

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 183

Country: Fiji

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Sep-2022	Oct-2022	Nov-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Western Division							
Penang Mill (1910-2022)	49.6	209.8	82.9	96.1	189.4	133.0	34/111
Lautoka Mill (1900-2022)	0.0	225.0	110.0	64.7	154.2	114.7	66/123
Nadi Airport (1942-2022)	9.1	196.9	115.2	91.6	146.5	124.0	37/80
Central Division							
Laucala Bay (Suva) (1942-2022)	113.7	352.4	116.5	156.0	284.5	205.6	20/81
Nausori Airport (1957-2022)	58.5	461.9	198.2	191.7	302.9	229.8	25/67
Tokotoko (Navua) (1945-2022)	122.5	490.0	139.5	200.1	363.6	279.0	14/77
Eastern Division							
Lakeba (1950-2022)	224.9	226.5	153.9	71.6	169.1	114.8	48/74
Vunisea (Kadavu) (1931-2022)	135.0		104.0	94.1	164.9	109.2	42/87
Ono-i-Lau (1943-2022)	111.3	221.7	79.5	61.8	119.2	93.1	32/76
Northern Division							
Labasa Airport (1946-2022)	40.4	248.6	162.2	110.7	196.1	147.6	35/63
Savusavu Airfield (1956-2022)	29.2	187.6	184.8	126.2	209.2	160.5	36/64
Udu Point (1946-2022)	99.9	285.5	237.3	163.5	286.7	222.6	39/73
Rotuma (1912-2022)	124.5	217.8	173.5	251.2	347.5	302.4	10/109

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 September to November 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Western Division						
Penang Mill (1910-2022)	342.3	Normal	239.5	414.3	292.4	68/110
Lautoka Mill (1900-2022)	335.0	Normal	200.3	344.0	277.7	87/123
Nadi Airport (1942-2022)	321.2	Normal	244.0	343.2	296.6	47/80
Central Division						
Laucala Bay (Suva) (1942-2022)	582.6	Normal	476.6	785.9	652.9	39/81
Nausori Airport (1957-2022)	718.6	Normal	445.8	747.7	602.6	42/66
Tokotoko (Navua) (1945-2022)	752.0	Normal	643.6	937.6	773.1	37/76
Eastern Division						
Lakeba (1950-2022)	605.3	Above normal	297.6	409.7	331.2	65/72
Vunisea (Kadavu) (1931-2022)			344.7	448.9	408.2	
Ono-i-Lau (1943-2022)	412.5	Above normal	207.9	384.2	294.5	55/74
Northern Division						
Labasa Airport (1947-2022)	451.2	Above normal	258.1	367.4	303.7	47/60
Savusavu Airfield (1957-2022)	401.6	Normal	368.5	511.5	425.2	29/63
Udu Point (1946-2022)	622.7	Above normal	403.5	569.2	498.7	50/72
Rotuma (1912-2022)	515.8	Below normal	728.8	986.1	895.3	4/104

