FIJI METEOROLOGICAL SERVICE

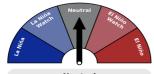
Private Mail Bag (NAP0351) Nadi Airport, Fiji Ph: +679 6724888, Fax: +679 6720430

Fiji Ocean Outlook

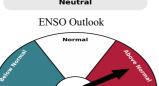
Email: climate@met.gov.fj Also online at http://www.met.gov.fj

Issue: 4 Volume: 7 Issued: April 16, 2025 Next Issue: May 20, 2025

In Brief



ENSO status continues to be neutral. ENSO-neutral is likely to continue in the \Rightarrow April to June 2025 period, with global models still favouring neutral status to continue till the third quarter of 2025.



Above normal sea surface temperatures (SSTs) are likely across the Fiji Waters \Rightarrow during May to July 2025.



The average position of the 29°C South Pacific Convergence Zone (SPCZ) is \Rightarrow likely to be displaced south of its normal position, close to Fiji's EEZ, during May to July 2025.



The 4 weeks coral bleaching outlook is at 'Warning' for Rotuma and waters north of Rabi island, 'Watch' is in place for the Northern, Western and Central Divisions, Lomaiviti Group, Kadavu and Northern Lau Group, while 'No Stress' is in place for the Southern Lau Group.

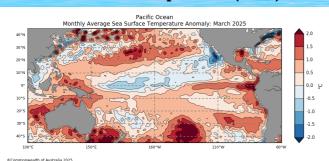


Coral Bleaching

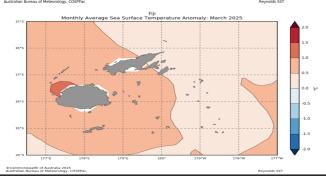
Below normal sea level likely for Viti Levu, Mamanuca Group, Lomaiviti \Rightarrow Group and Kadavu, while near normal sea level is likely for the remaining Fiji Group, during the May to July 2025 period.

Sea Level Outlook

Pacific Sea Surface Temperatures (SSTs): Recent Observations



Warmer than normal SSTs were observed in the eastern and far western Pacific Ocean. SSTs were up to 1.0°C cooler than average in the central equatorial Pacific.

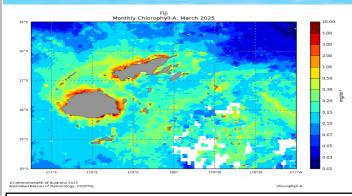


SSTs around the Fiji Waters were mostly above normal during March, with anomalies of 1.0-1.5°C observed over parts of the Western Division, over the Mamanuca group.

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

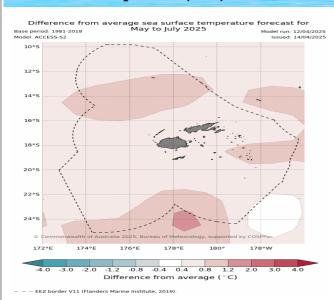


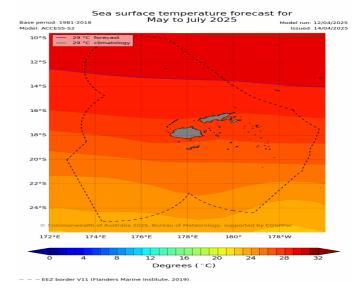
During March, high concentrations of chlorophyll were observed along the northern coast of Vanua Levu, Western and Central coasts of Viti Levu, parts of the Lomaiviti group and the southern coast of Kadavu.

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





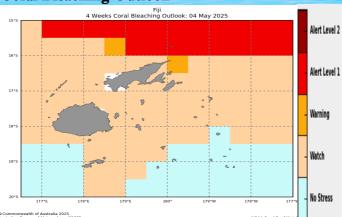
Above normal SSTs are likely across the Fiji Waters during the May to July 2025 period.

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 2025 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' for Rotuma and waters north of Rabi island, 'Watch' is in place for the Northern, Western and Central divisions, Lomaiviti Group, Kadavu and Northern Lau Group, while 'No Stress' is in place for the Southern Lau Group.

