



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

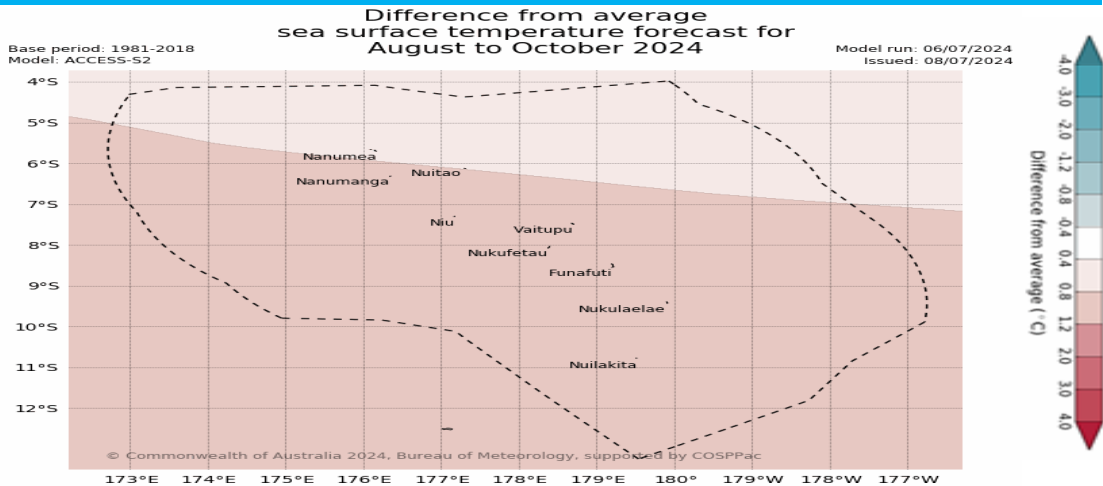
Issue: 28

Summary

July 2024

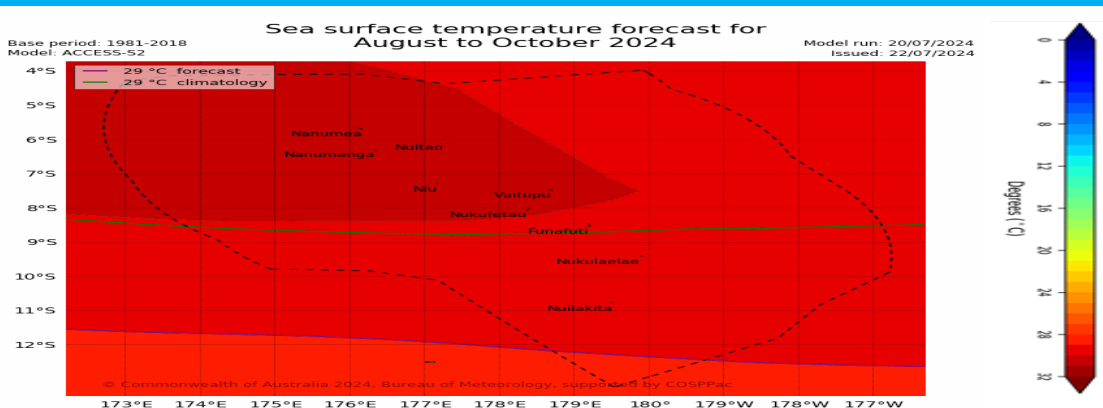
- Above normal SST 's conditions in the next 3 months over Tuvalu .
- The Fisheries Convergence Zone (FCZ) is expected to lie at Southern part EEZ of Tuvalu in the next three months.
- Coral Bleaching Outlook predicts on Watch at Northern and Central group and No stress over Southern group of Tuvalu.
- Sea levels around Northern and Central group are predicted to be above normal, while Southern group to be near normal, excepts Niulakita is likely to be below normal.

