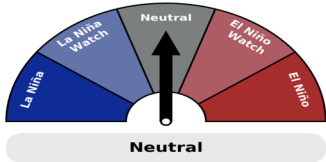
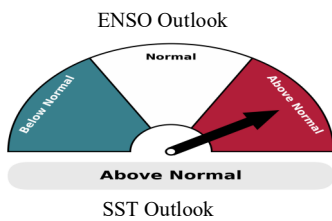


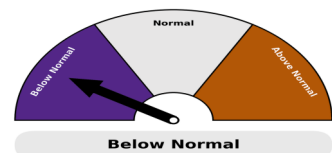
In Brief



⇒ The El Niño–Southern Oscillation (ENSO) is currently neutral, with a transition to borderline La Niña state likely during October to December 2024. However, these La Niña conditions are favored to be weak.



⇒ Above normal sea surface temperatures (SSTs) are likely across most of the Fiji Group during October to December 2024.

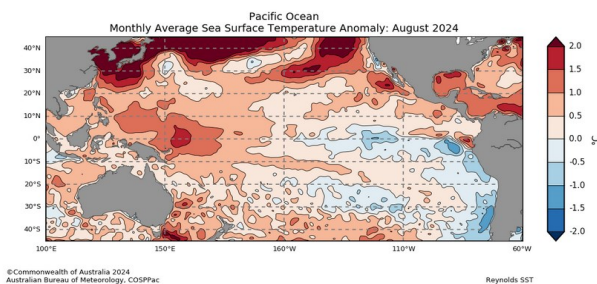


⇒ The average position of the 29°C South Pacific Convergence Zone (SPCZ) is likely to be displaced south of its normal position, close to Fiji’s EEZ, during the October to December 2024 period.

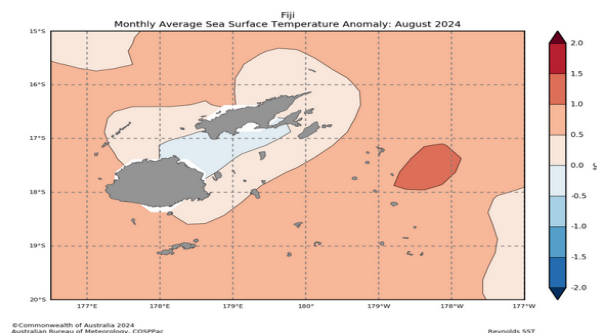
⇒ Below normal sea level is likely for Rotuma, while near normal sea level is favored for the rest of the Fiji Group, during the October to December 2024 period.

⇒ The highest tide of the year will be on 18th October at both Lautoka and Suva Wharves.

Pacific Sea Surface Temperatures (SSTs): Recent Observations



Warmer than normal SSTs were observed across most of the western tropical Pacific Ocean. However, SSTs were up to 2 °C cooler than average in patches of the equatorial Pacific, east of 130°W.

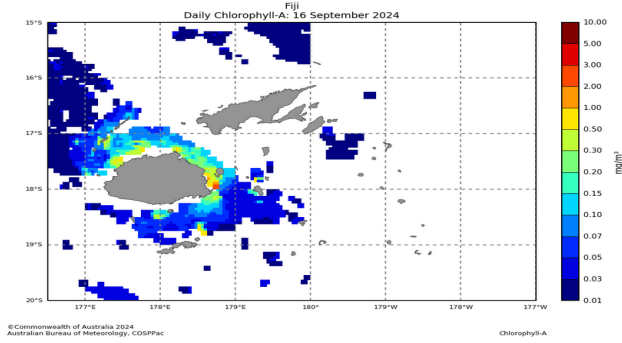


Sea surface temperatures around Fiji Waters were mostly above normal during August, with anomalies of 0.5°C to 1.5°C observed across most parts of the country, while below normal SSTs were prevalent across Vatu-I-Ra passage.

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 http://oceanportal.spc.int/portal/help/about_OceanTemperature.pdf.

Chlorophyll Concentration

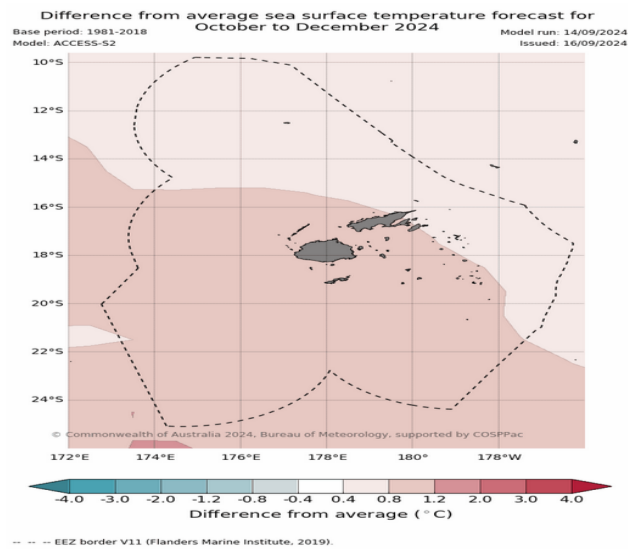


Daily chlorophyll concentration - 16th September 2024.
High concentrations of chlorophyll were observed along the western and eastern coasts of Viti Levu.

