

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 169

Country: Fiji

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Jul-2021	Aug-2021	Sep-2021				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Western Division							
Penang Mill (1910-2021)	43.9	15.1	56.8	38.3	93.0	59.9	47/111
Lautoka Mill (1900-2021)	M	19.9	62.6	31.6	86.6	56.0	73/122
Nadi Airport (1942-2021)	8.5	4.9	70.0	36.5	88.6	62.5	46/80
Central Division							
Laucala Bay (Suva) (1942-2021)	92.3	114.5	95.0	122.9	228.4	149.5	16/80
Nausori Airport (1957-2021)	113.4	116.2	109.6	112.8	208.9	147.4	22/65
Tokotoko (Navua) (1945-2021)	113.7	169.0	208.0	158.3	289.1	217.0	35/76
Eastern Division							
Lakeba (1950-2021)	65.8	47.0	171.2	68.7	121.3	90.6	59/72
Vunisea (Kadavu) (1931-2021)	215.0	96.5	174.2	91.7	165.7	132.5	61/84
Ono-i-Lau (1943-2021)	67.1	25.8	133.3	72.1	119.7	92.4	51/74
Northern Division							
Labasa Airport (1946-2021)	36.9	2.0	M	37.1	79.9	61.6	
Savusavu Airfield (1956-2021)	M	M	M	79.5	134.5	107.0	
Udu Point (1946-2021)	141.9	119.6	162.5	73.1	147.7	108.3	52/72
Rotuma (1912-2021)	352.5	226.8	163.2	171.3	271.9	210.6	26/105

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 July to September 2021

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Western Division						
Penang Mill (1910-2021)	115.8	Below normal	130.9	227.9	184.8	24/111
Lautoka Mill (1900-2021)			117.9	216.7	156.2	
Nadi Airport (1942-2021)	83.4	Below normal	128.8	211.4	175.0	10/80
Central Division						
Laucala Bay (Suva) (1942-2021)	301.8	Below normal	386.3	564.5	464.6	15/80
Nausori Airport (1957-2021)	339.2	Below normal	367.9	530.7	436.8	18/65
Tokotoko (Navua) (1945-2021)	490.7	Below normal	520.7	664.9	594.7	19/75
Eastern Division						
Lakeba (1950-2021)	284.0	Normal	199.6	315.8	233.2	43/70
Vunisea (Kadavu) (1931-2021)	485.7	Above normal	292.6	398.4	345.3	69/83
Ono-i-Lau (1943-2021)	226.2	Below normal	252.6	344.5	295.5	20/73
Northern Division						
Labasa Airport (1947-2021)			109.0	188.5	153.0	
Savusavu Airfield (1957-2021)			240.6	336.7	305.5	
Udu Point (1946-2021)	424.0	Above normal	230.1	337.6	294.0	57/71
Rotuma (1912-2021)	742.5	Normal	575.4	768.9	655.2	63/104

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: $X \geq 35$

Part 1i. Monthly and Seasonal Outlooks for November and November 2021 to January 2022

Monthly	Seasonal
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for November 2021</p> <p>Model: ACCESS-S1 Base period: 1990-2017 Model run: 04/10/2021 Issued: 07/10/2021</p>	<p>Tercile rainfall probabilities for November 2021 to January 2022</p> <p>Model: ACCESS-S1 Base period: 1990-2017 Model run: 04/10/2021 Issued: 07/10/2021</p>
Monthly Maximum temperature (Image 3)	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for November 2021</p> <p>Model: ACCESS-S1 Base period: 1990-2017 Model run: 04/10/2021 Issued: 07/10/2021</p>	<p>Tercile maximum temperature probabilities for November 2021 to January 2022</p> <p>Model: ACCESS-S1 Base period: 1990-2017 Model run: 04/10/2021 Issued: 07/10/2021</p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for November 2021</p> <p>Model: ACCESS-S1 Base period: 1990-2017 Model run: 04/10/2021 Issued: 07/10/2021</p>	<p>Tercile minimum temperature probabilities for November 2021 to January 2022</p> <p>Model: ACCESS-S1 Base period: 1990-2017 Model run: 04/10/2021 Issued: 07/10/2021</p>

