

# Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 167

Country: Tuvalu

## Part 1: Recent climate

**TABLE 1: Monthly Rainfall**

Station (include data period)	May-2021	Jun-2021	Jul-2021				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2021)	151.9	69.2	192.3	125.0	219.7	169.0	44/80
Nui (1946-2021)	131.1	147.0	147.7	162.5	232.6	197.9	20/76
Funafuti (1933-2021)	77.3	161.6	293.4	191.3	277.6	221.6	62/89
Niulakita (1953-2021)	74.3	350.9	158.1	167.8	259.3	212.5	22/69

### Monthly: July 2021 statement

Below normal rainfall was recorded at Nui and Niulakita, normal rainfall was recorded at Nanumea, while Funafuti observed above normal rainfall.

**TABLE 2: Three-month Total Rainfall for May to July 2021**

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Nanumea (1941-2021)	413.4	Below normal	475.9	701.6	607.2	20/80
Nui (1946-2021)	425.8	Below normal	514.5	705.7	578.3	15/76
Funafuti (1933-2021)	532.3	Below normal	621.2	774.4	701.6	21/89
Niulakita (1953-2021)	583.3	Normal	546.3	781.4	653.1	30/69

### Last three months: May to July 2021 statement:

#### Rainfall (Table 2):

Below normal rainfall was recorded at Nanumea, Nui and Funafuti, with normal rainfall was recorded at Niulakita.

**NB: The X LEPS % score has been categorised as follows:**

Very Low:  $X < 0.0$

Low:  $0 \leq X < 5$

Moderate  $5 \leq X < 10$

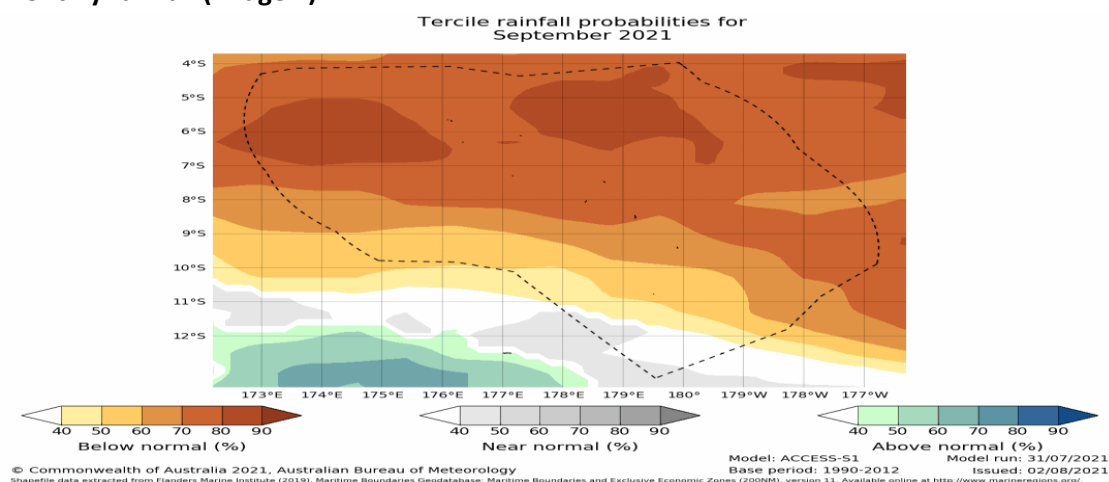
Good:  $10 \leq X < 15$

High:  $15 \leq X < 25$

Very High:  $25 \leq X < 35$  Exceptional:  $X \geq 35$

## Part 1i. Monthly and Seasonal Outlooks for September and September to November 2021

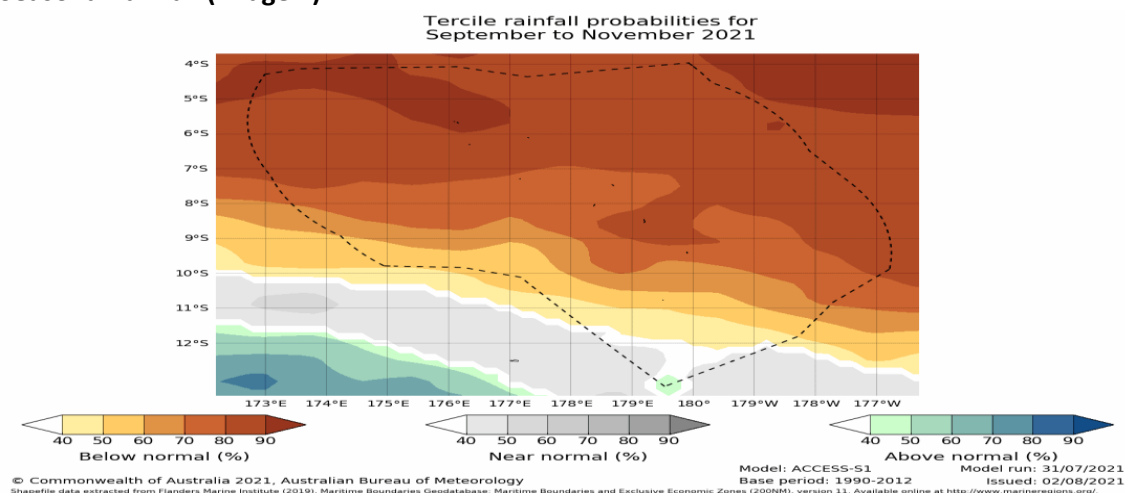
### Monthly rainfall (Image 1):



### Monthly rainfall Outlook statements

The outlook is very likely to be below normal rainfall for northern and central region of Tuvalu while the outlook is likely to be below normal for the southern region.