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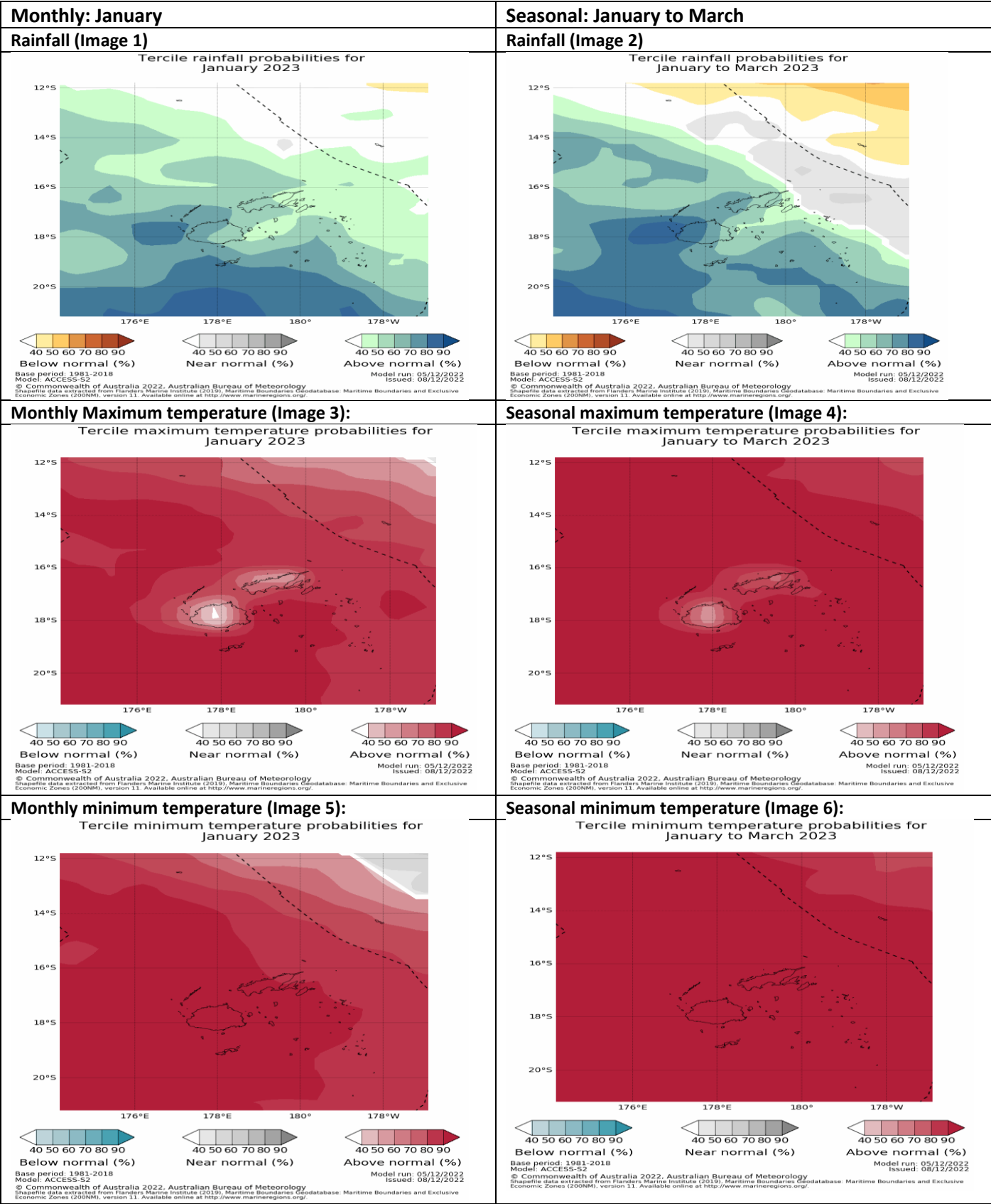
Moderate $5 \leq X < 10$

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



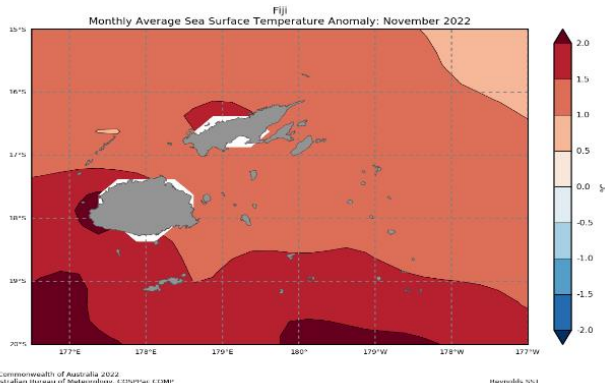
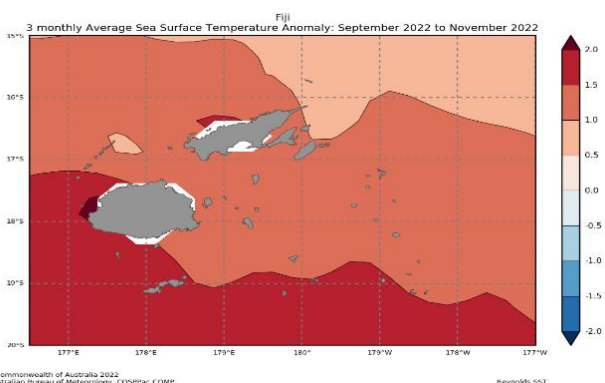
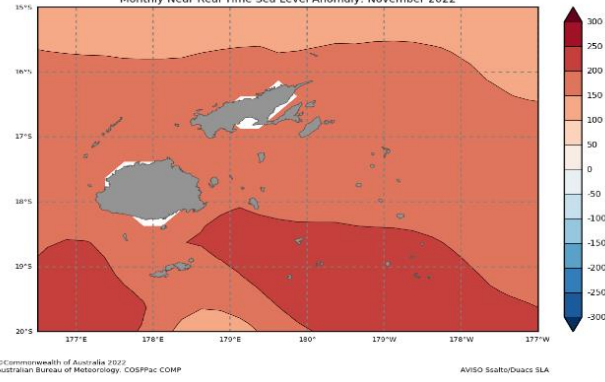
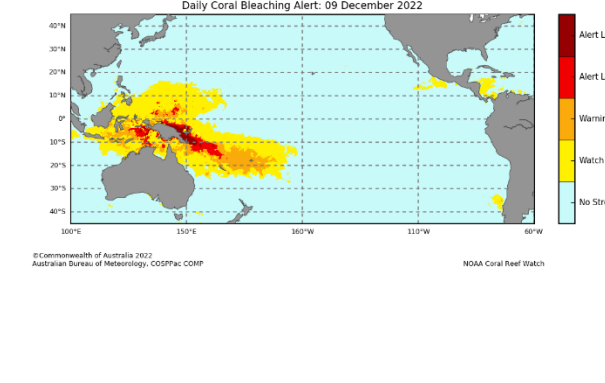
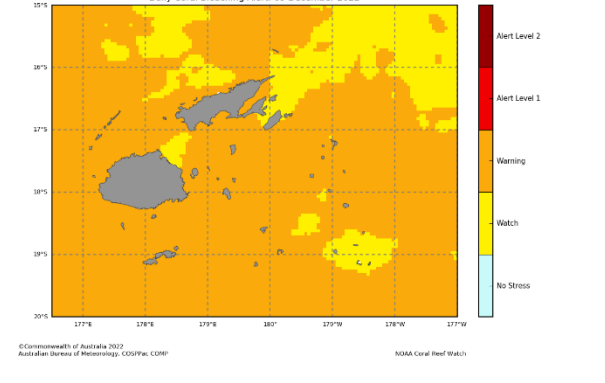
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Part 2: Recent Ocean Observation

