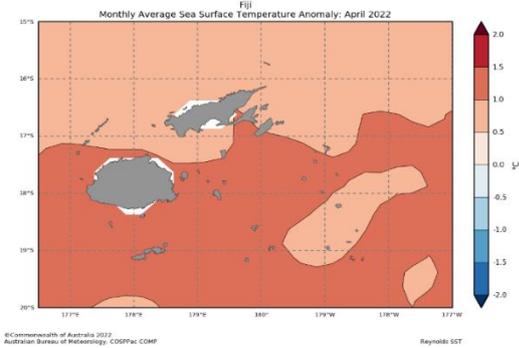
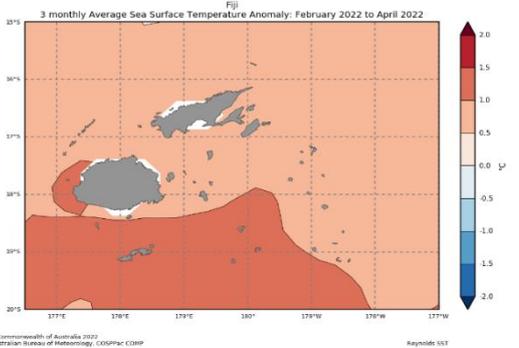
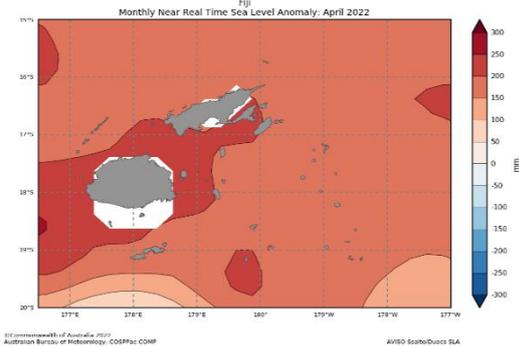
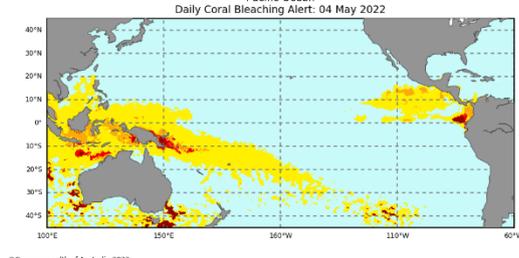
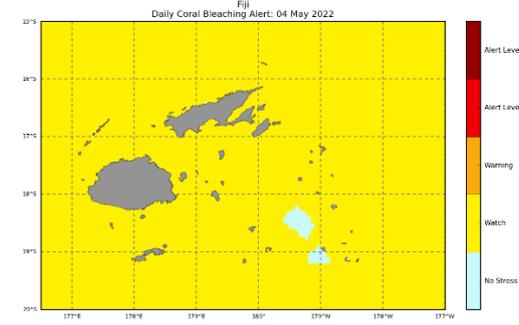
Monthly: June	Seasonal: June to August
<p>Rainfall (Image 1)</p> <p>Tercile rainfall probabilities for June 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/ Model run: 02/05/2022 Issued: 05/05/2022</p>	<p>Rainfall (Image 2)</p> <p>Tercile rainfall probabilities for June to August 2022</p> <p>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 Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/ Model run: 02/05/2022 Issued: 05/05/2022</p>
<p>Monthly Maximum temperature (Image 3):</p> <p>Tercile maximum temperature probabilities for June 2022</p> <p>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 Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/ Model run: 02/05/2022 Issued: 05/05/2022</p>	<p>Seasonal maximum temperature (Image 4):</p> <p>Tercile maximum temperature probabilities for June to August 2022</p> <p>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 Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/ Model run: 02/05/2022 Issued: 05/05/2022</p>
<p>Monthly minimum temperature (Image 5):</p> <p>Tercile minimum temperature probabilities for June 2022</p> <p>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 Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/ Model run: 02/05/2022 Issued: 05/05/2022</p>	<p>Seasonal minimum temperature (Image 6):</p> <p>Tercile minimum temperature probabilities for June to August 2022</p> <p>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 Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/ Model run: 02/05/2022 Issued: 05/05/2022</p>

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- Exceptional: $X \geq 35$

Part 2: Recent Ocean summary statement

Monthly: April 2022

Monthly: April	Last three months: February to April 2022:
<p>Sea Surface Temperature (Image 1):</p>  <p>Monthly Average Sea Surface Temperature Anomaly: April 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>Reynolds SST</p>	<p>Sea Surface Temperature (Image 4):</p>  <p>3 monthly Average Sea Surface Temperature Anomaly: February 2022 to April 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>Reynolds SST</p>
<p>Sea level (Image 2):</p>  <p>Monthly Near Real Time Sea Level Anomaly: April 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>AVISO SeaWiFS/Quicks SLA</p>	
<p>Daily coral bleaching alert (Image 3):</p>  <p>Pacific Ocean Daily Coral Bleaching Alert: 04 May 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>NOAA Coral Reef Watch</p>	 <p>Daily Coral Bleaching Alert: 04 May 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>NOAA Coral Reef Watch</p>

