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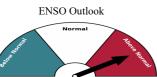
Fiji Ocean Outlook

Issue: 7 Volume: 6 Issued: July 19, 2024 Next Issue: August 20, 2024

In Brief



The El Niño-Southern Oscillation (ENSO) is currently neutral, with a transition to La Niña state likely during August to October 2024 period.



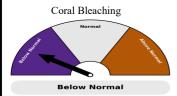
Above normal sea surface temperatures (SSTs) are likely across most of Fiji \Rightarrow Waters during August to October 2024.



The 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 August to October 2024 period.



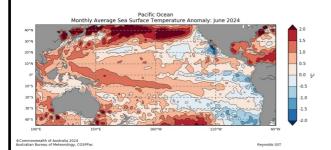
The 4, 8 and 12 weeks coral bleaching outlook is at 'No Stress' level across the Fiji Waters.



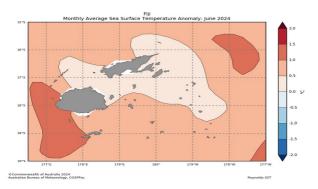
Sea Level Outlook

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

Pacific Sea Surface Temperatures (SSTs): Recent Observations



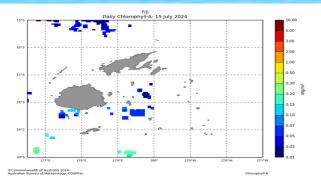
Warmer than normal SSTs were observed across most of the equatorial Pacific Ocean. SSTs were up to 2 °C cooler than average in the equatorial Pacific east of 140°W and along parts of the South American coast.



SSTs around the Fiji Waters were mostly above normal during June, with anomalies of 1.0°C to 1.5°C observed across the country.

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

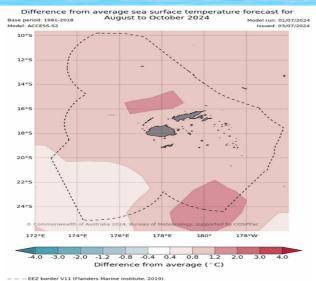


Daily chlorophyll concentration - 15th July 2024. Low concentrations of chlorophyll were observed along the southern coast of Viti Levu.

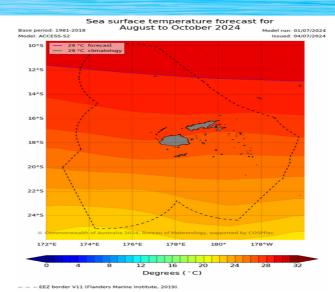
Possible Applications:

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 August to October 2024 period.

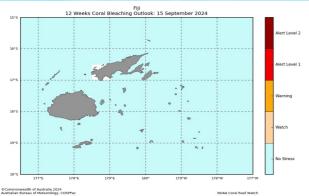


Average position of the 29°C convergence zone is likely to be displaced south of its normal position, close to Fiji's EEZ, during the August to October 2024 period (purple line).

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



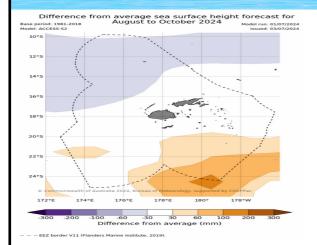
The 4, 8 and 12 weeks coral bleaching outlook is at 'No Stress' for the Fiji Waters.

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 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 August to October 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 (August to October 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
21 Aug	07:10	2.06m	21 Aug	13:34	0.33m	21 Aug	06:54	2.31m	21 Aug	13:16	0.24m
20 Sep	20:05	2.10m	19 Sep	13:05	0.37m	19 Sep	19:00	2.35m	18 Sep	12:04	0.27m
18 Oct	18:49	2.14m	20 Oct	02:10	0.34m	18 Oct	18:30	2.40m	19 Oct	00:57	0.28m

All date and time are in Fiji Standard Time.

Moon Phases (August to October 2024)

New Moon	First Quarter	Full Moon	Last Quarter 🌓
4 th August	13 th August	20 th August	26 th August
3 rd September	11 th September	18 th September	25 th September
3 rd October	11 th October	17 th October	24 th October

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.