Monthly/Three months: November 2022 and September to November 2022

Monthly: November	Last three months: September to November 2022:
Sea Surface Temperature (Image 1):  <p>Monthly Average Sea Surface Temperature Anomaly: November 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p>	Sea Surface Temperature (Image 4):  <p>3 monthly Average Sea Surface Temperature Anomaly: September 2022 to November 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p>
Sea level (Image 2):  <p>Monthly Near Real Time Sea Level Anomaly: November 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p>	
Daily coral bleaching alert (Image 3):  <p>Pacific Ocean Daily Coral Bleaching Alert: 09 December 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p>	 <p>Fiji Daily Coral Bleaching Alert: 09 December 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p>

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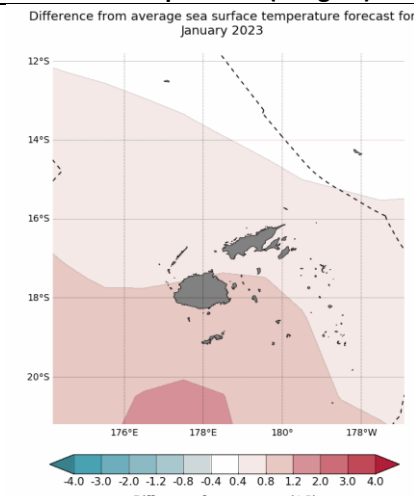
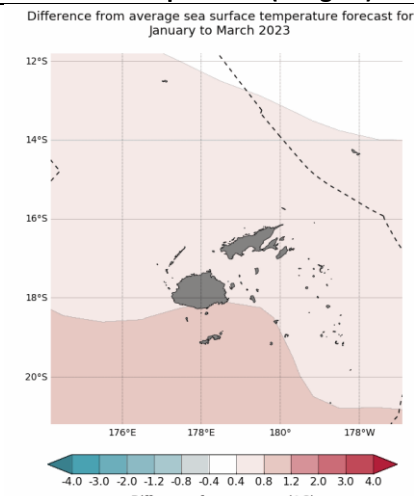
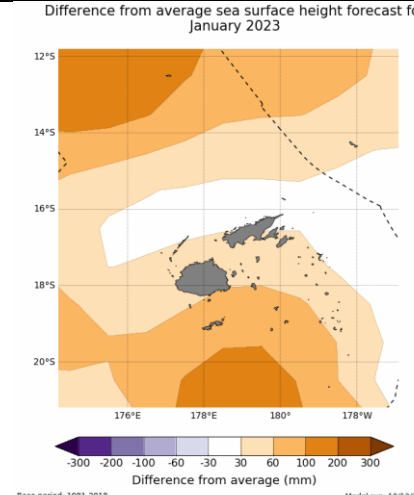
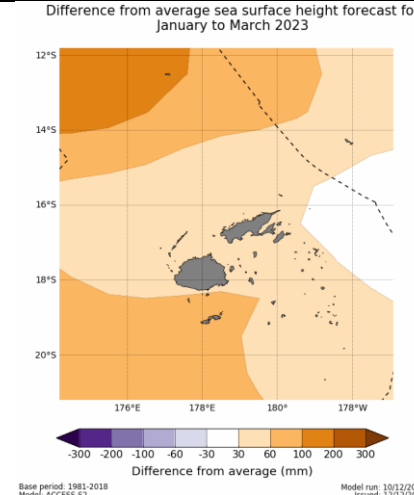
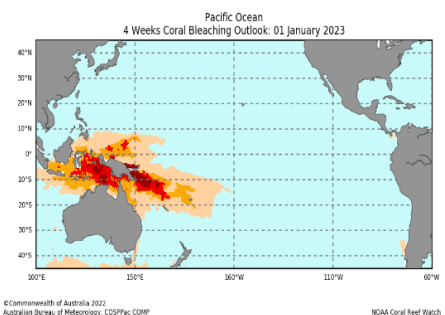
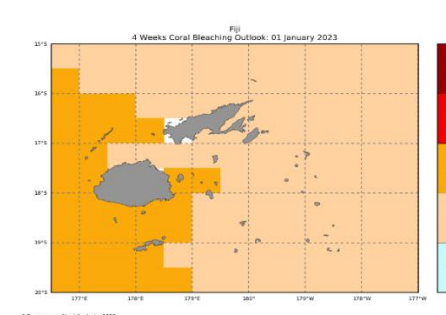
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Part 2i. Monthly and Seasonal Outlooks for January and January to March 2023