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Part 2i. Monthly and Seasonal Outlooks for June and June to August 2022

Monthly: June	Seasonal: June to August
<p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for June 2022</p> <p>Difference from average (°C)</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Hydrographic Institute (2019), Maritime Boundaries Geodatabase, Maritime Boundaries and Exclusive Economic Zones (20NM), version 11. Available online at http://www.maritimerregions.org</p> <p>Model run: 14/05/2022 Issued: 16/05/2022</p>	<p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for June to August 2022</p> <p>Difference from average (°C)</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Hydrographic Institute (2019), Maritime Boundaries Geodatabase, Maritime Boundaries and Exclusive Economic Zones (20NM), version 11. Available online at http://www.maritimerregions.org</p> <p>Model run: 14/05/2022 Issued: 16/05/2022</p>
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for June 2022</p> <p>Difference from average (mm)</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 15/04/2022 Issued: 21/04/2022</p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for June 2022 to August 2022</p> <p>Difference from average (mm)</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 15/04/2022 Issued: 21/04/2022</p>
<p>4-week Coral Bleaching (Image 9):</p> <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 29 May 2022</p> <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSP/Pho, CSOP</p> <p>NOAA Coral Reef Watch</p>	<p>Fiji</p> <p>Fiji 4 Weeks Coral Bleaching Outlook: 29 May 2022</p> <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSP/Pho, CSOP</p> <p>NOAA Coral Reef Watch</p>

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Summary Statement

Monthly and last three months: April 2022/February to April 2022 statement (Highly significant changes)

For April 2022, *above normal* rainfall was recorded at Lautoka Mill, Lakeba and Ono-i-Lau. *Near normal* rainfall was registered at Penang Mill, Nadi Airport, Laucala Bay (Suva), Labasa Airport and Savusavu Airfield. Nausori Airport, Tokotoko (Navua), Vunisea (Kadavu), Udu Point and Rotuma recorded *below normal* rainfall. Nausori Airport recorded its eighth driest April, in 66 years of record.

Above normal rainfall was recorded across Western Division, Vunisea (Kadavu), Ono-i-Lau and Labasa Airport for February to April 2022 period, while *near normal* rainfall was registered at Lakeba. *Below normal* rainfall was recorded across Central Division, Udu Point and Rotuma. Lautoka Mill recorded its sixth wettest February to April period in 122 years of record, while Nadi Airport recorded its eighth wettest February to April period in 79 years of record. Nausori Airport recorded its fourth driest February to April period in 66 years of record.

Part 1i. Monthly and Seasonal Outlooks for June and June to August 2022

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

The rainfall outlook for Fiji for June is very likely to be *above normal*, while *near normal* rainfall is likely for Rotuma.

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

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

Part 2: Recent Ocean summary statement

Monthly and last three months: April/February to April 2022 (Highly significant changes)

Most of the Fiji Waters experienced above average SST in April 2022. Significant warm SSTs of 1.0 to 1.5°C above average were experienced around Viti Levu, Kadavu, Taveuni and parts of Lomaiviti and southern Lau group.

For the February to April 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 April 2022 was significantly higher than normal, with waters around Viti Levu, Lomaiviti Group, Taveuni and southern Vanua Levu in the range of 200 to 250 mm above average.

Coral bleaching status is at 'Watch' for Fiji.

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Part 2i. Monthly and Seasonal Outlooks for June and June to August 2022

Ocean Variable statement *(Highly significant changes)*

The SST outlook for Fiji Waters shows a significant temperature difference of 0.8-1.2°C *above normal* for June and June to August 2022.

The outlook for Rotuma shows a significant sea level difference of 0.2-0.3m *above normal* for June and 0.1-0.2m *above normal* for June to August 2022.

There is a coral bleaching outlook status at 'Watch' level for Vanua Levu for the next four weeks.

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

Product	Date: April 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Fiji Climate Summary	07/04/22	General Public	140	106	34
EAR Watch	14/04/22	Humanitarian partners	122	96	26
Fiji Climate Outlook	29/04/22	General public	124	93	31
Climate Outlook for Monasavu	29/04/22	Energy Fiji Limited	13	13	-
Fiji Sugarcane Climate Outlook	30/04/22	Sugar Industry stakeholders	77	60	17
Meteorological Data Request	01/04/22 to 30/04/22	A range of stakeholders	46	35	11
Total			522	403	119

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