



Tuvalu Ocean Outlook



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Issue Outline:

- Ocean Summary
- Ocean Temperature
- Fisheries Convergence Zone
- Coral Bleaching
- Sea Level Forecast

Climate Status:

ENSO Update



Contributors:

- Pacific Ocean Portal oceanportal.spc.int
- Bureau of Meteorology- ENSO Wrap-up: <http://www.bom.gov.au/climate/enso/>
- WMO GPSC(Global Produce Center) for Long-Range Forecasts
- ACCESS-S Clide access-s.clide.cloud

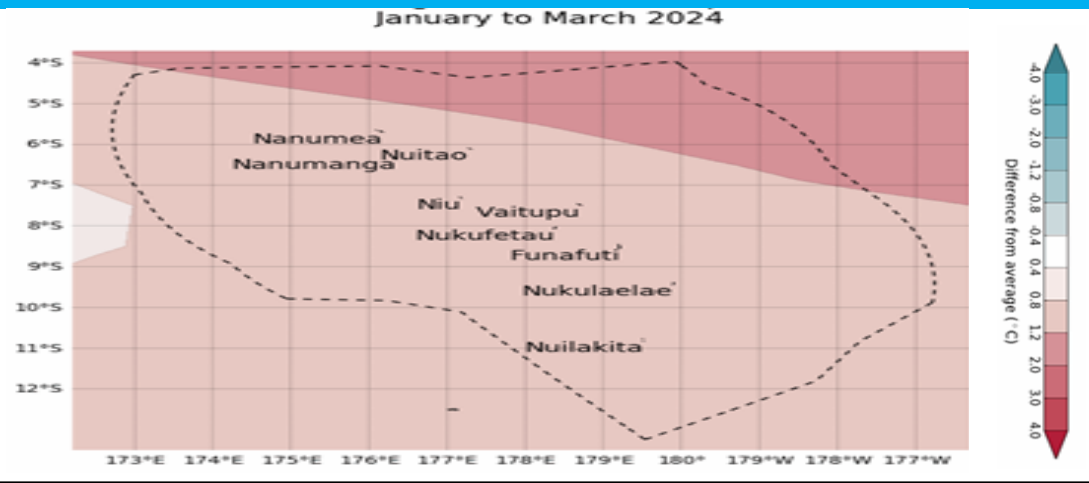
Issue: 26

Summary

December 2023

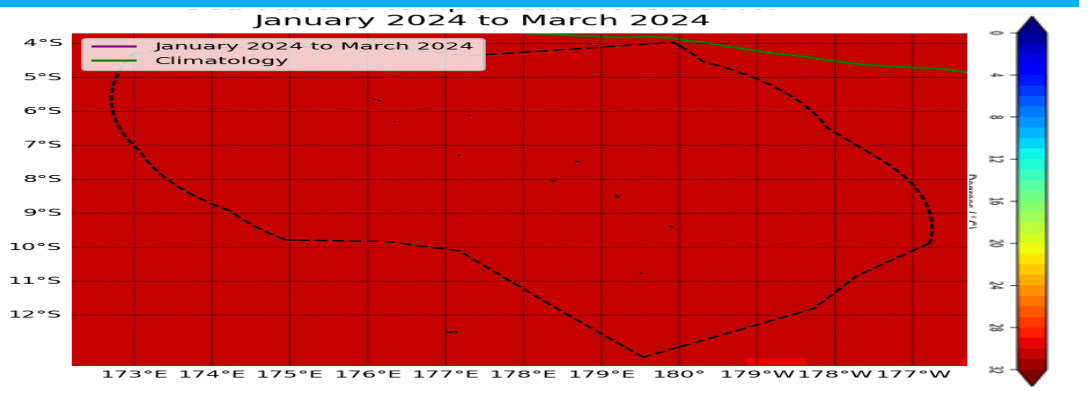
- Above normal SST conditions in the next 3 months over the Northern, Central and Southern group of Tuvalu.
- The Fisheries Convergence Zone (FCZ) is expected to remain outside the Tuvalu EEZ in the next three months, from January to March 2024.
- Coral Bleaching outlook for the next four weeks around the Northern group is predicted to be "Alert level 2", while Central group and Southern group are predicted to be "Warning" to "Alert level 1".
- December 2023 to February 2024 sea levels around Tuvalu are predicted to be near normal and above normal at the Central and Southern part of Tuvalu.
- _King tide will be on 10th March 2024

Sea Surface Temperature Forecast Anomaly



January to March, ocean temperatures around Tuvalu are predicted to be 0.8 to 1.2°C above normal, except some parts for the North-East of Tuvalu EEZ are predicted to be 1.2 to 2.0°C above normal.

