



Tuvalu Ocean Outlook

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Issue: 04

Summary

October 2018

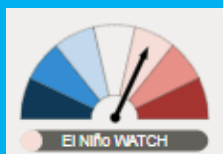
- Tuvalu oceans are likely to be warmer than normal from October to December.
- The Fisheries Convergence Zone is expected to remain across the Tuvalu group in the next three months.
- Coral bleaching outlook for the next three months show that **mortality is likely**.
- Sea level is predicted to be higher than normal in the next 3 months.

Issue Outline:

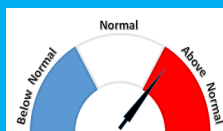
- Ocean Summary
- Ocean Temperature
- Fisheries Convergence Zone
- Coral Bleaching

Climate Status:

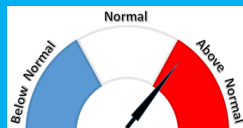
ENSO Update:



Sea Surface Temperature:



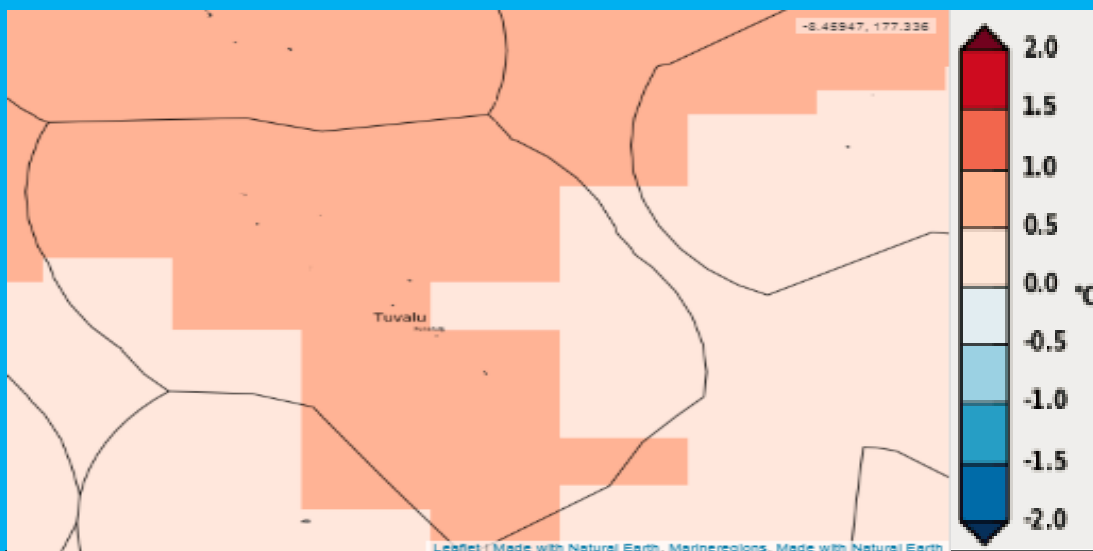
Sea Level Anomaly Forecast:



Major Contributors:

