

# Samoa Ocean Outlook



# Samoa Meteorology Division

#### Member of WMO

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http://www.samet.gov.ws

### Issue: 02 Summary July 2018

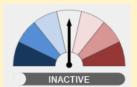
- Warmer Ocean temperatures of up to 1<sup>o</sup>C is predicted for Samoa.
- The fisheries convergence zone is expected to remain north west of Samoa.
- Coral bleaching outlook shows that there will be no stress in the upcoming months.
- Sea levels for the Samoa region is anticipating a 0-50mm fall in the next three monthly period July to September.

# Issue Outline:

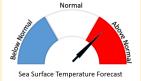
- Ocean Summary
- Ocean Temperature
- Convergence Zone
- Coral Bleaching
- Sea Level Forecast

#### **Climate Status:**

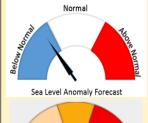
**ENSO Update: Neutral** 



#### Sea Surface Temperature:



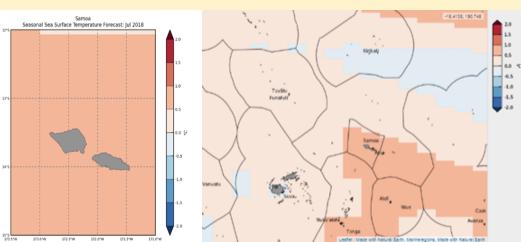
### **Sea Level Anomaly Forecast:**





Coral Bleaching Forecast:

## **Sea Surface Temperature Forecast Anomaly**



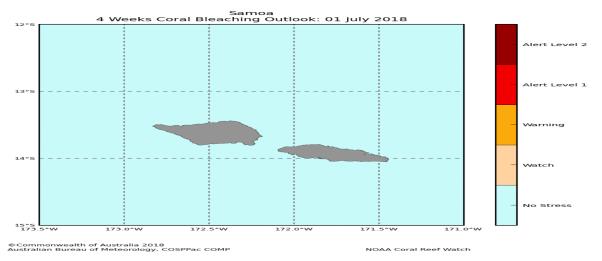
A 1°C increase in sea surface temperature is expected for the Samoan region, while neighbouring Pacific countries will anticipate a 0.5°C warmer Ocean waters in July.

### Sea Surface temperature forecast with convergence zone



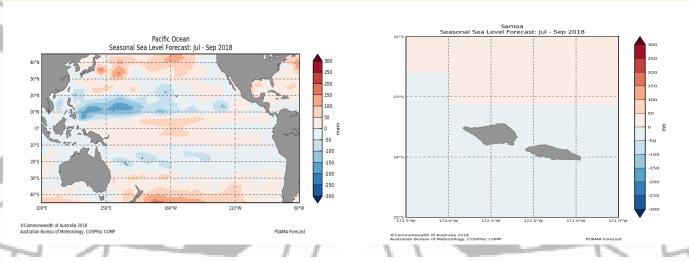
The July position for the Convergence Zone is predicted to remain north west of Samoa. In accordance to its average July position, the Convergence Zone has propagated eastward. *N.B Convergence zones are where cold and warm water meet, and are rich in nutrients, attracting lots of fish.* 

#### **Coral Bleaching**



The coral bleaching alert for the month of July still remains at "No Stress" state. This means temperatures are within productive range and will not cause any coral bleaching for the month of July 2018. Fisheries management is still advised to conduct monitoring.

#### **Seasonal Sea Level Forecast**



Overall, the sea level prediction for the July to September period fluctuates. While the Central Equatorial region will experience a rise of up to 100mm, further up north and part of the South Pacific will anticipate a fall in sea level of about 0-50mm. Moreover, Samoa will experience a fall in sea level of about 0-50mm as well in the upcoming season. 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.

10 highest tides for 2018		
Date	Time	Height (m)
12-Aug	6:39	1.55
31-Jan	18:14	1.54
2-Jan	18:28	1.54
11-Aug	5:46	1.53
1-Feb	19:05	1.53
10-Sep	6:20	1.53
14-Jul	6:55	1.53
9-Sep	5:30	1.52
3-Jan	19:22	1.52
13-Aug	7:30	1.52

The highest tide for 2018 is expected to be on the  $12^{th}$  of August. On the  $14^{th}$  of July, the  $07^{th}$  highest tide is anticipated. A 0-50mm fall in sea level is expected.

### **Major Contributors:**

Pacific Ocean Portal: oceanportal.spc.int Bureau of Meteorology: http://www.bom.gov.au/climate/enso/