Sea Surface Temperature Forecast Anomaly



August to October, sea surface temperatures (SST) around Tuvalu are predicted to be 0.8 to 1.2°C above normal, excepts from the Northern parts EEZ to the Eastern parts of Tuvalu's EEZ include Nanumea and Niutao Island are predicted to be 0.4 to 0.8°C above normal.

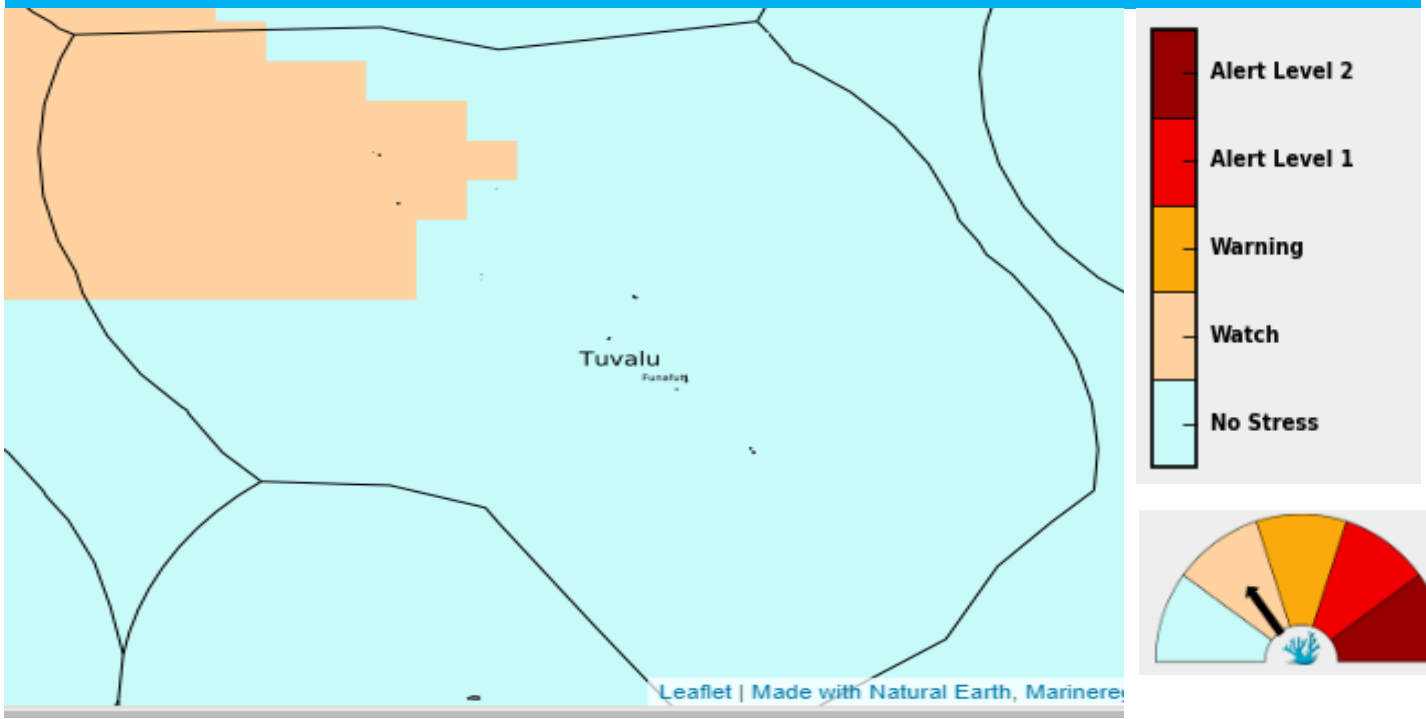
Sea Surface temperature forecast with Fisheries Convergence Zone



The Fisheries Convergence Zone (FCZ) is currently located at the Central group of its climatology position, and it is predicted to lies in the Southern group of Tuvalu later this year. Fisheries 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.