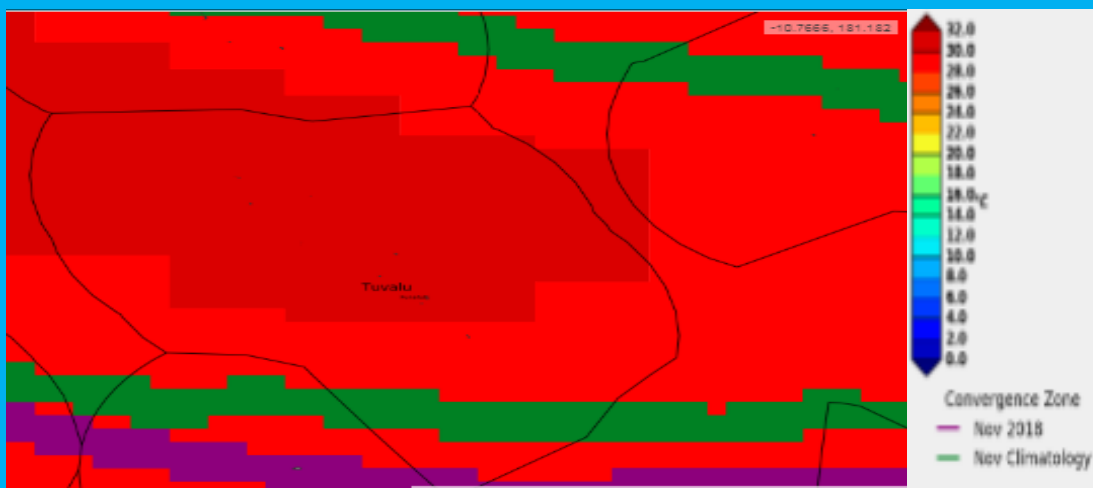
- Pacific Ocean Portal
oceanportal.spc.int
- Bureau of Meteorology-
ENSO Wrap-up:
<http://www.bom.gov.au/climate/enso/>

Sea Surface Temperature Forecast Anomaly



Sea surface temperature (SST) anomaly forecast for October to December show a warmer than normal of 0 to 1.0 degree Celsius.

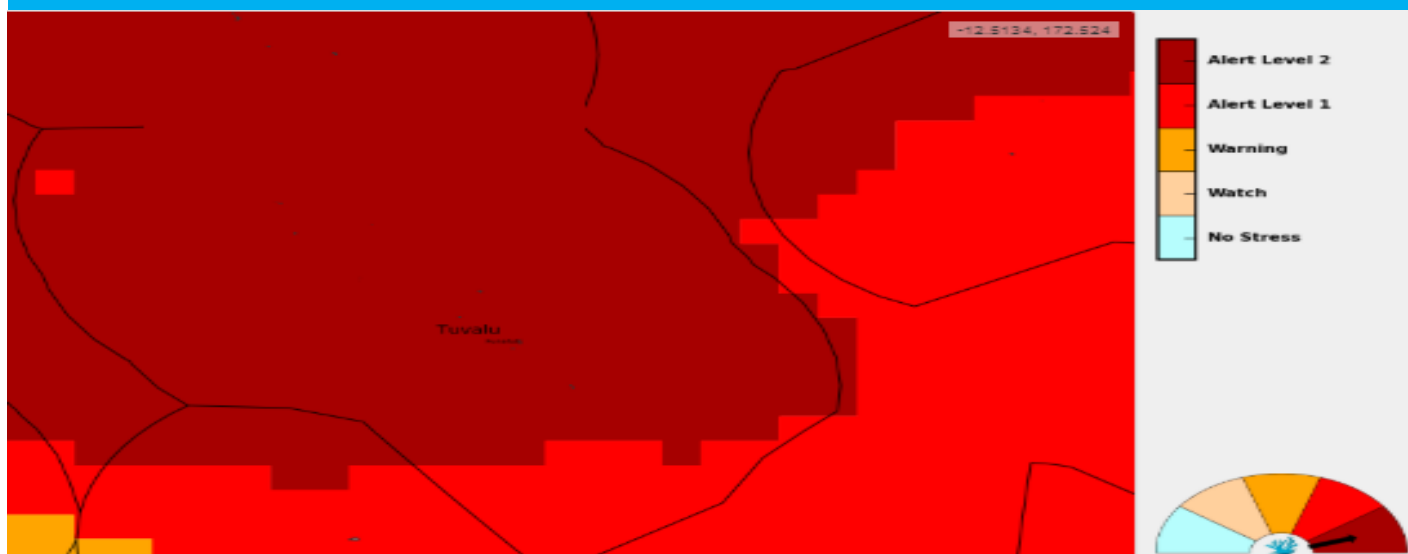
Sea Surface temperature forecast with Fisheries Convergence Zone



The Fisheries Convergence zone is forecasted to lie across the southern extent of Tuvalu islands in the next three months. ¹Fisheries Convergence zone is where cold and warm water meet, and are rich in nutrients, attracting lots of fish.