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

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

Moderate $5 \leq X < 10$

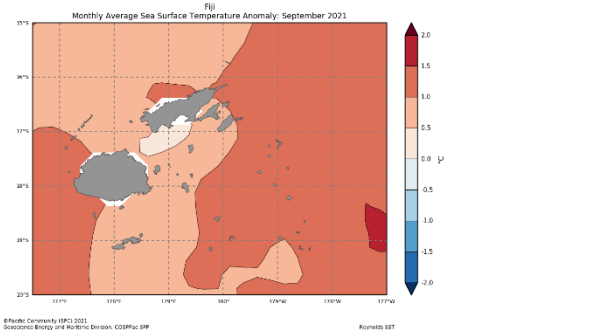
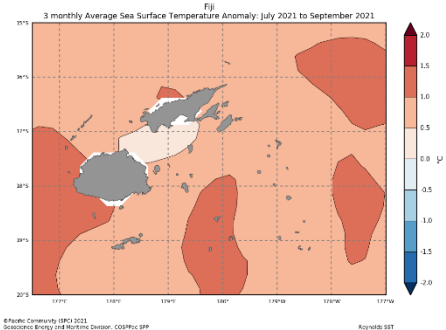
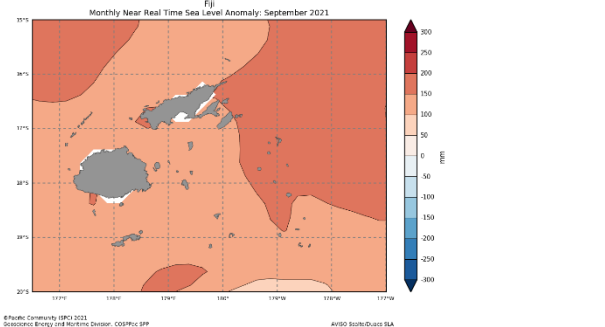
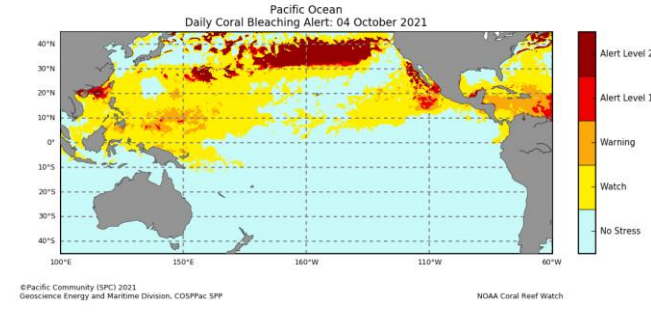
Good: $10 \leq X < 15$

High: $15 \leq X < 25$

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

Part 2: Recent Ocean summary statement

Monthly: September 2021

Monthly: September	Last three months: July to September 2021:
<p>Sea Surface Temperature (Image 1):</p>  <p>Fiji Monthly Average Sea Surface Temperature Anomaly: September 2021</p> <p>© Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p>	<p>Sea Surface Temperature (Image 4):</p>  <p>Fiji 3 monthly Average Sea Surface Temperature Anomaly: July 2021 to September 2021</p> <p>© Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p>
<p>Sea level (Image 2):</p>  <p>Fiji Monthly Near Real Time Sea Level Anomaly: September 2021</p> <p>© Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p>	
<p>Daily coral bleaching alert (Image 3):</p>  <p>Pacific Ocean Daily Coral Bleaching Alert: 04 October 2021</p> <p>© Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p> <p>NOAA Coral Reef Watch</p>	

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: $X \geq 35$

Part 2i. Monthly and Seasonal Outlooks for November and November 2021 to January 2022

