



## Tuvalu Ocean Outlook

Tuvalu Meteorological Service  
Member of WMO

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Summary

March 2019

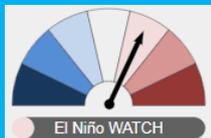
- Tuvalu oceans are likely to be warmer than normal March 2019.
- The Fisheries Convergence Zone is expected to lie outside the Northern and Southern extent of EEZ.
- Coral bleaching warning is likely in the upcoming three months. .
- Sea level is predicted to be higher than normal in the next 3 months.

**Issue Outline:**

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

**Climate Status:**

ENSO Update:



Sea Surface Temperature:



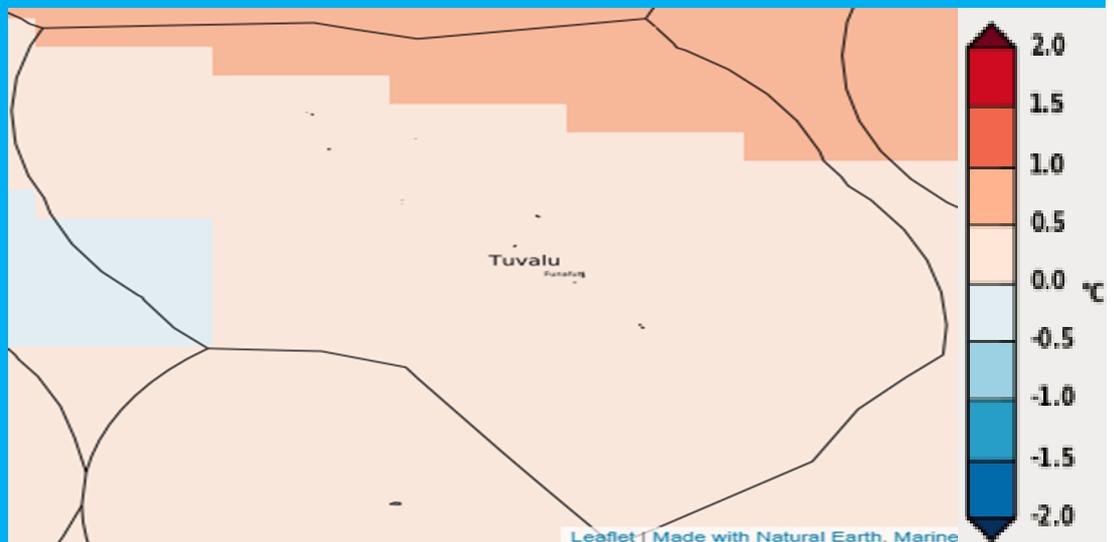
Sea Level Anomaly Forecast:



**Major Contributors:**

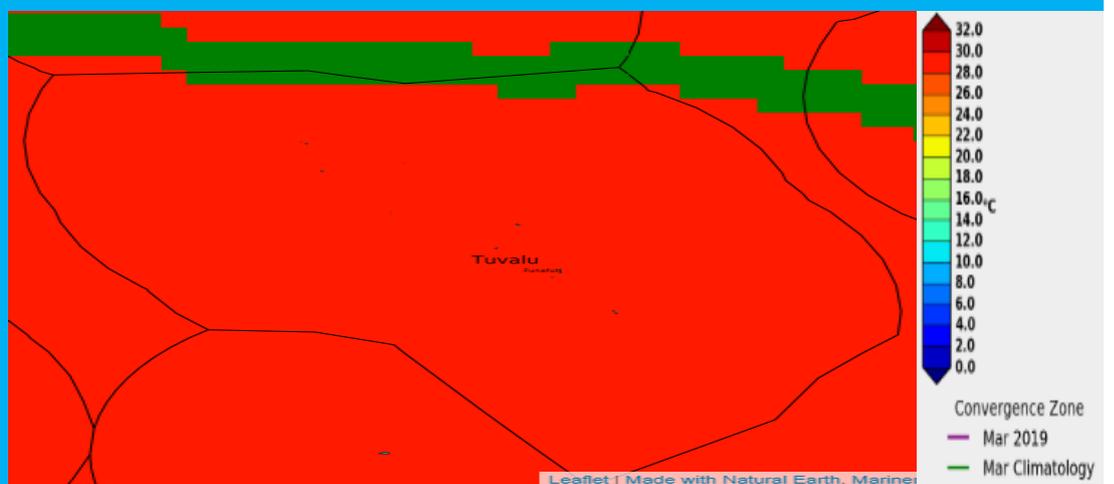
- Pacific Ocean Portal [oceanportal.spc.int](http://oceanportal.spc.int)
- Bureau of Meteorology- ENSO Wrap-up: <http://www.bom.gov.au/climate/enso/>

**Sea Surface Temperature Forecast Anomaly**



Sea surface temperature (SST) anomaly forecast for March is likely to be warmer than normal.