### Seasonal rainfall (Image 2):



### Seasonal Rainfall Outlook statements

The outlook for the season is very likely to be below normal rainfall for all stations.

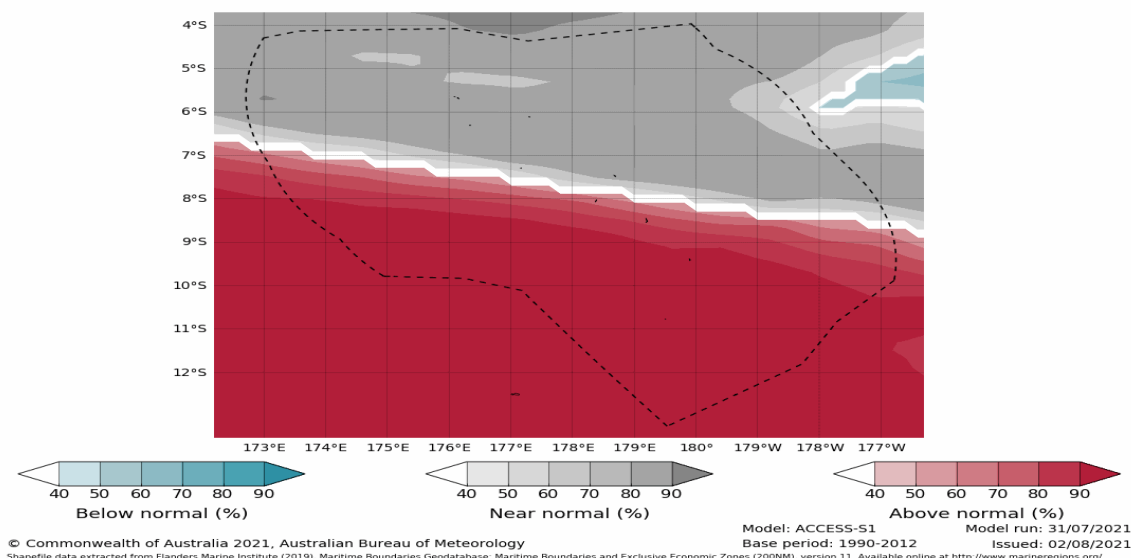
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## Monthly Maximum temperature (Image 3):

Tercile maximum temperature probabilities for September 2021

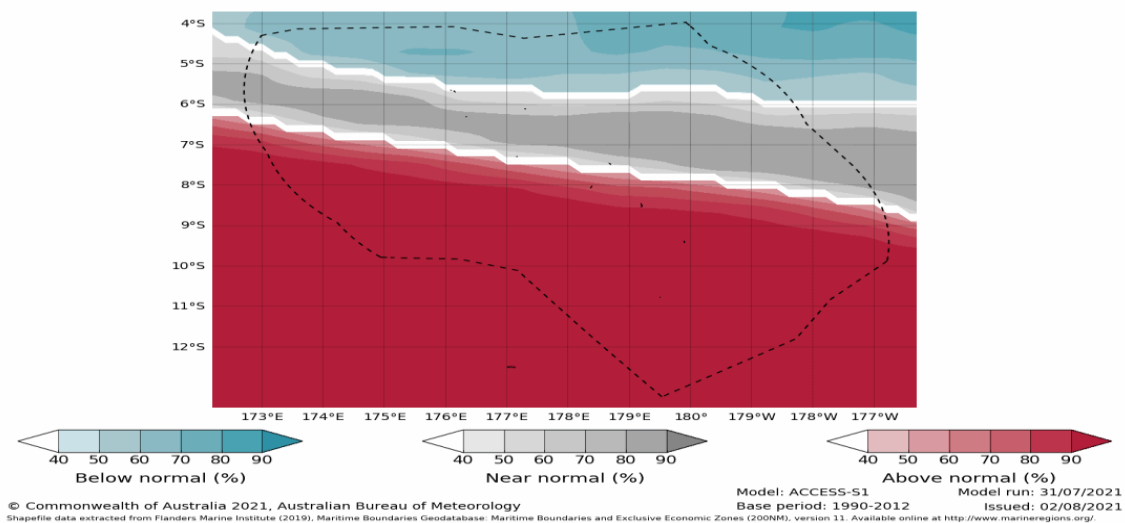


## Monthly Maximum Outlook statements

The outlook is very likely to be normal maximum temperature for Nanumea and Nui, while very likely to be above normal temperature for Funafuti and Niulakita in the southern part of Tuvalu.

