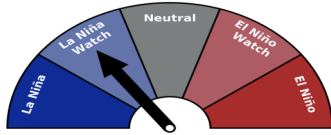


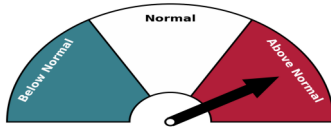
In Brief



La Niña Watch

ENSO Outlook

⇒ ENSO is currently neutral, with ENSO indicators showing signs of likely chances of development of a weak La Niña in the coming months, and a return to neutral state from January to March 2025 period.

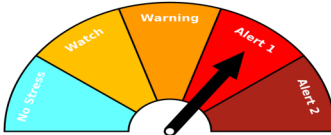


Above Normal

Above Normal

⇒ Above normal sea surface temperatures (SSTs) are likely across most of Fiji Waters during January to March 2025.

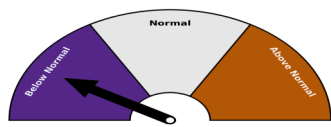
⇒ The average position of the 29°C South Pacific Convergence Zone (SPCZ) is likely to be displaced south of its normal position, closer to Fiji Group, during the January to March 2025 period.



Alert 1

Coral Bleaching

⇒ The 12 weeks coral bleaching outlook is at 'Alert Level 1' for the coral coast of Viti Levu, Vatulele, Beqa and Kadavu, while 'Warning' is in place for the rest of the Fiji Waters.

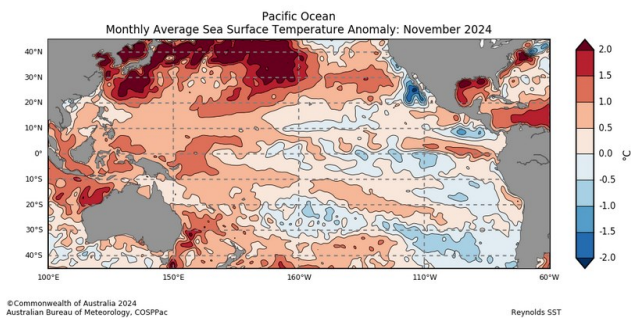


Below Normal

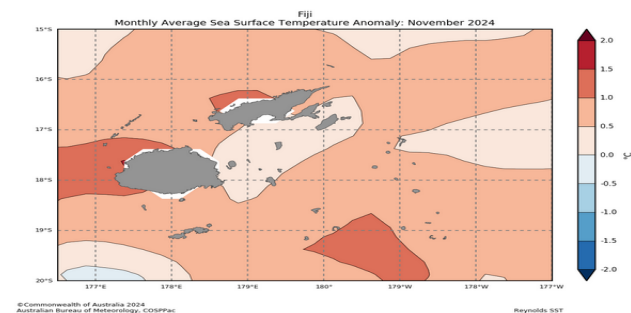
Sea Level Outlook

⇒ Below normal sea level is likely for northern parts of Fiji's EEZ, while near normal sea level is likely for the rest of the Fiji Group, during the January to March 2025 period.

Pacific Sea Surface Temperatures (SSTs): Recent Observations



Warmer than normal SSTs were observed across most of the western tropical Pacific Ocean. SSTs were up to 1.0°C cooler than average in the central and eastern equatorial Pacific. The cooler SSTs are in patches across the central Pacific.

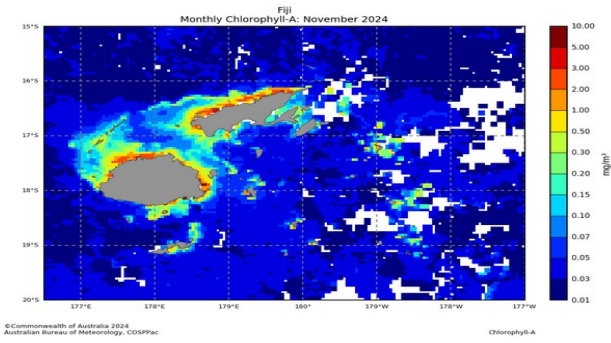


SSTs around the Fiji Waters were mostly above normal during November, with anomalies of 1.0-1.5°C observed west of Viti Levu, north of Vanua Levu and some parts of the southern Lau Group.

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

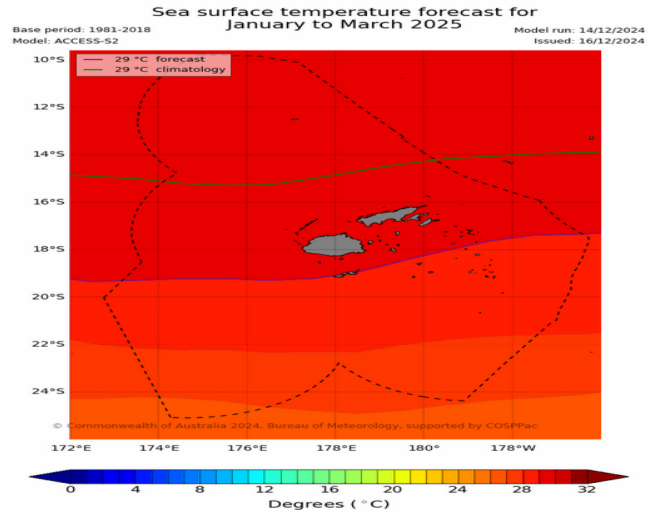
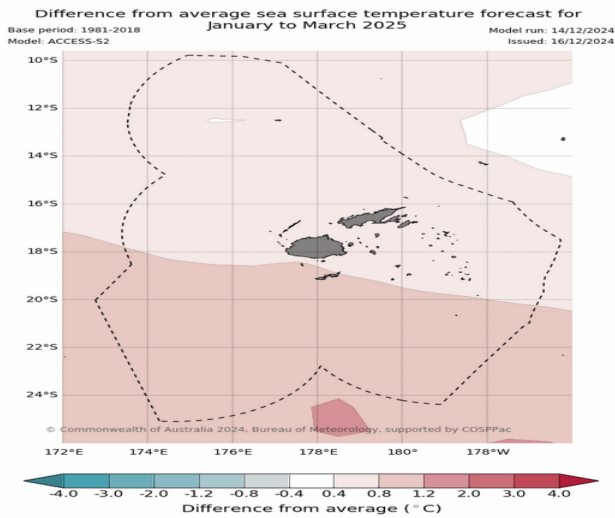