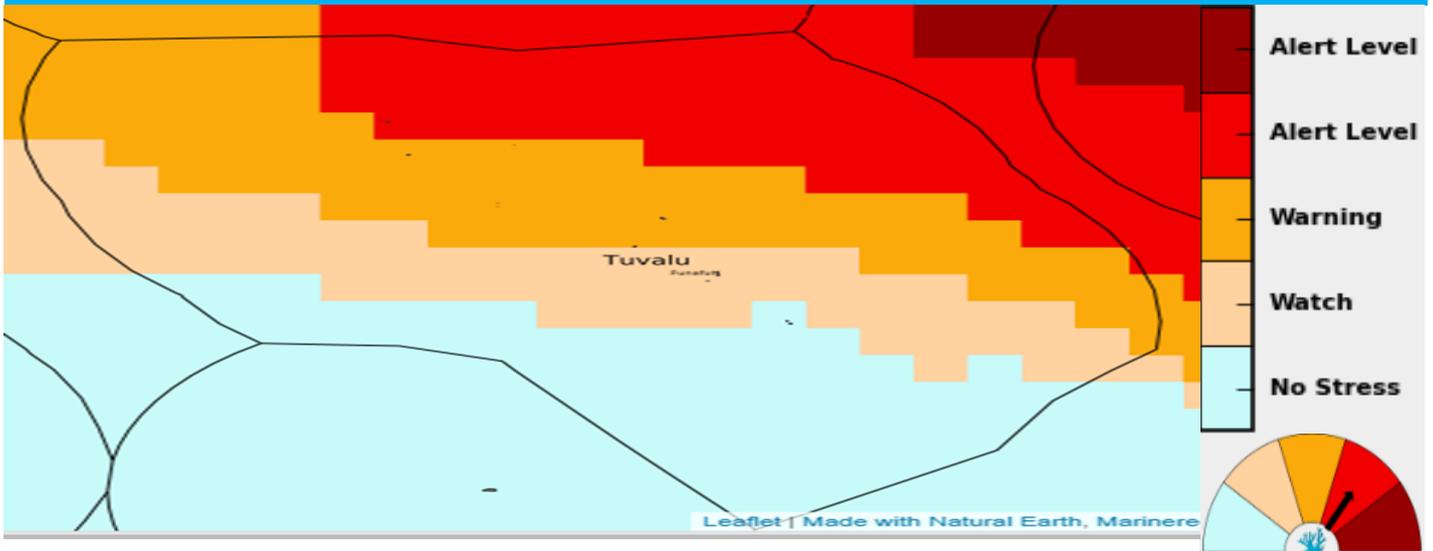
**Sea Surface temperature forecast with Fisheries Convergence Zone**



The Fisheries Convergence zone is forecasted to lie north of its climatological position in the northern extent of the EEZ. <sup>1</sup>Fisheries Convergence zone is where cold and warm water meet, and are rich in nutrients, attracting lots of fish.

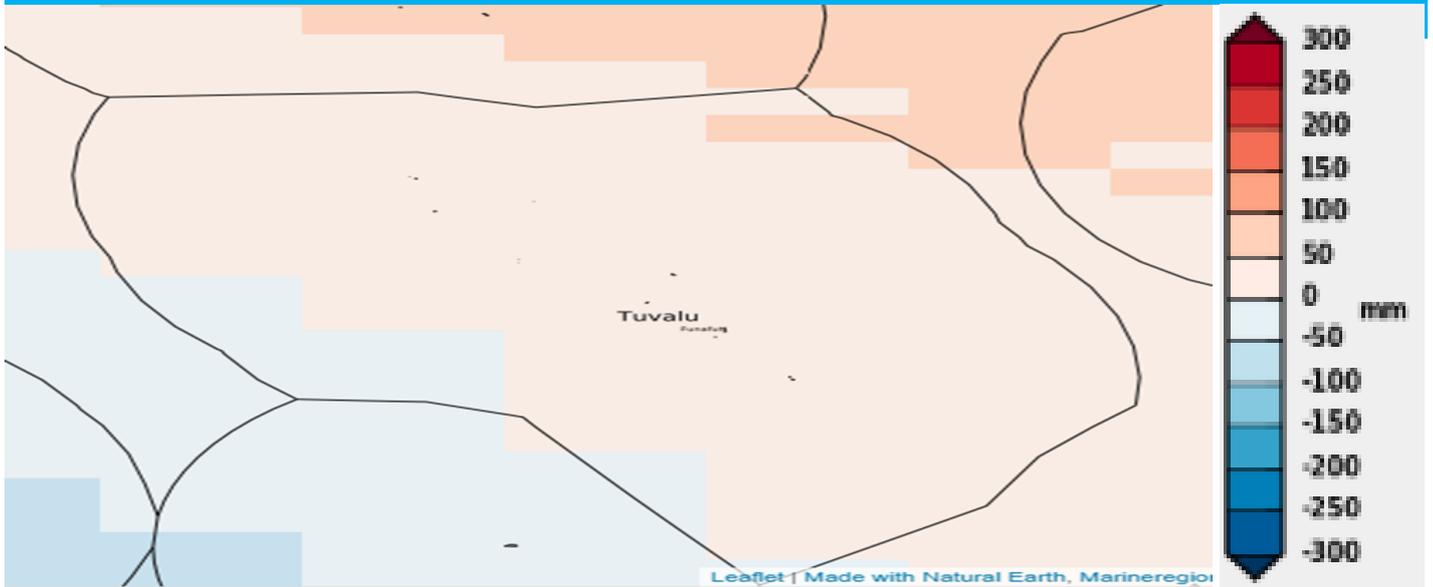
<sup>1</sup> Fisheries Convergence Zone is different from South Pacific Convergence Zone.

## Coral Bleaching Outlook



Coral bleaching warning is still possible for all Tuvalu coral reefs, with a high possibility for coral bleaching near the southern extent of Tuvalu EEZ in the upcoming three months.

## Seasonal Sea Level Forecast



The sea level forecast for March to May show a higher than normal for all Tuvalu waters. The sea level is forecasted to remain higher for these regions. 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 February—April

Date	Time	Tide Level(m)
19-02-19	23:23	0.97
20-02-19	17:45	3.29
20-03-19	16:43	3.25
20-03-19	23:00	1.00
18-04-19	22:35	1.07
19-04-19	04:45	3.13

The highest and lowest tides for February to April are listed in the table on the left. Highlighted is the highest predicted tide for the year. 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 cautious during this Cyclone season, 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>1</sup> Fisheries Convergence Zone is different from South Pacific Convergence Zone.