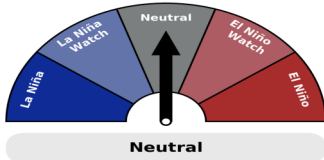
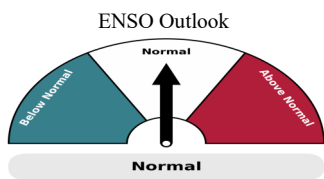


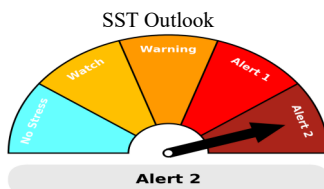
In Brief



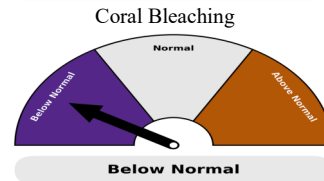
⇒ El Niño has ended and the El Niño–Southern Oscillation (ENSO) has returned to neutral. ENSO-neutral state is likely to continue until at least July 2024.



⇒ *Near normal* sea surface temperatures (SSTs) are likely across most of Fiji Waters during May to July 2024.



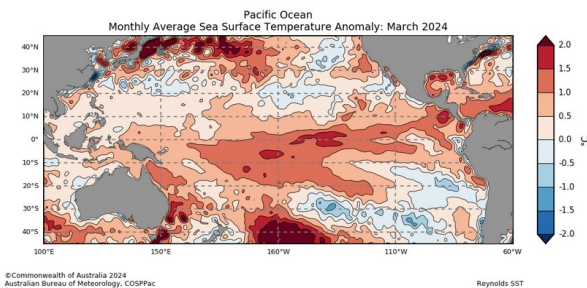
⇒ The average position of the 29°C convergence zone is likely to be displaced south of its normal position, close to Fiji’s EEZ, during the May to July 2024 period.



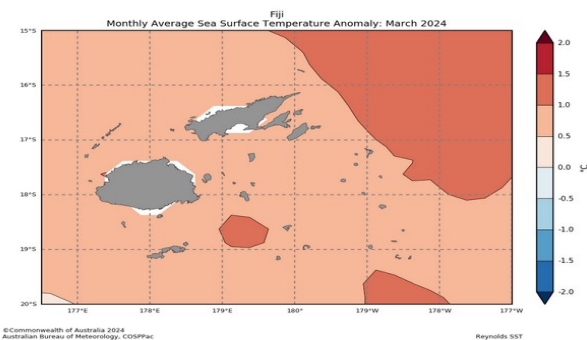
⇒ The 4 and 8 weeks coral bleaching outlook is at ‘No Stress’ for majority of the Fiji Waters, with ‘Alert Level 2’ in place for waters around Rotuma.

⇒ *Below normal* sea level is likely for Vanua Levu, Taveuni, northwestern Viti Levu, Yasawa and Mamanuca Groups, as well as Rotuma, while *near normal* sea level is likely for the rest of the Fiji Group, during the May to July 2024 period.

Pacific Sea Surface Temperatures (SSTs): Recent Observations



Warmer than normal SSTs were observed across almost all of the equatorial Pacific Ocean. The extent and magnitude of warm anomalies across the equatorial Pacific has decreased compared to February 2024, reflecting the decay of the El Niño.

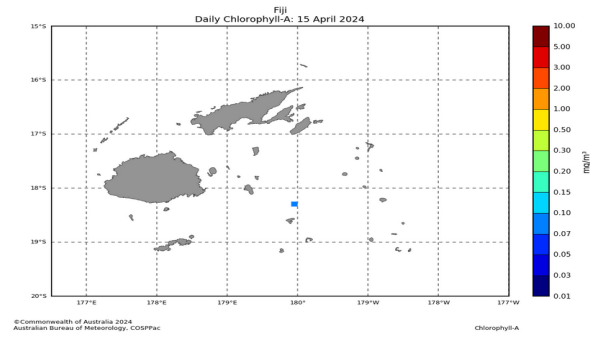


SSTs around the Fiji Waters were mostly *above normal* during March, with anomalies of 1.0°C to 1.5°C observed east of Vanua Levu, while anomalies of 0.5°C to 1.0°C were prevalent for the rest of the Fiji Group.