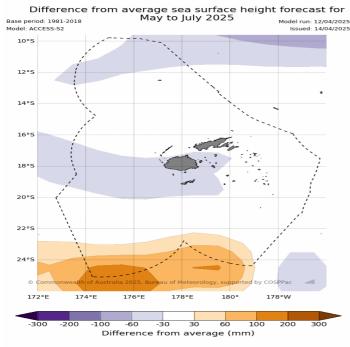
The 8 and 12 weeks coral bleaching outlook is at 'No Stress' for the Fiji Waters.

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

Sea Level Outlook



Below normal sea level likely for Viti Levu, Mamanuca Group, Lomaiviti Group and Kadavu, while near normal sea level is likely for the remaining Fiji Group, during the May to July 2025 period.

-- -- EEZ border V11 (Flanders Marine Institute, 2019).

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 2025)

Suva						Lautoka					
Monthly Highest Tide			Monthly Lowest Tide			Monthly Highest Tide			Monthly Lowest Tide		
Date	Time	Height	Date	Time	Height	Date	Time	Height	Date	Time	Height
27 May	06:00	2.09m	28 May	13:29	0.27m	27 May	05:43	2.32m	28 May	13:10	0.22m
25 Jun	05:44	2.04m	26 Jun	13:15	0.29m	25 Jun	05:30	2.25m	26 Jun	13:00	0.24m
25 Jul	06:44	2.00m	25 Jul	13:00	0.35m	25 Jul	06:12	2.21m	25 Jul	12:45	0.28

Port Denarau						Vatia					
Monthly Highest Tide			Monthly Lowest Tide			Monthly Highest Tide			Monthly Lowest Tide		
Date	Time	Height	Date	Time	Height	Date	Time	Height	Date	Time	Height
27 May	05:48	2.18m	28 May	13:13	0.06m	27 May	05:32	2.11	28 May	13:01	0.07m
25 Jun	05:34	2.10m	26 Jun	13:01	0.07m	25 Jun	05:22	2.05m	26 Jun	12:51	0.08m
25 Jul	06:16	2.06m	25 Jul	12:47	0.13m	25 Jul	06:03	2.04m	25 Jul	12:36	0.14m

All date and time are in Fiji Standard Time.

Moon Phases (May to July 2025)

New Moon	First Quarter	Full Moon	Last Quarter 🌓
	5 th May	13 th May	20 th May
27 th May	3 rd June	11 th June	19 th June
25 th June	3 rd July	11 th July	18 th July
25 th July			

Explanatory Notes

Anomalies – denote the departure of an element (sea surface temperature and sea level) from its long-period average value for a particular location.

Sea Surface Temperature (SST) - the temperature of the water's surface. It is usually measured using buoys, ship data, and satellites.

Sea Surface Temperature (SST) Outlook

Above Normal – indicates that SST anomalies fall within the highest 3rd of observations in a 37 year period, typically equal to or above +0.8°C.

Near Normal – indicates that SST anomalies lies in the middle 3rd of observations in a 37 year period, typically between -0.4° C and $+0.4^{\circ}$ C.

Below Normal – indicates that SST anomalies fall within the lowest 3rd of observations in a 37 year period, typically equal to or below -0.8°C.

Coral Bleaching Outlook

No Stress – Thermal stress is unlikely.

Watch - Low-level of thermal stress.

Warning – Coral bleaching possible.

Alert 1 – Coral bleaching is likely.

Alert 2 – Coral mortality is Likely.

Sea Level Outlook

Above Normal – indicates that sea level anomalies fall within the highest 3rd of observations in a 37 year period, typically equal to or above ±60mm.

Near Normal – indicates that sea level anomalies lies in the middle 3rd of observations in a 37 year period, typically between – 60mm and +60mm.

Below Normal – indicates that sea level anomalies fall within the lowest 3rd of observations in a 37 year period, typically equal to or below –60mm.

El Niño events are associated with warming of the central and eastern tropical Pacific. El Niño events usually result in reduction of Fiji's rainfall. Often the whole of Fiji is affected in varying degrees and it is quite unusual for one part of the country to experience a prolonged dry spell, while the other is in a wet spell.

La Niña events are associated with cooling of the central and eastern tropical Pacific. Usually La Niña results in wetter than normal conditions for Fiji, occasionally leading to flooding during the Warm/Wet Season. (November to April).

When ENSO is **Neutral**, that is, neither El Niño nor La Niña, it has little effect on global climate, meaning other climate influences are more likely to dominate.

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.