## FIJI METEOROLOGICAL SERVICE

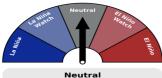
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# Fiji Ocean Outlook

Volume: 6 Issue: 10 Issued: October 18, 2024 Next Issue: November 20, 2024

## In Brief



ENSO Outlook

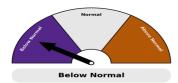
The El Niño-Southern Oscillation (ENSO) is currently neutral, with a transition to La Niña state likely during November 2024 to January 2025. Weak La Niña conditions are likely to remain dominant till January to March 2025.



Coral Bleaching

The average position of the 29°C South Pacific Convergence Zone (SPCZ) is likely to be displaced south of its normal position, close to Fiji Group, during the November to January 2025 period.

The 4, 8 and 12 weeks coral bleaching outlook is at 'No Stress' level across the Fiji Waters.



Sea Level Outlook

Below normal sea level is likely for Rotuma, while near normal sea level is favored for the rest of the Fiji Group, during the November to January 2025 period.

# Pacific Sea Surface Temperatures (SSTs): Recent Observations

The monthly average sea surface temperature anomaly maps for the Pacific Ocean and Fiji could not be generated due to technical issues.

#### Possible Applications:

Presence of warmer than usual waters in the central and eastern equatorial Pacific indicate persistence of an El Niño event and cool waters indicate La Niña. Monitoring warm patches of ocean gives insight into the potential for cyclone formation, and possible start or finish of the cyclone season. For further information on ocean temperature refer to <a href="http://oceanportal.spc.int/portal/help/about\_OceanTemperature.pdf">http://oceanportal.spc.int/portal/help/about\_OceanTemperature.pdf</a>.

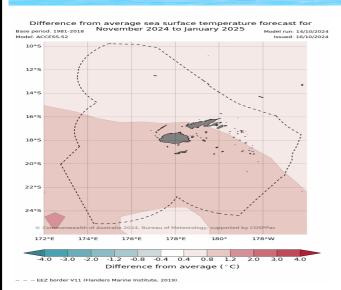
# **Chlorophyll Concentration**

The chlorophyll concentration map could not be generated due to technical issues.

#### Possible Applications:

Chlorophyll concentration can be of great interest to fishermen targeting smaller pelagic (open sea) fish. High concentration of chlorophyll can also provide indication of potential hazardous conditions near the coast from reef fish diseases, such as ciguatera, harmful algal blooms, and outbreak of Crown of Thorns starfish, which is a coral eating pest. For further information on chlorophyll concentration refer to <a href="http://oceanportal.spc.int/portal/help/about chlorophyll.pdf">http://oceanportal.spc.int/portal/help/about chlorophyll.pdf</a>.

## Sea Surface Temperature (SST) Outlook



Sea surface temperature forecast for November 2024 to January 2025 Model run 14/10/202 Issued 16/10/202 Issu

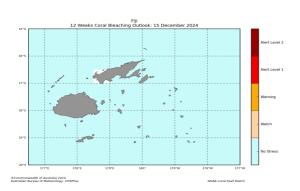
Above normal SSTs are likely across most of Fiji Waters during the November to January 2025 period.

Average position of the 29°C convergence zone is likely to be displaced south of its normal position, close to Fiji Group, during the November to January 2025 period (purple line).

#### Possible Applications:

The movement of the convergence zone has an influence on relative abundance of tuna in the Pacific Ocean. The 29°C isotherm around the western Pacific warm pool forms a good proxy for the convergence zone, and can therefore be used to track the gravity center of Skipjack tuna fishing activity. For further information on seasonal sea surface temperature forecast refer to <a href="http://oceanportal.spc.int/portal/help/about\_POAMA\_SST.pdf">http://oceanportal.spc.int/portal/help/about\_POAMA\_SST.pdf</a>.

## Coral Bleaching Outlook



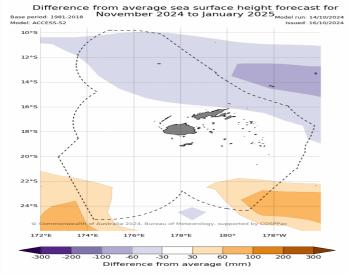
The 4, 8 and 12 weeks coral bleaching outlook is at 'No Stress' for the Fiji Waters.

Caption: The image is for 12 weeks outlook.

## Possible Applications:

Once a potential bleaching event is detected, a management plan should be implemented to reduce the impacts of bleaching. For further information on coral bleaching refer to <a href="http://oceanportal.spc.int/portal/help/about\_coralbleaching.pdf">http://oceanportal.spc.int/portal/help/about\_coralbleaching.pdf</a>.

## Sea Level Outlook



*Below normal* sea level is likely for Rotuma, while *near normal* sea level is likely for the rest of the Fiji Group, during the November to January 2025 period.

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#### Possible Applications:

Stakeholders can use forecasts of extreme sea level to make decisions about the protection of communities and infrastructure against coastal inundation. For further information on sea level refer to <a href="http://oceanportal.spc.int/portal/help/about\_POAMA\_Sea\_Level.pdf">http://oceanportal.spc.int/portal/help/about\_POAMA\_Sea\_Level.pdf</a>.

## Tide Predictions (November to January 2025)

Suva Tidal Gauge						Lautoka Tidal Gauge					
Monthly Highest Tide			Monthly Lowest Tide			Monthly Highest Tide			<b>Monthly Lowest Tide</b>		
Date	Time	Height	Date	Time	Height	Date	Time	Height	Date	Time	Height
16 Nov	18:26	2.13m	17 Nov	01:02	0.34m	15 Nov	17:22	2.39m	17 Nov	00:43	0.27m
14 Dec	17:17	2.08m	17 Dec	01:40	0.37m	14 Dec	17:05	2.31m	16 Dec	00:33	0.30m
31 Jan	19:52	2.04m	15 Dec	01:24	0.44m	31 Jan	19:35	2.28m	31 Jan	01:19	0.36m

All date and time are in Fiji Standard Time.

## Moon Phases (November to January 2025)

New Moon	First Quarter	Full Moon	Last Quarter 🌓
2 <sup>nd</sup> November	9 <sup>th</sup> November	16 <sup>th</sup> November	23 <sup>rd</sup> November
1 <sup>st</sup> December	9 <sup>th</sup> December	15 <sup>th</sup> December	23 <sup>rd</sup> December
31 <sup>st</sup> December	7 <sup>th</sup> January	14 <sup>th</sup> January	22 <sup>nd</sup> January
30 <sup>th</sup> January			

**Disclaimer:** While Fiji Meteorological Service takes all measures to provide accurate information and data, it does not guarantee 100% accuracy of the information presented in this outlook. The Department should be sought for expert advice, clarifications and additional information as and when necessary. The user assumes all risk resulting directly or indirectly from the use of this outlook.