



Tuvalu Ocean Outlook

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Summary

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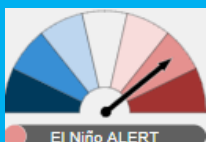
- Tuvalu oceans are likely to be warmer than normal March 2019.
- The Fisheries Convergence Zone is expected to lie outside the Northern and Southern extent of EEZ.
- Coral bleaching warning is likely in the upcoming three months. .
- Sea level is predicted to be higher than normal in the next 3 months.

Issue Outline:

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

Climate Status:

ENSO Update:



Sea Surface Temperature:



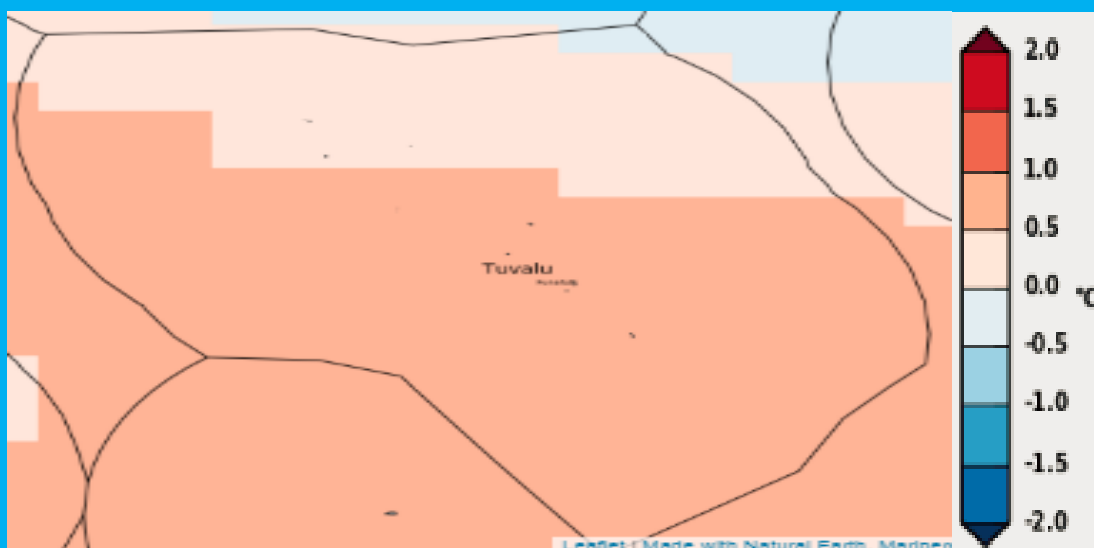
Sea Level Anomaly Forecast:



Major Contributors:

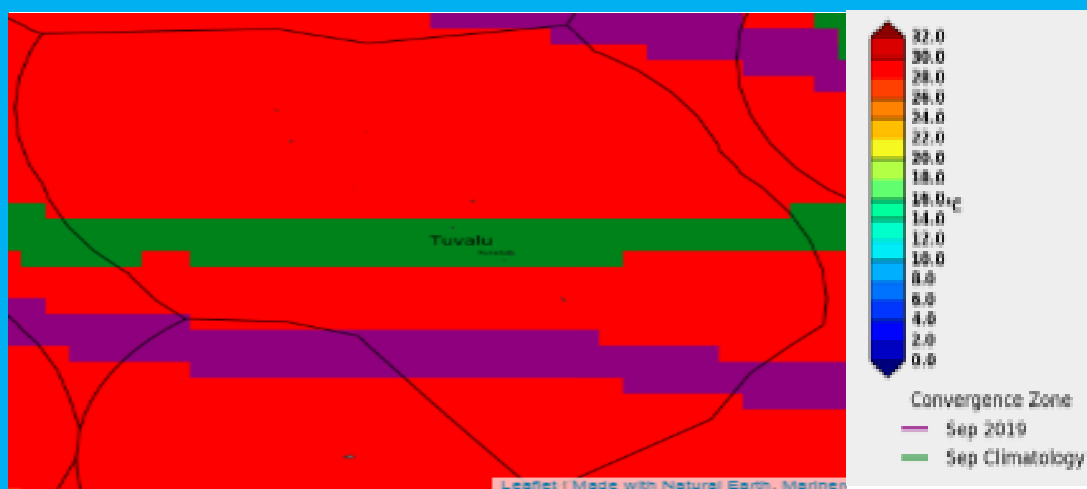
- Pacific Ocean Portal
oceanportal.spc.int
- Bureau of Meteorology-
ENSO Wrap-up:
<http://www.bom.gov.au/climate/enso/>

Sea Surface Temperature Forecast Anomaly



Central and Southern group are likely to have 1.0 degrees Celsius warmer than normal. Likewise for Northern Group, yet warm by 0.5 degree Celsius only in September