Sea Surface temperature forecast with Fisheries Convergence Zone

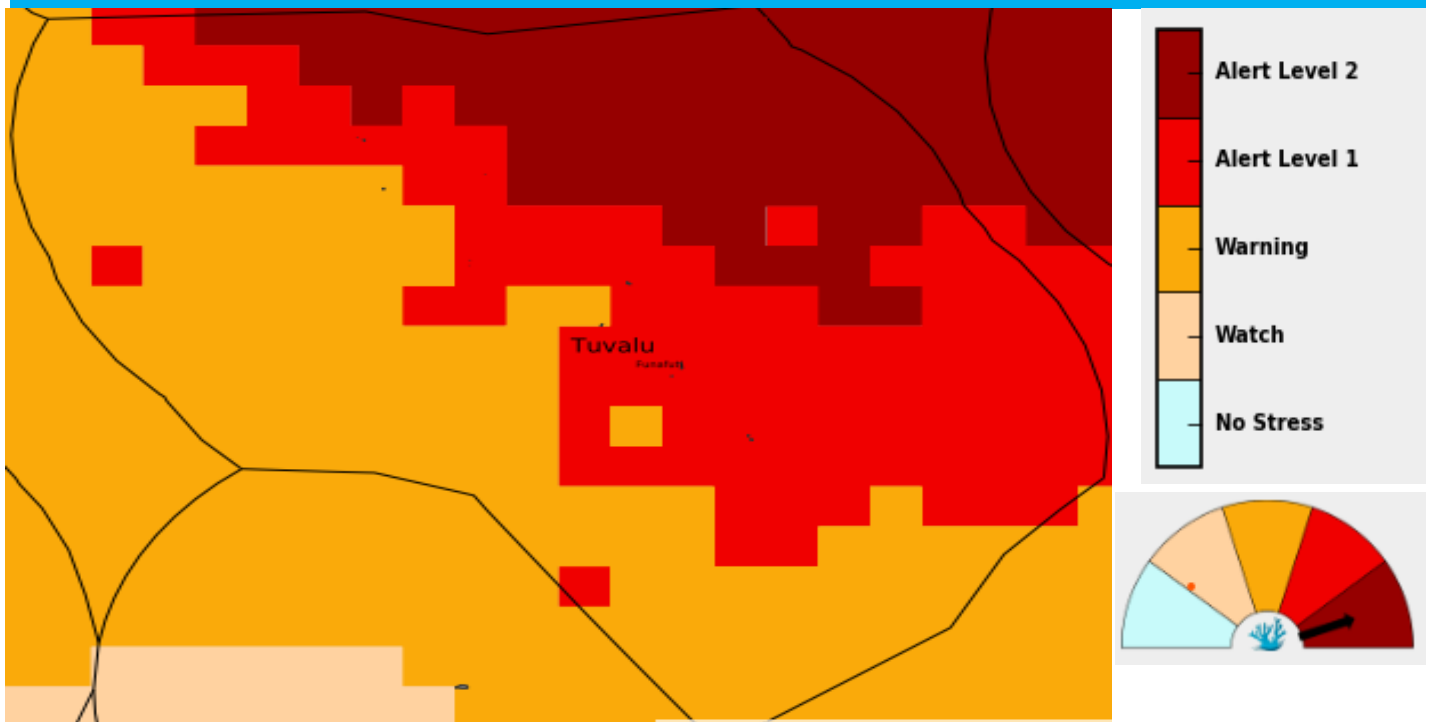


The Fisheries Convergence Zone (FCZ) is expected to lie in the northern part of its climatology position, and it is predicted to remain outside the Tuvalu EEZ in the next three months, from January to March 2024.

