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Fiji Ocean Outlook

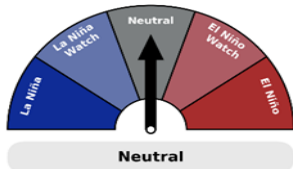
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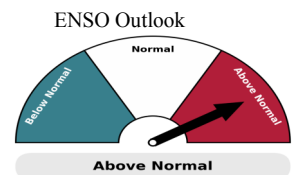
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Next Issue: August 19, 2022

In Brief



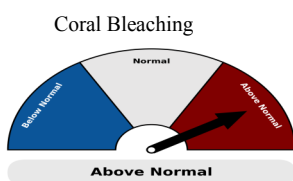
⇒ The tropical Pacific Ocean is in an ENSO-neutral state, that is, neither El Niño nor La Niña.



⇒ *Above normal* sea surface temperatures (SSTs) are likely to be observed within the Fiji Waters during the August to October 2022 period.



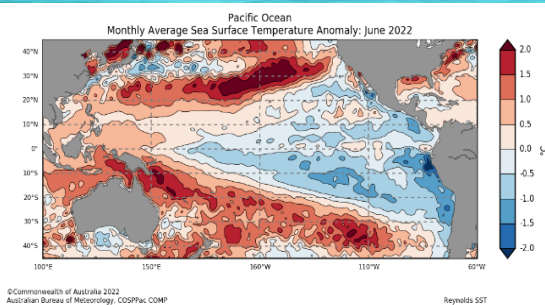
⇒ The average position of the 29°C Convergence Zone is likely to be located to the far north of Fiji during the August to October 2022 period.



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

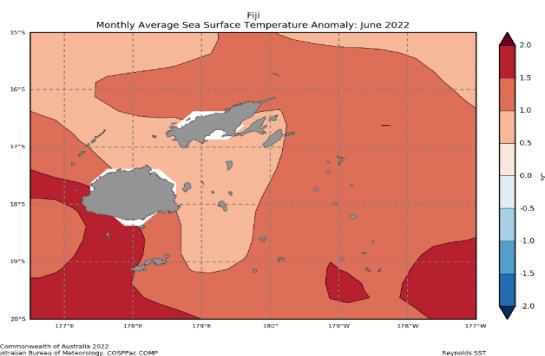
⇒ Sea level is likely to be *above normal* across most of Fiji's EEZ during the August to October 2022 period.

Pacific Sea Surface Temperatures (SSTs): Recent Observations



Below normal to near normal sea surface temperatures persisted across most of the central and eastern equatorial Pacific Ocean during June, with warm anomalies present in the western Pacific Ocean.

The above pattern is consistent with an ENSO-neutral state, that is, neither El Niño nor La Niña.



SSTs around the Fiji Waters were mostly warmer than normal during June, with anomalies between 1.5°C - 2.0°C observed west of Viti Levu, Kadavu and parts of southern Lau group, while anomalies of 1.0°C-1.5°C were observed north of Vanua Levu, east of Kadavu, Mamanuca Group, northern Lau Group and parts of southern Lau group. Anomalies of 0.5°C-1.0°C were observed 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.

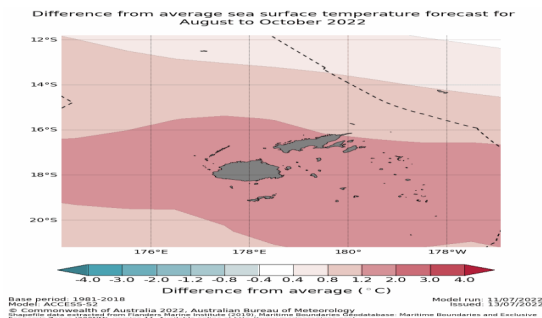
Chlorophyll Concentration

Chlorophyll concentration map is not available due to technical issues.

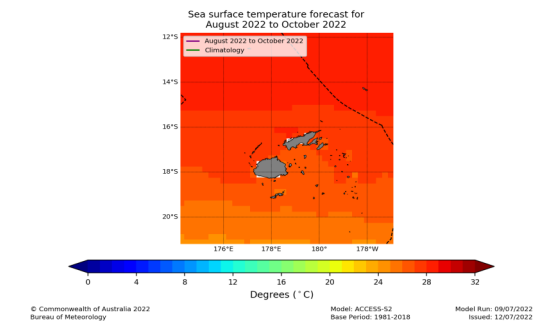
Possible Applications:

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



The SSTs in most of the Fiji Waters are likely to be above normal during the August to October 2022 period.

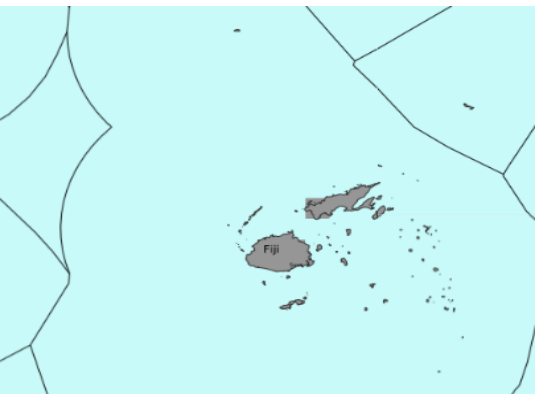


Average position of the 29°C convergence zone is likely to be located to the far north of Fiji during the August to October 2022 period (purple line).

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



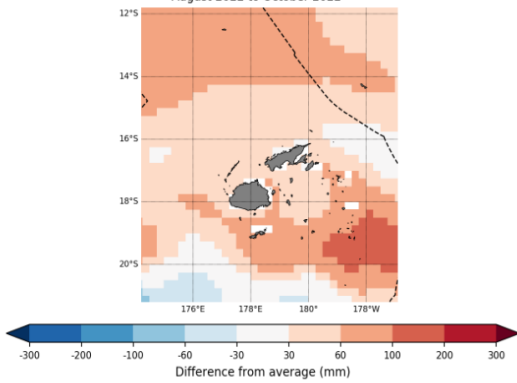
The 4, 8 and 12 weeks coral bleaching outlooks are at 'No Stress' across the Fiji Waters.

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 August 2022 to October 2022



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Model: ACCESS-S2
Base Period: 1981-2018

Model Run: 28/06/2022
Issued: 12/07/2022

Above normal sea level is likely across most of Fiji's EEZ during the August to October 2022 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 2022)

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
13 Aug	06:58	2.07m	13 Aug	13:28	0.26m	13 Aug	06:45	2.32m	12 Aug	12:25	0.18m
11 Sep	06:41	2.02m	10 Sep	12:18	0.35m	10 Sep	05:40	2.29m	10 Sep	12:02	0.26m
27 Oct	19:37	1.99m	28 Oct	02:07	0.44m	26 Oct	18:31	2.24m	8 Oct	10:56	0.39m

All date and time are in Fiji Standard Time.

Moon Phases (August to October 2022)

New Moon 	First Quarter 	Full Moon 	Last Quarter 
	5 th August	12 th August	19 th August
27 th August	4 th September	10 th September	18 th September
26 th September	3 rd October	10 th October	18 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.