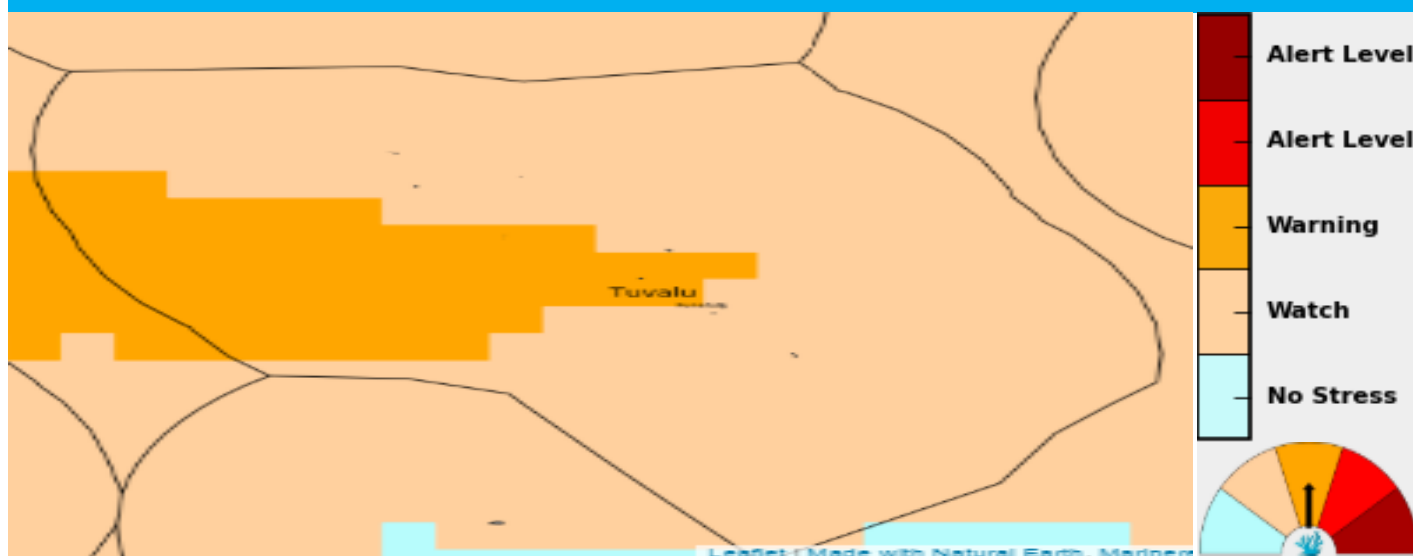
Sea Surface temperature forecast with Fisheries Convergence Zone



The Fisheries Convergence zone is forecasted to lie south of its climatological position, which is to the northern extent of the EEZ and over the central waters. A good month for local fishermen. ¹Fisheries Convergence zone is where cold and warm water meet, and are rich in nutrients, attracting lots of fish.

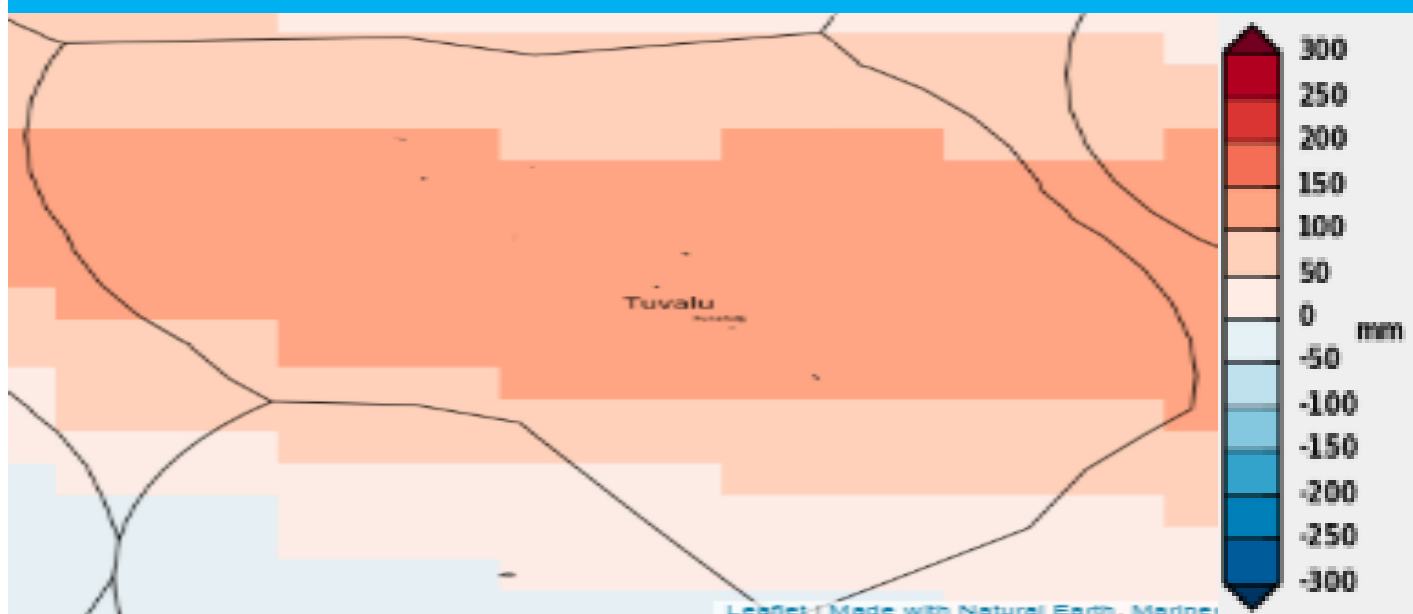
¹ Fisheries Convergence Zone is different from South Pacific Convergence Zone.

Coral Bleaching Outlook



Coral bleaching warning remains for Tuvalu, with a higher possibility for coral bleaching over the western extent of EEZ until the month of October.

Seasonal Sea Level Forecast



The sea level is forecasted to be higher than normal from in the next three months. 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 September—November

Date	Time	Tide Level(m)
29-09-19	0457	3.16
29-09-19	1112	0.93
28-10-19	1658	3.14
28-10-19	2314	1.01
26-11-19	1639	3.09
26-11-19	2300	1.10

The highest and lowest tides for September to November are listed in the table on the left. The predicted tide levels may be different from the observed tide due to weather phenomenon such as low/high pressure systems; South Pacific Convergence Zone; 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 cautious during the upcoming 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.

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