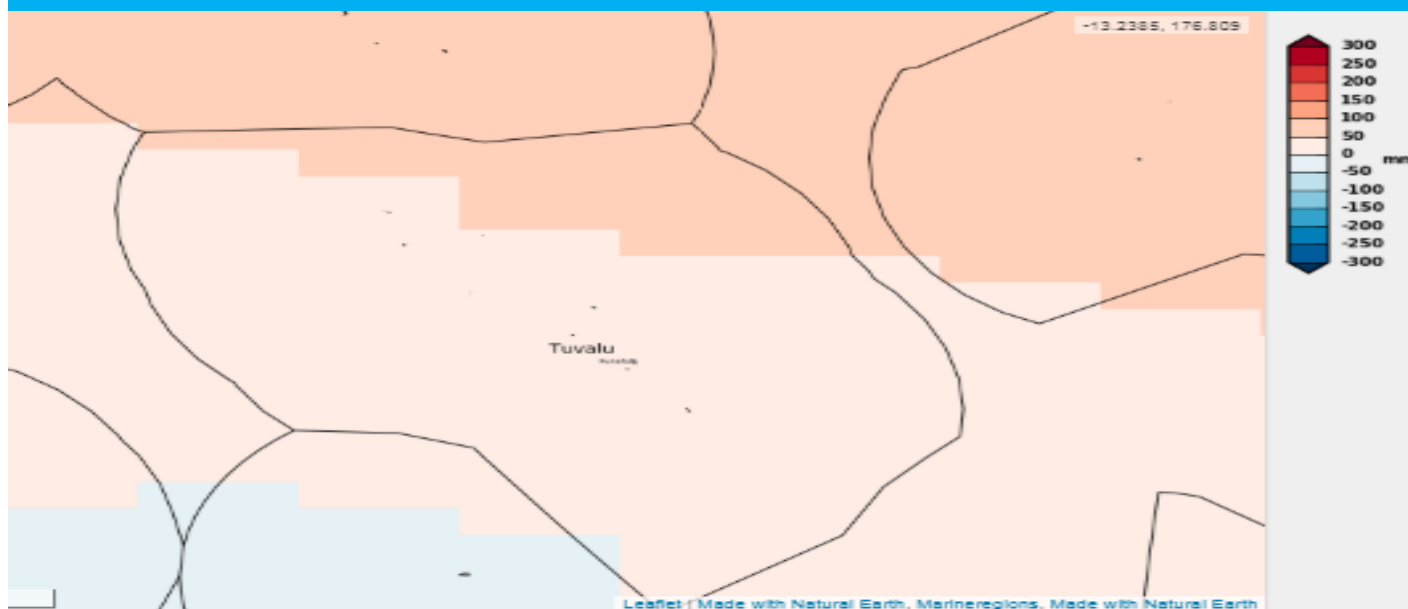
¹ Fisheries Convergence Zone is different from South Pacific Convergence Zone.

Coral Bleaching Outlook



The outlook for August to October predict an **ALERT 2** for Tuvalu, which means widespread **bleaching and significant coral mortality** are likely.

Seasonal Sea Level Forecast



The sea level forecast for October to December show a higher than normal for all Tuvalu waters. The sea level is forecasted to remain higher for these regions in the last quarter of the year. 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 & Lowest tides from Oct—Dec 2018

Date	Time (LT)	Height (m)
08-10-18	10:17	1.01
09-10-18	17:04	3.04
23-11-18	23:12	1.1
24-11-18	17:30	3.05
23-12-18	17:20	3.13
	23:47	1.05

The highest and lowest tides for October, November and December are listed in the table on the left. 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 period.