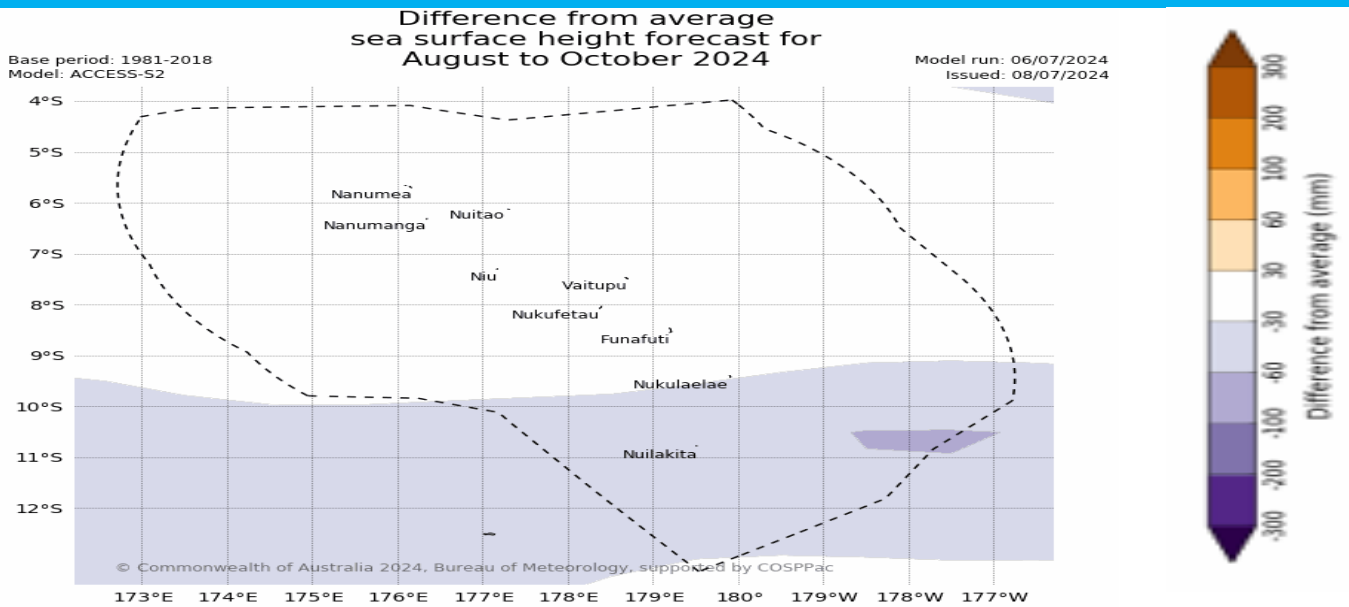
¹ Fisheries Convergence Zone is different from South Pacific Convergence Zone.

Coral Bleaching Outlook (4 weeks)



Coral Bleaching outlook for the next four weeks, is favoured No thermal stress across the Country, but there is an small portion of watch located in the North-West of Tuvalu EEZ.

Seasonal Sea Level Forecast Anomaly



August to October sea levels around Northern and Central group are predicted to be -30mm to 30mm near normal. In the far Southern parts of Tuvalu EEZ sea levels are likely to be below normal. This forecast is based on the combined long-term effects of temperature, salinity and wind on the water levels and do not include daily changes in tide or weather.

Highest and Lowest Tide from August to October 2024

Date	Time(LT)	Tide Level (m)
21/08/24	5:45am	3.14
21/08/24	12:04am	0.98
18/09/24	4: 41am	3.17
18/09/24	10: 57am	0.95
17/10/24	4:38pm	3.18
17/10/24	10:52pm	1.01

The highest (spring tide) and lowest tides of the month during **August to October 2024** are listed in the table on the left. As an important information for all, the Lowest tide of this year will be on **September 18th**, 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.

The higher tide levels coupled with higher than normal sea levels for Tuvalu could cause inundation in low lying areas. For preparedness, coastal communities should be cautions at all times., as higher tide level could result in serious inundation if coincides with a meteorological system, which may have impacts on agriculture, infrastructures, and daily activities.

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