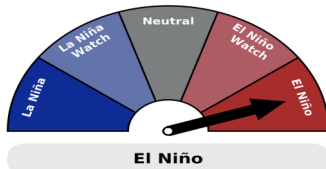
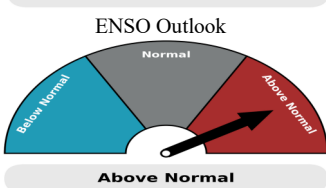


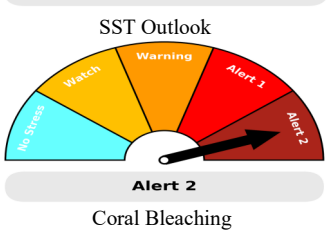
In Brief



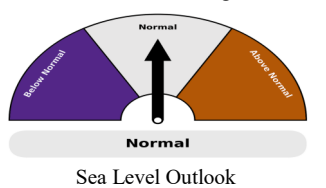
⇒ El Niño continues in the tropical Pacific Ocean.



⇒ The current El Niño event have passed its peak, with likely chances for it to continue through the March to May 2024 period. A transition to ENSO-neutral state is likely during April to June 2024.



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

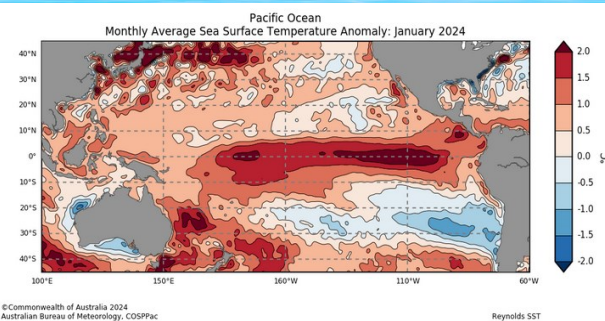


⇒ The average position of the 29°C convergence zone is likely to lie over the Fiji Group during the March to May 2024 period.

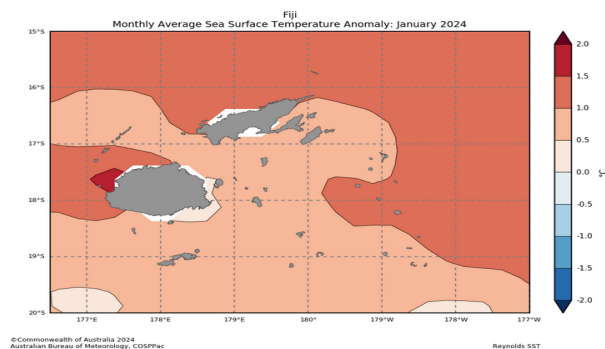
⇒ The 8 weeks coral bleaching outlook is at 'Alert Level 1' across most of Fiji Waters, with 'Alert Level 2' for waters north of Vanua Levu and Rotuma.

⇒ Sea level is likely to be below normal for the northern half of Fiji's EEZ, while near normal anomalies is likely across the rest of Fiji's EEZ, during March to May 2024 period.

Pacific Sea Surface Temperatures (SSTs): Recent Observations



Warmer than normal SSTs were observed across the equatorial Pacific Ocean. The SSTs in the equatorial Pacific Ocean is consistent with an El Niño event.



SSTs around the Fiji Waters were mostly above normal during January, with anomalies of more than 1.5°C observed west of Viti Levu, 1.0°C to 1.5°C observed across the Mamanuca Group, southern parts of Yasawa Group, parts of southern Lau Group and waters north 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

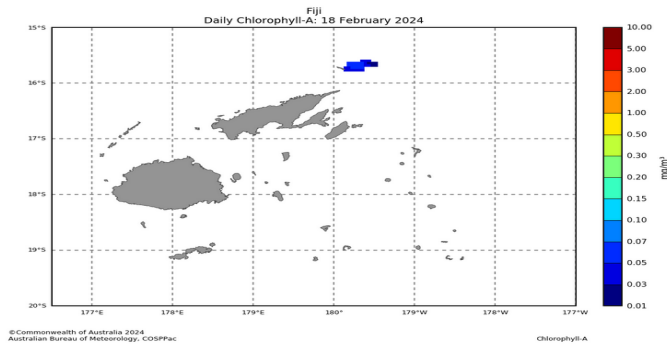


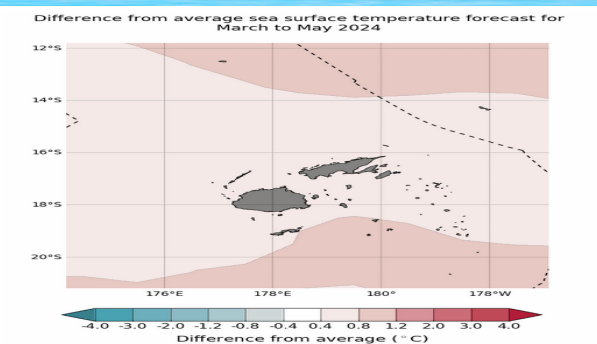
Image on the left illustrates the daily chlorophyll concentration on 18th February 2024.