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

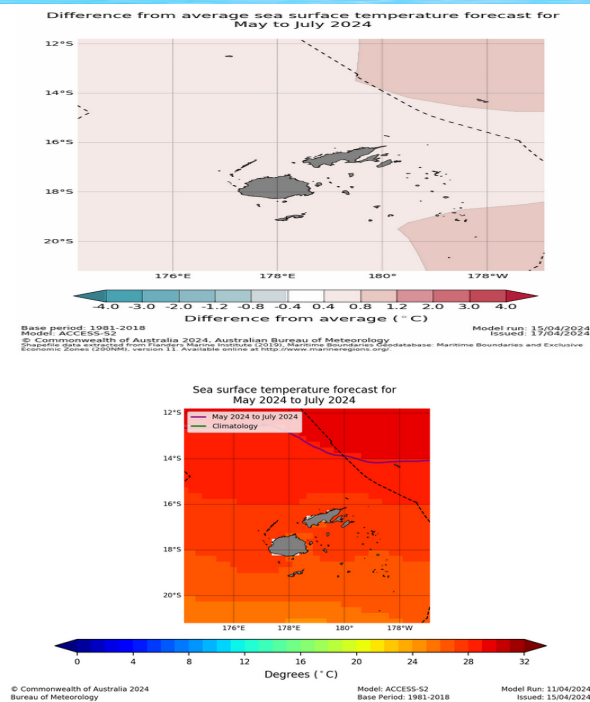


Daily chlorophyll concentration - 15th April 2024. Chlorophyll concentration were not observed in the Fiji Waters.

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



Near normal SSTs are likely across most of Fiji Waters during the May to July 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 May to July 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 and 8 weeks coral bleaching outlook is at 'No Stress' for majority of the Fiji Waters, with 'Alert Level 2' in place for waters around Rotuma.

The 12 weeks coral bleaching outlook is at 'No Stress' across Fiji Waters.

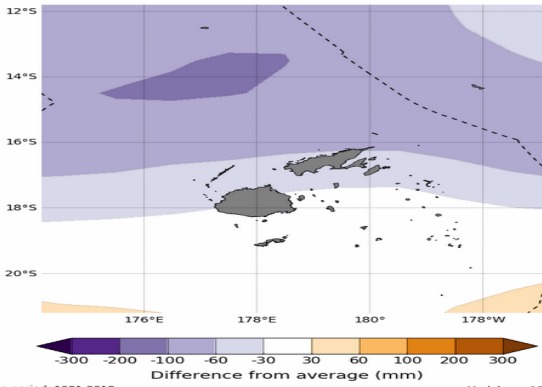
Caption: The image is for 4 weeks outlook.

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

Difference from average sea surface height forecast for May to July 2024



Base period: 1981-2018
 Model: ACCESS-S2
 © Commonwealth of Australia 2024. Australian Bureau of Meteorology
 Shapefile data extracted from Flinders Marine Institute (2023). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <http://www.marinerregions.org/>
 Model run: 15/04/2024
 Issued: 17/04/2024

Below normal sea level is likely for Vanua Levu, Taveuni, northwestern Viti Levu, Yasawa and Mamanuca Groups, as well as Rotuma, while *near normal* sea level is likely for the rest of the Fiji Group, during the May to July 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 (May to July 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
8 May	06:10	2.08m	9 May	13:30	0.32m	8 May	05:51	2.31m	8 May	12:19	0.28m
6 June	05:48	2.01m	7 June	13:15	0.33m	5 June	04:45	2.21m	6 June	12:08	0.31m
24 July	08:20	1.99m	23 July	14:01	0.34m	23 July	07:14	2.21m	23 July	13:43	0.27m

All date and time are in Fiji Standard Time.

Moon Phases (May to July 2024)

New Moon 	First Quarter 	Full Moon 	Last Quarter 
			1 st May
8 th May	15 th May	24 th May	31 st May
7 th June	14 th June	22 nd June	29 th June
6 th July	14 th July	21 st July	28 th July

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.