

# Tuvalu Ocean Outlook



Tuvalu Meteorological Service Member of WMO

#### Contacts:

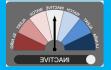
General: 20736

Email: tuvmet@gmail.com Website: www.tuvmet.tv

#### **Issue Outline:**

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

## Climate Status: ENSO Update



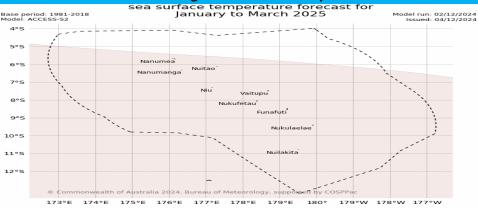
#### **Contributors:**

- 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: 32 Summary December 2024

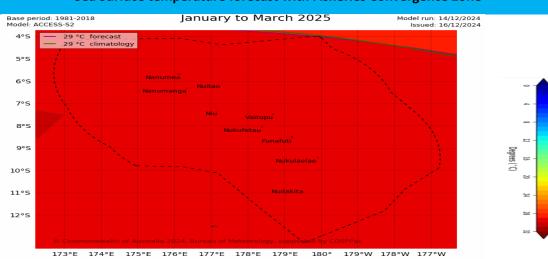
- Above normal to Near normal SST 's conditions for the next 3 months over Tuvalu .
- The Fisheries Convergence Zone (FCZ) is expected to be positioned nearby northeast Tuvalu EEZ of its climatological position in the next three months.
- Coral Bleaching Outlook predicts on watch across the country.
- Near normal to above normal Sea Surface Height (SSH's) are predicted for December 2024 to February 2025 over Tuvalu.
- King tide will be expected to peak on 28th February 2025.

### **Difference from average Sea Surface Temperature Forecast Anomaly**

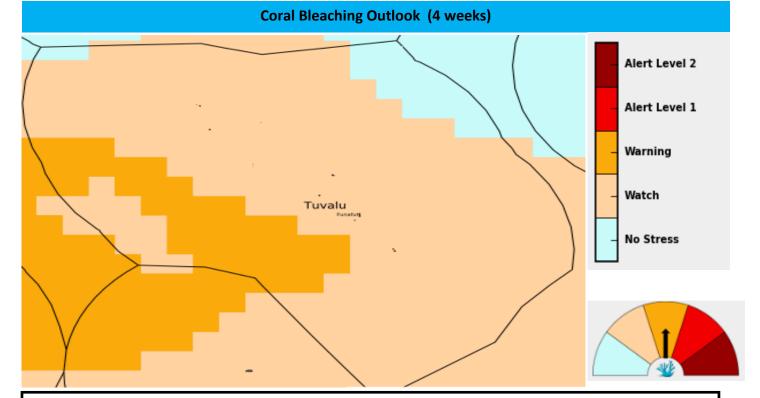


January to March 2025, sea surface temperatures around Tuvalu are predicted to be 0.4 to 0.8°C above normal, except the Northeast side Tuvalu EEZ is predicted to be near normal.

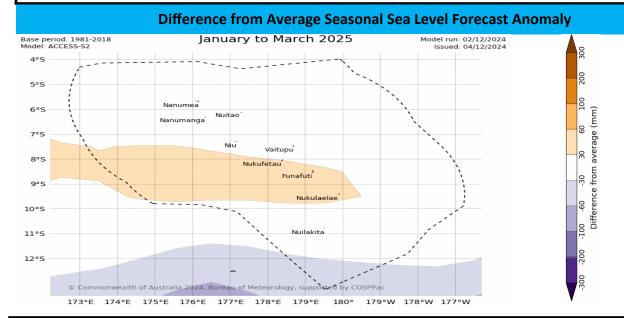
#### Sea Surface temperature forecast with Fisheries Convergence Zone



The fisheries convergence zone is forecasted for the months of January to March 2025 to be positioned nearby northeast Tuvalu EEZ of its climatology position, which is average position of the FCZ in 37 years, (1981 to 2018). Fisheries convergence zone is where the cooler, nutrient rich water meet the warm water of the Western Pacific warm pool. Tuna, particularly skipjack tuna are known to move with the FCZ and with the nutrient rich zone, a number of fish species could be found here.



The Coral Bleaching Outlook for the next four weeks indicates on watch over Tuvalu, excepts some parts for west side Tuvalu EEZ is predicted to be Warning.



Averaged over December to February 2025, sea levels around Northern and Central groups are predicted to be 30 to 30mm near normal including Niulakita, excepts Nukufetau, Funafuti and Nukulaelae are predicted to be 30 to 60mm above normal.

## Highest and Lowest Tide from January to March 2025

Date	Time(LT)	Tide Level (m)
31/01/25	18:23	3.16
31/01/25	00:06	1.15
28/02/25	17:24	3.26
28/02/25	23:41	1.08
01/03/25	18:02	3.24
29/03/25	23:11	1.07

The highest (spring tide) and lowest tides of the month during **January to March 2025** are listed in the table on the left. As an important information, for all the king tide for the next year 2025 will be on February 28th, 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.

<sup>&</sup>lt;sup>1</sup> Fisheries Convergence Zone is different from South Pacific Convergence Zone.