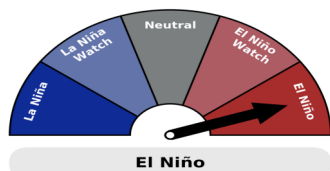
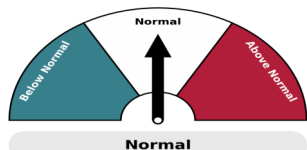


## In Brief



ENSO Outlook

⇒ Weak El Niño conditions continue in the tropical Pacific Ocean.



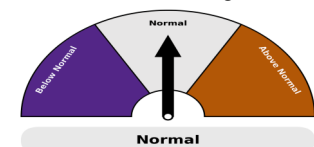
SST Outlook

⇒ The current El Niño is expected to gradually strengthen through to the December 2023 to February 2024 period.



Coral Bleaching

⇒ Near normal sea surface temperatures (SSTs) are likely in the Fiji Waters during August to October 2023.



Sea Level Outlook

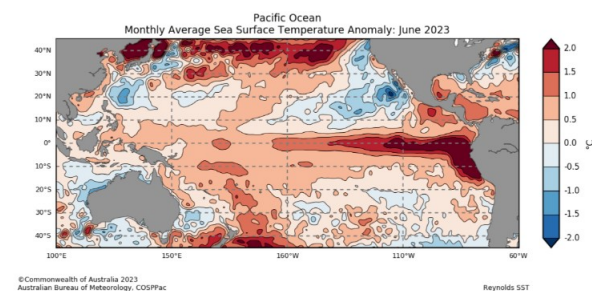
⇒ The average position of the 29°C fisheries convergence zone is likely to be displaced south of its normal position, close to far north of Fiji's EEZ, during the August to October 2023 period.

⇒ The 4, 8 and 12 weeks coral bleaching outlooks are at 'No Stress' across the Fiji Waters.

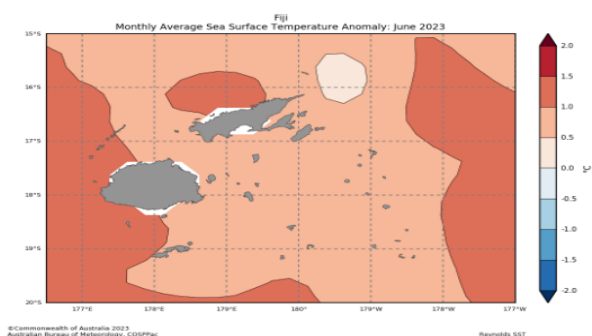
⇒ Sea level is likely to be *near normal* across most of Fiji's EEZ during August to October 2023 period.

⇒ The lowest astronomical tide of the year will be on 3<sup>rd</sup> August, both at Lautoka and Suva.

## Pacific Sea Surface Temperatures (SSTs): Recent Observations



Warmer than normal SSTs were observed across the equatorial Pacific Ocean. In comparison to May, warm anomalies in the eastern tropical Pacific Ocean have extended westwards. Warm anomalies of more than 2.0°C were prevalent near the coast of South America. The SSTs in the equatorial Pacific Ocean is consistent with an El Niño event.

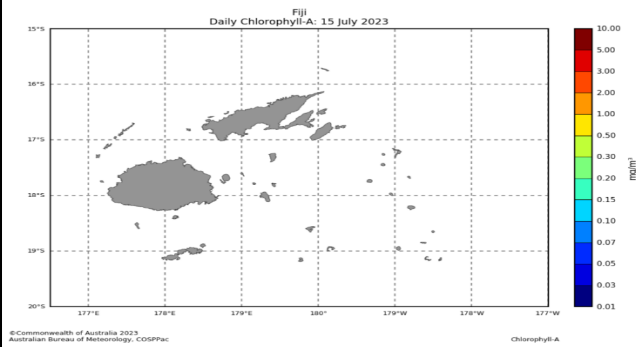


SSTs around the Fiji Waters were warmer than normal during June, with anomalies of 0.5°C-1.0°C observed across most of the Fiji Waters. Anomalies of more than 1.0°C were observed around the Mamanuca Group, parts of the Yasawa Group, south-west of Viti Levu, north-western Vanua Levu, including Vatulele and northwestern parts of Kadavu.

### 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](http://oceanportal.spc.int/portal/help/about_OceanTemperature.pdf).