During November, high concentration of chlorophyll were observed along the northern coast of Vanua Levu, western and central coasts of Viti Levu, some parts of the Mamanuca and Yasawa Group, parts of Kadavu, Lomaiviti Group, Vanuabalavu and along the coastal areas of Lakeba.

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



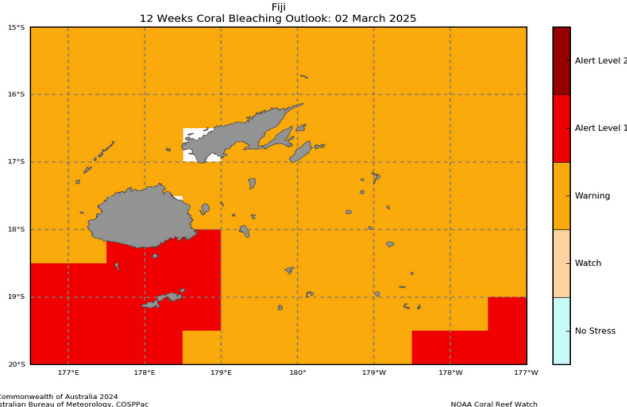
Above normal SSTs are likely across most of Fiji Waters during the January to March 2025 period.

Average position of the 29°C convergence zone is likely to be displaced south of its normal position, closer to Fiji Group, during the January to March 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 'Watch' for most of the Fiji Waters.

The 8 weeks coral bleaching outlook is at 'Watch' across the Fiji Waters.

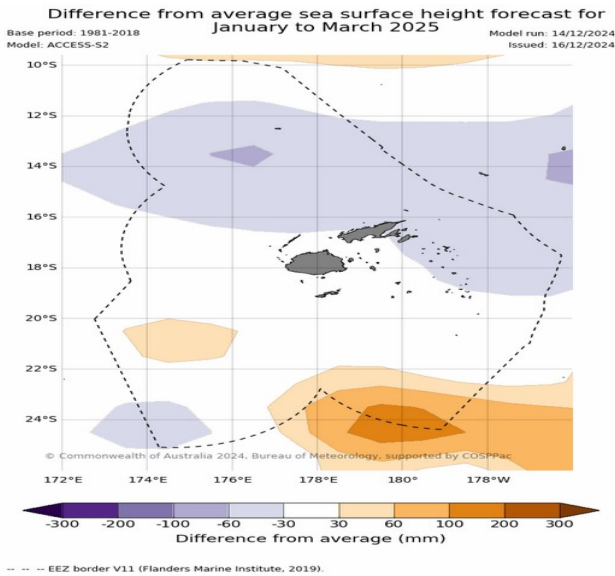
The 12 weeks coral bleaching outlook is at 'Alert Level 1' for the coral coast of Viti Levu, Vatu-lele, Beqa and Kadavu, while 'Warning' is in place for the rest of the Fiji Waters.

Caption: The image is for 12 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 is likely for northern parts of Fiji's EEZ, while *near normal* sea level is likely for the rest of the Fiji Group, during the January to March 2025 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 (January to March 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
31 Jan	19:52	2.04m	15 Jan	01:24	0.44m	31 Jan	19:35	2.28m	31 Jan	01:19	0.36m
28 Feb	18:44	2.06m	1 Feb	02:20	0.45m	28 Feb	18:30	2.33m	28 Feb	00:11	0.36m
31 Mar	07:37	2.14m	31 Mar	14:00	0.41m	31 Mar	07:15	2.36m	1 Mar	00:50	0.33m

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
31 Jan	19:44	2.15m	14 Jan	00:28	0.21m	30 Jan	18:39	2.09m	31 Jan	01:10	0.23m
28 Feb	18:39	2.20m	1 Feb	02:03	0.21m	28 Feb	18:18	2.13m	28 Feb	00:00	0.20m
31 Mar	07:23	2.24m	1 Mar	00:55	0.18m	30 Mar	06:21	2.14m	1 Mar	00:41	0.18m

All date and time are in Fiji Standard Time.

Moon Phases (January to March 2025)

New Moon 	First Quarter 	Full Moon 	Last Quarter 
	7 th January	14 th January	22 nd January
30 th January	5 th February	13 th February	21 st February
28 th February	7 th March	14 th March	23 rd March
29 th March			

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°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.