Slight traces of chlorophyll concentration were seen on the far north of Vanua Levu, while there weren't any chlorophyll concentration observed for the rest of the Fiji Waters.

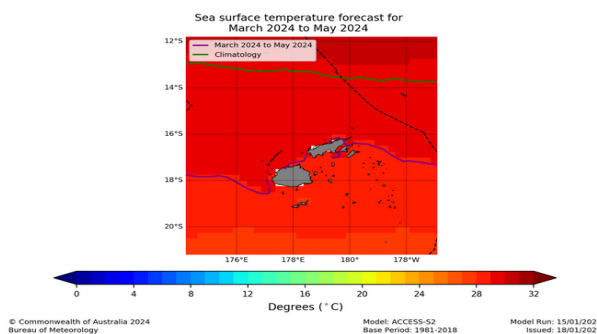
Possible Applications:

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



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

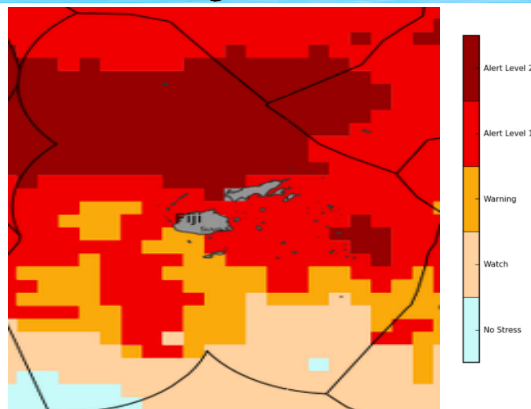


While the average position of the 29°C convergence zone is usually located north of Fiji during this time of the year (green line), it is likely to lie over the Fiji Group during March to May 2024 period (purple line).

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 weeks coral bleaching outlook is at 'Warning' across most of Fiji Waters, with 'Alert Level 1' for waters north of Vanua Levu, west of Viti Levu, some parts of the Lau Group and Rotuma.

The 8 weeks coral bleaching outlook is at 'Alert Level 1' across most of Fiji Waters, with 'Alert Level 2' for waters north of Vanua Levu and Rotuma.

The 12 weeks coral bleaching outlook is at 'Alert Level 1' for northern half of Fiji's EEZ, 'Warning' for Yasawas, and 'No Stress' for most parts of Fiji.

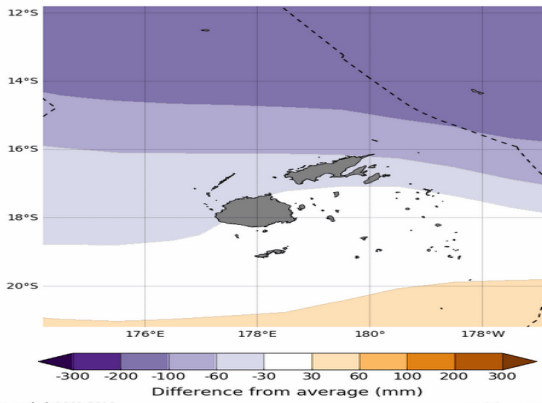
Caption: The image is for 8 weeks outlook.

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_corableaching.pdf.

Sea Level Outlook

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



Below normal sea level is likely for Vanua Levu, north-western Viti Levu, Yasawa and Mamanuca Groups, as well as Rotuma, while *near normal* sea level is likely for the rest of the Fiji's EEZ, during the March to May 2024 period.

Base period: 1981-2018
Model: ACCESS-S2
Model run: 12/02/2024
Issued: 14/02/2024
© Commonwealth of Australia 2024, Australian Bureau of Meteorology
Sea Level extracted from Fiji's Marine Institute (2019), Maritime Boundaries, geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 13. Available online at <http://www.marine.gov.fj/>

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 (March to May 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
12 Mar	07:49	2.12m	11 Mar	00:49	0.36m	10 Mar	18:13	2.39m	11 Mar	00:33	0.25m
10 Apr	07:22	2.12m	10 Apr	13:46	0.37m	9 Apr	06:16	2.36m	9 Apr	12:35	0.31m
8 May	06:10	2.08m	9 May	13:30	0.32m	8 May	05:51	2.31m	8 May	12:19	0.28m

All date and time are in Fiji Standard Time.

Moon Phases (March to May 2024)

New Moon ●	First Quarter ◐	Full Moon ○	Last Quarter ◑
			4 th March
10 th March	17 th March	25 th March	2 nd April
9 th April	16 th April	24 th April	1 st May
8 th May	15 th May	24 th May	31 st May

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.