Monthly: January	Seasonal: January to March
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for January 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinegovernance.org/</p> <p>Model run: 10/12/2022 Issued: 12/12/2022</p>	<p>Difference from average sea surface temperature forecast for January to March 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinegovernance.org/</p> <p>Model run: 10/12/2022 Issued: 12/12/2022</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for January 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinegovernance.org/</p> <p>Model run: 10/12/2022 Issued: 12/12/2022</p>	<p>Difference from average sea surface height forecast for January to March 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinegovernance.org/</p> <p>Model run: 10/12/2022 Issued: 12/12/2022</p>
4-week Coral Bleaching (Image 9):	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 01 January 2023</p>  <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, CSIRO/PC: CSIRO</p> <p>NOAA Coral Reef Watch</p>	<p>Fiji 4 Weeks Coral Bleaching Outlook: 01 January 2023</p>  <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, CSIRO/PC: CSIRO</p> <p>NOAA Coral Reef Watch</p>

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Summary Statement

Monthly and last three months: November 2022/September to November 2022 statement

For November 2022, *near normal* rainfall was registered across Eastern and Northern Divisions, at Lautoka Mill, Nadi Airport and Nausori Airport. *Below normal* rainfall was recorded at Penang Mill, Laucala Bay (Suva) Tokotoko (Navua) and Rotuma.

For September to November 2022, *normal* to *above normal* rainfall was recorded across Fiji, except for Rotuma, which recorded *below normal* rainfall. Lakeba registered their eighth wettest September to November in 72 years of record. Rotuma registered its fourth driest September to November in 104 years of record.

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

Monthly /Seasonal rainfall and temperature Outlook statements

Fiji's January and January to March 2023, rainfall is likely to be *above normal*, except for Rotuma where there is little guidance with almost equal chances of *below normal*, *near normal* and *above normal* rainfall.

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

Part 2: Recent Ocean summary statement

Monthly and last three months: November/September to November 2022

November ocean temperatures around Fiji were 1.0 to 2.0°C above normal.

Averaged over September to November, ocean temperatures around Fiji were 0.5 to 2.0°C above normal.

November sea levels around Fiji were above normal, ranging from 150mm to 250mm around Fiji.

Coral bleaching alert is at '*Warning*' status for most of the Fiji Waters.

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

Ocean Variable statement

The monthly sea surface temperature outlook for January shows a temperature difference of 1.2-2.0°C *above normal* for Kadavu and parts of Southern Lau group. The seasonal SST outlook for January to March 2023 forecasts SST temperatures of utmost 1.2°C over the Kadavu Waters.

The monthly and seasonal sea level outlook for January and January to March 2023 reveals sea surface height differences of 100mm to 200mm for waters in Kadavu, parts of southern Lau Group and Rotuma.

Coral bleaching outlook for the next four weeks is at '*Warning*' for waters west of Viti Levu, Viwa, Yasawa Group, Lomaiviti Group, Vatulele, Beqa and Kadavu.

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

Product	Date: November 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Fiji Climate Summary	08/11/22	General Public	140	106	34
EAR Watch	10/11/22	Humanitarian partners	122	96	26
Fiji Climate Outlook	30/11/22	General public	124	93	31
Climate Outlook for Monasavu	30/11/22	Energy Fiji Limited	13	13	-
Fiji Ocean Outlook	18/11/22	A number of key ocean related stakeholders	36	29	7
ENSO Update	25/11/22	General Public	142	116	26
Meteorological Data Request	01/11/22 to 31/10/22	A range of stakeholders	44	34	10
Total			621	487	134

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