



Kiribati Meteorological Service

Member of WMO

Contacts

Phone: (686) 26511, 25444

Kiribati Ocean Outlook

February to April 2019

Kiribati Meteorological Service Division

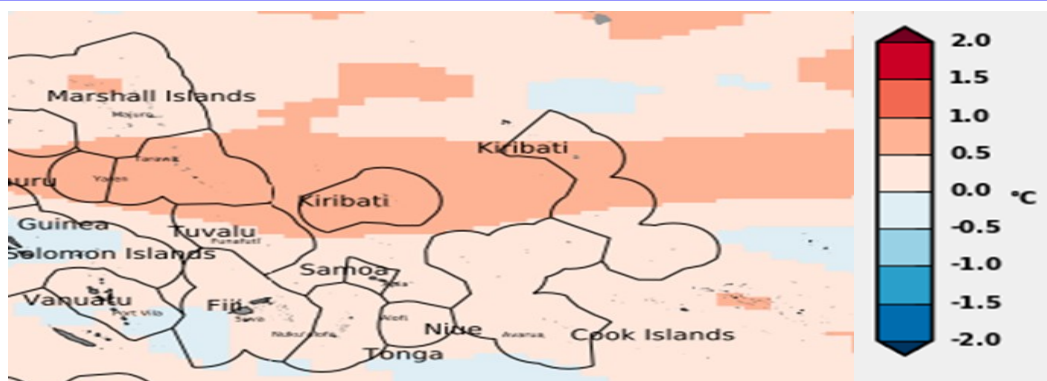
Issue: 41

Summary

February 2019

- Kiribati waters will be warmer by 0.5°C to 1.5°C .
- The warm pool—cold tongue intersection zone is located South West of Kiribati.
- Coral bleaching is on alert level 1 for Gilbert Islands and the rest is on warning.
- Sea level will increase by 0.15m. The highest spring tide (2.96m) is on the 20th of February.

Sea Surface temperature Forecast anomaly



The forecast on the SST for the Gilbert group is expected to be warmer by up to 1.5°C while the Line and Phoenix groups will be warmer by 0.5 - 1.0°C.

NB: Warm waters is related to more rainfall and cooler waters is related to less rainfall.

Issue Outline:

- Ocean Summary
- SST Anomaly
- SST with warm pool
- Coral Bleaching

Important notes:

Coral Bleaching Effect:

Alert: No thermal stress

Watch: Low-thermal stress

Warning: Coral Bleaching possible

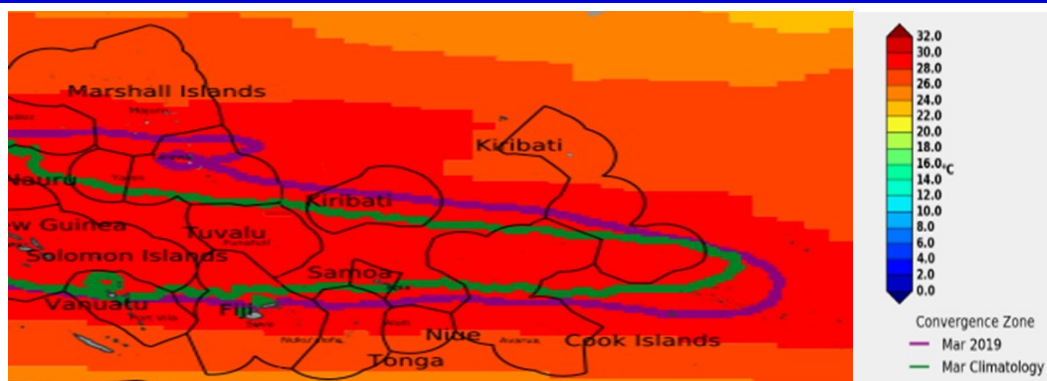
Alert 1: Coral Bleaching likely

Alert 2: Coral mortality likely.

Major Contributors:

1. Climate and Oceans Support Program in the Pacific
2. POAMA

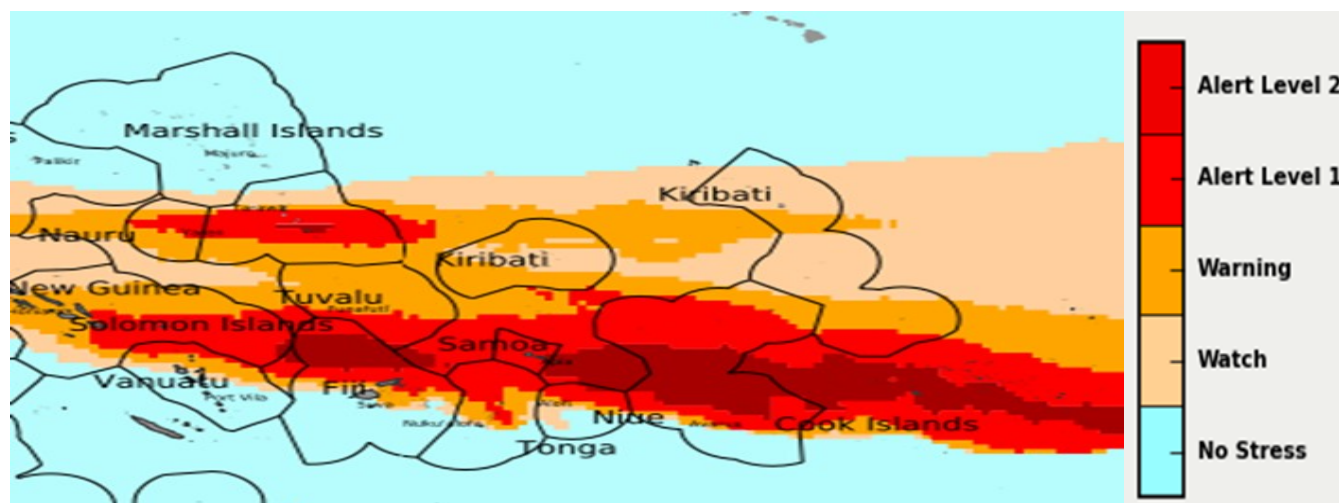
Sea Surface temperature forecast with warm pool—cold tongue intersection zone



