



TONGA METEOROLOGICAL SERVICE



Tonga Ocean Outlook

Issue: 02

Summary

February 2021

TONGA METEOROLOGICAL SERVICE

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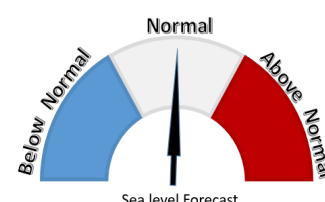
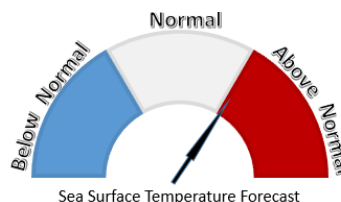
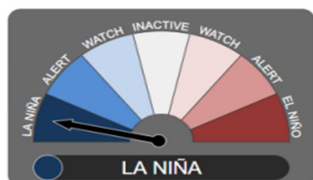
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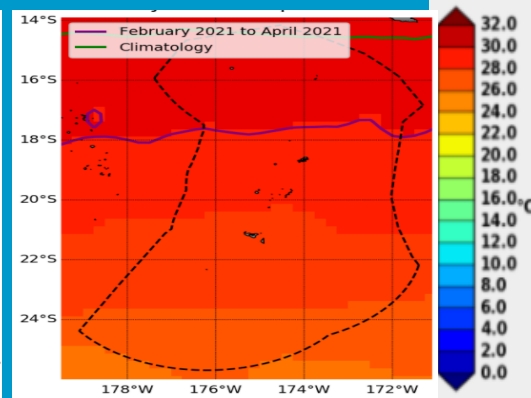
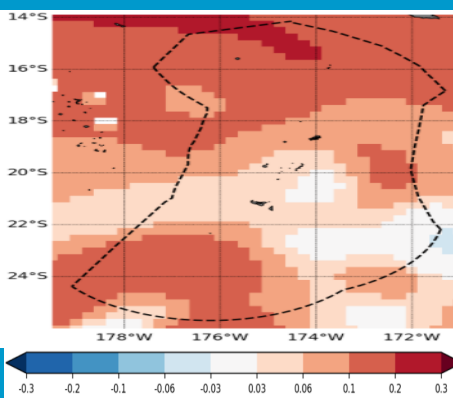
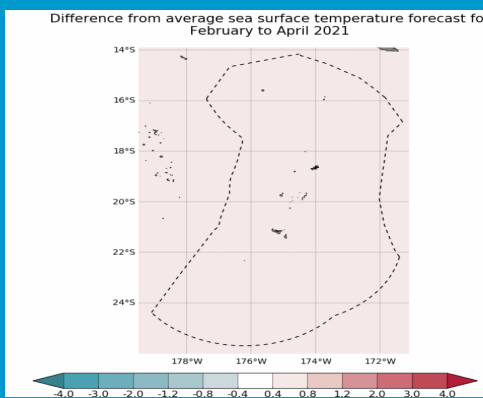
- Above average sea surface temperature is expected in February 2020 for Tonga.
- Sea level forecasts shows around average across Tonga for the next three months.
- The fisheries convergence zone is predicted to be across Tonga in the next few months.
- Next extreme highest tides will be on 28th February at height of 1.77m, next lowest tide will be on the 31st March 2021.



Sea Surface Temperature Forecast

Sea-level Forecast

Nutrient Zone Forecast



Sea surface temperature anomaly forecast for February to April 2021 shows around average across the country.

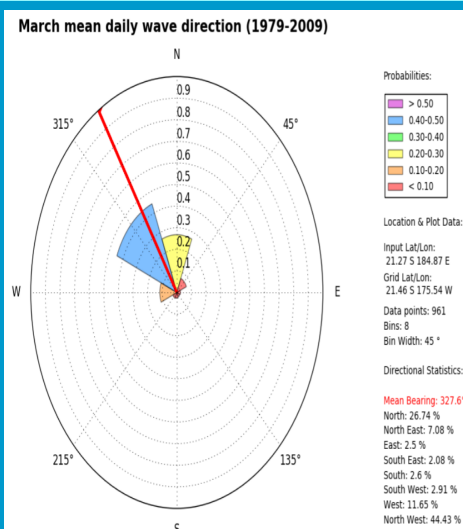
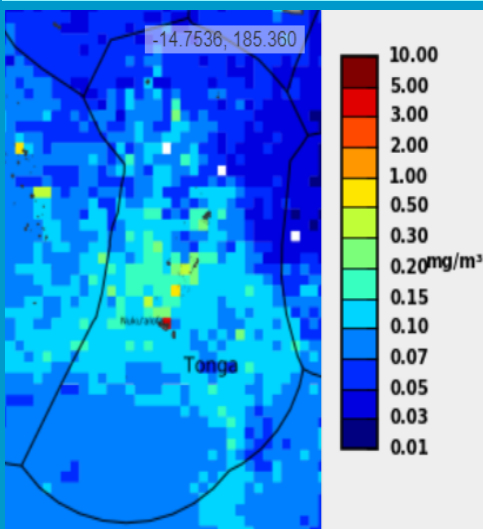
Sea level anomaly 3 month forecast shows above average over the Niuaus and south of Tongatapu. Near average about the rest of the group. This is a forecast for the 3 month period February to April 2021.

The boundary between warm and cold ocean water is rich in nutrients and attracts lots of fish. This zone is forecast to extend around the equator out of Tonga's EEZ. Green line shows the zones average location for February to April and purple line shows the zones forecast for February-April 2021 which is sitting across Tonga area (between Vava'u and Niuaus).

Monthly Chlorophyll

Monthly Wave Direction

The highest tide predicted for 2021



10 highest tides for 2021			10 lowest tides for 2021		
Date	Time	Height (m)	Date	Time	Height (m)
5-Dec	20:05	1.87	26-Jun	14:47	0.19
6-Dec	21:00	1.86	28-May	15:03	0.20
29-Apr	08:56	1.86	25-Jun	13:53	0.20
4-Dec	19:12	1.85	27-May	14:09	0.21
28-Apr	8:56	1.85	27-Jun	15:40	0.22
31-Mar	9:20	1.84	29-May	15:58	0.22
27-May	7:41	1.84	7-Dec	3:30	0.22
6-Nov	20:27	1.84	6-Dec	2:36	0.22
28-May	8:35	1.84	25-Jul	14:30	0.23
1-Apr	10:11	1.83	8-Nov	3:46	0.23

Last month's map shows a higher concentration of chlorophyll spreading across central to northern Tonga group. Chlorophyll is present in algae and small marine plants and these areas tend to be rich areas for fishing during this time period.

Nuku'alofa wave climate for the month of March shows majority of the waves coming from the southeast going toward the northwest direction. This has been the average direction for the past 30 years. The average wave height for this location in March is 2.4 m with the possibility of waves reaching as high as 8.1m.

2021 Tidal predictions show the highest tides of the year for Nuku'alofa. The next highest tide coming up on the 28th of February with a height of 1.77m. The next lowest tide is on the 12th of February with a height of 0.41m.