Monthly: November	Seasonal: November to January
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for November 2021</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 04/10/2021 Issued: 06/10/2021</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology Seafile data used from Bureau of Meteorology (2020), National Bureau of Oceanography, Pacific Ocean and Southern Ocean Division, Oceanographic Data Centre (2020), version 11, available online at http://www.bom.gov.au</p>	<p>Difference from average sea surface temperature forecast for November 2021 to January 2022</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 04/10/2021 Issued: 06/10/2021</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology Seafile data used from Bureau of Meteorology (2020), National Bureau of Oceanography, Pacific Ocean and Southern Ocean Division, Oceanographic Data Centre (2020), version 11, available online at http://www.bom.gov.au</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for November 2021</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 27/09/2021 Issued: Map not issued</p> <p>© Commonwealth of Australia 2021 Bureau of Meteorology</p>	<p>Difference from average sea surface height forecast for November 2021 to January 2022</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 27/09/2021 Issued: Map not issued</p> <p>© Commonwealth of Australia 2021 Bureau of Meteorology</p>
4-week Coral Bleaching (Image 9):	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 10 October 2021</p> <p>© Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPAC SPP</p> <p>NOAA Coral Reef Watch</p>	

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: $X \geq 35$

Summary Statement

Monthly and last three months: September 2021/July to September statement (Highly significant changes)

For September 2021, *below normal* rainfall was recorded at Laucala Bay, Nausori Airport and Rotuma. On the other hand, *above normal* rainfall was registered in the Eastern Division and Udu point. *Near normal* rainfall was received in the Western Division and Tokotoko (Navua). Rainfall data is not available for Labasa Airport and Savusavu Airfield.

Below normal rainfall was recorded in the Western and Central Divisions, and Ono-i-Lau for July to September period. On the other hand, *above normal* rainfall was registered at Vunisea and Udu Point. *Near normal* rainfall was received at Lakeba and Rotuma.

Part 1i. Monthly and Seasonal Outlooks for November and November 2021 to January 2022

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

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

The rainfall outlook for Fiji for November 2021 to January 2022 is very likely to be *above normal*.

The maximum and minimum temperatures for Fiji for November and November 2021 to January 2022 are very likely to be *above normal*.

Part 2: Recent Ocean summary statement

Monthly and last three months: September/July to September 2021 (Highly significant changes)

Most of the Fiji Waters experienced above average SST in September 2021. Significant warm SSTs of 1.0 to 1.5°C above average were experienced on the western side of Viti Levu, Northern Vanua Levu and Lau Group.

For the July to September 2021 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, Northern Vanua Levu and some parts of the southern Lau Group.

The sea level anomaly across Fiji in September 2021 was significantly higher than normal, with Lau Waters in the range of 150 to 200 mm above average.

Part 2i. Monthly and Seasonal Outlooks for November and November 2021 to January 2022

Ocean Variable statement (Highly significant changes)

The SST outlook for Viti Levu, Kadavu, and parts of Lomaiviti Group shows a significant temperature difference of 0.8-1.2°C above normal for November.

The SST outlook for Viti Levu, Kadavu, Lomaiviti Group and southern Lau Group shows a significant temperature difference of 0.8-1.2°C above normal for November 2021 to January 2022.

The outlook across the Fiji Group shows a significant sea level difference of 0.06-0.2m above normal for November and November 2021 and January 2022.

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

Product	Date: September 2021	Stakeholder	Total Number of Participants	Number of male	Number of female
Fiji Climate Summary	08/09/21	General Public	140	106	34
EAR Watch	08/09/21	Humanitarian partners	122	96	26
Fiji Climate Outlook	30/09/21	General public	124	93	31
Climate Outlook for Monasavu	30/09/21	Energy Fiji Limited	13	13	-
Ocean Outlook	20/09/21	A number of key ocean related stakeholders	36	29	7
ENSO Outlook	25/09/21	General Public	142	116	26
Meteorological Data Request	01/09/21 to 30/09/21	A range of stakeholders	31	23	8
Total			608	476	132

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: $X \geq 35$