¹Fisheries Convergence Zone is where cold and warm water meet, and are rich in nutrients, attracting lots of fish. Also refer on salinity front that surround the western pacific warm pool.

¹ Fisheries Convergence Zone is different from South Pacific Convergence Zone.

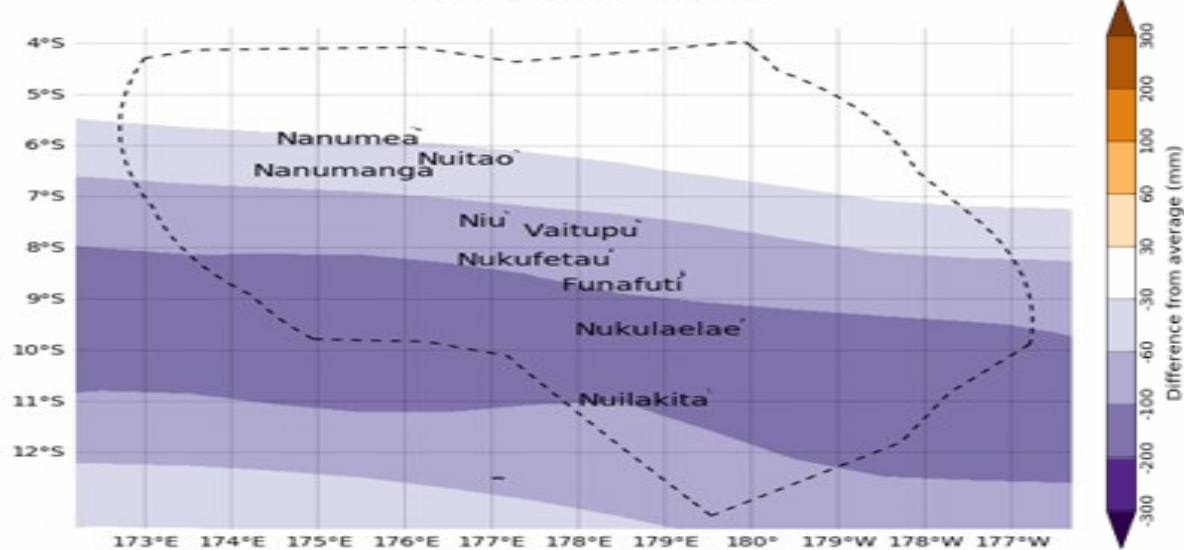
Coral Bleaching Outlook 10 December 2023



Coral Bleaching outlook for the next four weeks around the Northern group is predicted to be "Alert level 2", while Central group and Southern group are predicted to be "Warning" to "Alert level 1".

Seasonal Sea Level Forecast

January to March 2024



January to March sea levels around the Northern group is predicted to be near normal, except Nanumaga predicted to be -30mm to -60mm below normal. In the Central group and Southern group are predicted to be -30mm to -100mm below normal.

Highest and Lowest Tide from January to March 2024

Date	Time(LT)	Tide Level(m)
12/01/24	17:43	3.15
10/01/24	00:10	1.10
10/02/2024	17:30	3.28
13/02/2024	23:52	1.02
10/03/24	17:10	3.32
10/03/24	23:27	1.01

The highest (spring tide) and lowest tides for **January to March 2024** are listed in the table on the left. As an important information for all, the **king tide** for the next year 2024 will be on **March 10th**, highlighted in blue.

The predicted tide levels may be different from the observed tide levels due to weather phenomenon such as low/high pressure systems; South Pacific Convergence Zone (SPCZ); El Nino Southern Oscillation (ENSO) - El Nino/La Nina.

Based on the **ENSO updated for this month December 2023**, the **El Niño continues in the Tropical Pacific and it will likely to remain in place during the next three months**. Whereas, Coastal areas communities strongly advertised to practices cautions at all times.

¹ Fisheries Convergence Zone is different from South Pacific Convergence Zone.