The warm pool-cold tongue intersection zone is anticipated to lie over the Gilbert, Phoenix and Southern Line Islands for the upcoming months. This zone is an area that is likely rich in nutrients and favorable for migratory fish. So, this is a good time for fishing vessels to fish in the Kiribati waters.

Note: This information needs to be verified with MFMRD.

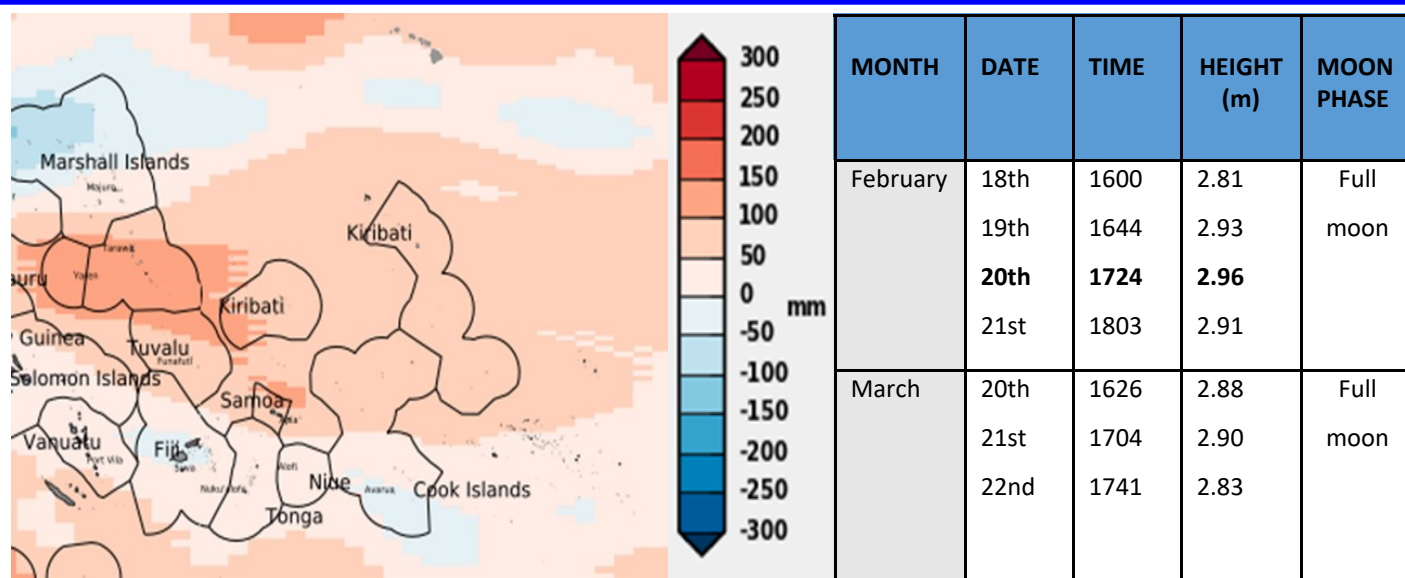
Coral Bleaching



The Coral bleaching outlook is on Alert level 1 for Western Kiribati while Central and Eastern Kiribati are on warning phase. Coral mortality is likely to exist especially in the Gilbert group, therefore, the public is advised to take extra cautious when diving/fishing in the lagoon.

Note: This information requires verification from MFMRD on the condition of corals in the Kiribati coastal waters as this forecast is based only on the Sea surface temperature (Ocean Portal) produced by COSPPac, Australia.

Seasonal Sea Level Forecast and Extreme Spring Tide Prediction



The seasonal sea level forecast for the coming months is expected to be higher than normal sea level by 150mm (0.15m) for the Gilbert group while the Line and Phoenix group will also increase by 100mm (0.01m).

This forecast is based on the ocean atmosphere model (POAMA) produced by Bureau of Meteorology, Australia.

For preparedness, there will be an astronomical spring tide for February and March (refer to tide table above). Note that the highest spring tide of the year is on the 20th of February with the height of 2.96m. Hence, coastal communities should be cautious as this might cause flooding in low lying areas.