## Chlorophyll Concentration

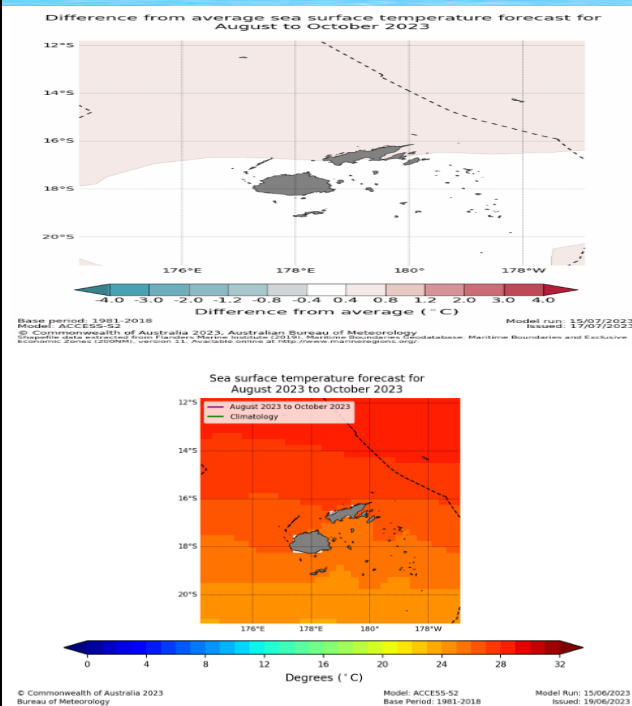


Daily chlorophyll concentration - 15<sup>th</sup> July 2023. Chlorophyll concentration were not observed in the Fiji Waters.

### 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](http://oceanportal.spc.int/portal/help/about_chlorophyll.pdf).

## Sea Surface Temperature (SST) Outlook



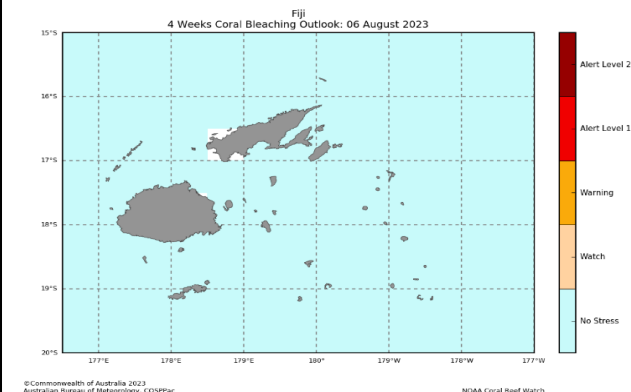
The SSTs in the Fiji Waters are likely to be *near normal* during the August to October 2023 period.

Average position of the 29°C convergence zone is likely to be displaced south of its normal position, close to far north of Fiji's EEZ, during the August to October 2023 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](http://oceanportal.spc.int/portal/help/about_POAMA_SST.pdf).

## Coral Bleaching Outlook



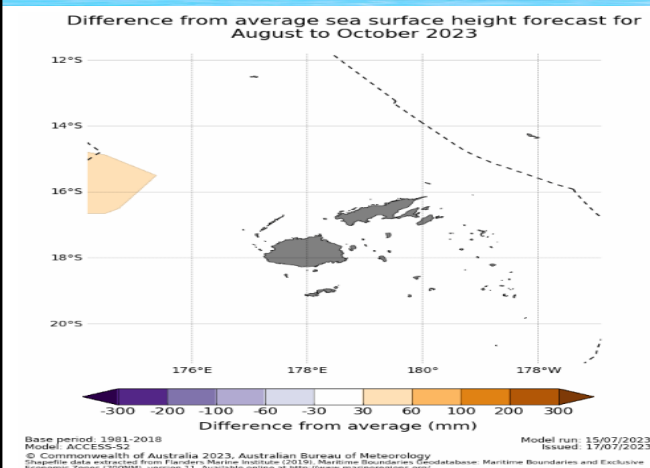
The 4, 8 and 12 weeks coral bleaching outlook is at 'No Stress' across the Fiji Waters.

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](http://oceanportal.spc.int/portal/help/about_coralbleaching.pdf).

## Sea Level Outlook



Near normal sea level is likely across most of Fiji's EEZ during the August to October 2023 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](http://oceanportal.spc.int/portal/help/about_POAMA_Sea_Level.pdf).

## Tide Predictions (August to October 2023)

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
03 Aug	07:12	2.08m	03 Aug	13:43	0.25m	31 Aug	05:51	2.35m	03 Aug	13:26	0.17m
01 Sep	06:54	2.09m	01 Sep	13:18	0.29m	01 Sep	06:40	2.35m	01 Sep	13:00	0.21m
29 Oct	18:35	2.08m	30 Oct	01:05	0.39m	28 Oct	17:34	2.34m	30 Oct	00:44	0.34m

All date and time are in Fiji Standard Time.

### Note:

The lowest astronomical tide of the year will be on 3rd August at Lautoka and Suva Wharves. The lowest tide at Lautoka Wharf will be around 1.26pm and the tide height is predicted to be 0.17m while the lowest tide at Suva Wharf is expected to be around 1.43pm with predicted height of 0.25m.

## Moon Phases (August to October 2023)

New Moon ●	First Quarter ◐	Full Moon ○	Last Quarter ◑
		2 <sup>nd</sup> August	8 <sup>th</sup> August
16 <sup>th</sup> August	24 <sup>th</sup> August	31 <sup>st</sup> August	7 <sup>th</sup> September
15 <sup>th</sup> September	23 <sup>rd</sup> September	29 <sup>th</sup> September	7 <sup>th</sup> October
15 <sup>th</sup> October	22 <sup>nd</sup> October	29 <sup>th</sup> 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.