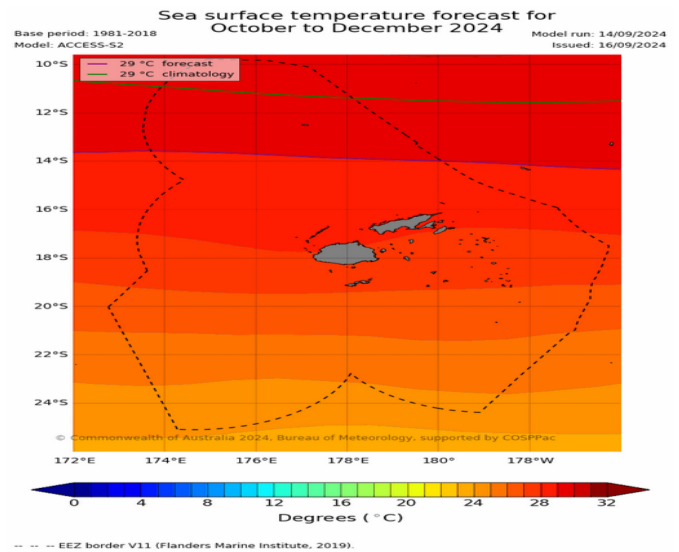
Possible Applications:

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 http://oceanportal.spc.int/portal/help/about_chlorophyll.pdf.

Sea Surface Temperature (SST) Outlook



Above normal SSTs are likely across most of Fiji Waters during the October to December 2024 period.



Average position of the 29°C convergence zone is likely to be displaced south of its normal position, close to Fiji's EEZ, during the October to December 2024 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 http://oceanportal.spc.int/portal/help/about_POAMA_SST.pdf.

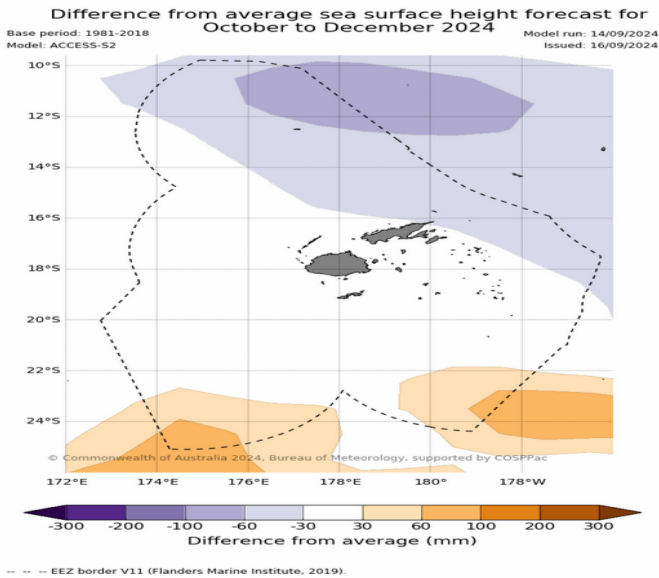
Coral Bleaching Outlook

The 4, 8 and 12 weeks coral bleaching outlook could not be generated due to technical issues.

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 http://oceanportal.spc.int/portal/help/about_coralbleaching.pdf.

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 October to December 2024 period.

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 http://oceanportal.spc.int/portal/help/about_POAMA_Sea_Level.pdf.

Tide Predictions (October to December 2024)

Suva Tidal Gauge						Lautoka Tidal Gauge					
Monthly Highest Tide			Monthly Lowest Tide			Monthly Highest Tide			Monthly Lowest Tide		
Date	Time	Height	Date	Time	Height	Date	Time	Height	Date	Time	Height
18 Oct	18:49	2.14m	20 Oct	02:10	0.34m	18 Oct	18:30	2.40m	19 Oct	00:57	0.28m
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

All date and time are in Fiji Standard Time.

**The highest tide of the year will be on 18th October at Lautoka and Suva Wharves and will be 2.40m and 2.14m in height, respectively.*

Moon Phases (October to December 2024)

New Moon ●	First Quarter ☾	Full Moon ○	Last Quarter ☽
3 rd October	11 th October	17 th October	24 th October
2 nd November	9 th November	16 th November	23 rd November
1 st December	9 th December	15 th December	23 rd December
31 st December			

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.