## Seasonal maximum temperature (Image 4):

Tercile maximum temperature probabilities for September to November 2021



## Seasonal maximum temperature Outlook statement

The outlook for the season is likely to be normal maximum temperature for Nanumea, while very likely to be above normal for Nui, Funafuti and Niulakita.

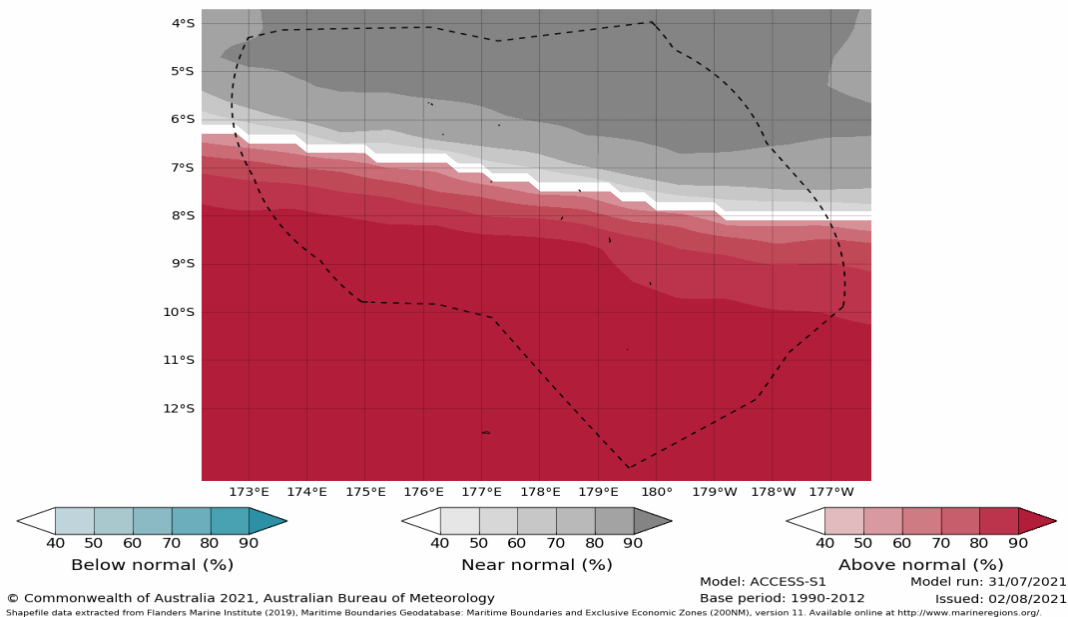
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Very High:  $25 \leq X < 35$       Exceptional:  $X \geq 35$

## Monthly minimum temperature (Image 5):

Tercile minimum temperature probabilities for September 2021

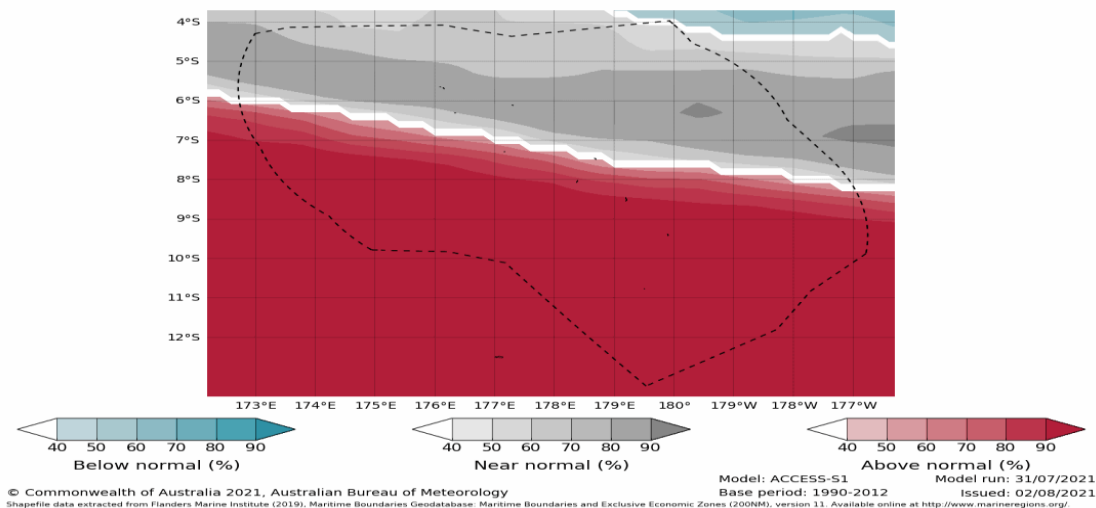


## Monthly Minimum Outlook statements

The outlook is very likely to be above normal minimum temperature for Nui, Funafuti and Niulakita, while Nanumea is very likely to be normal.

## Seasonal minimum temperature (Image 6):

Tercile minimum temperature probabilities for September to November 2021



## Seasonal minimum temperature Outlook statement

The outlook for the season is very likely to be above normal minimum temperature for Nui, Funafuti and Niulakita, while Nanumea is very likely to be normal.

**NB: The X LEPS % score has been categorised as follows:**

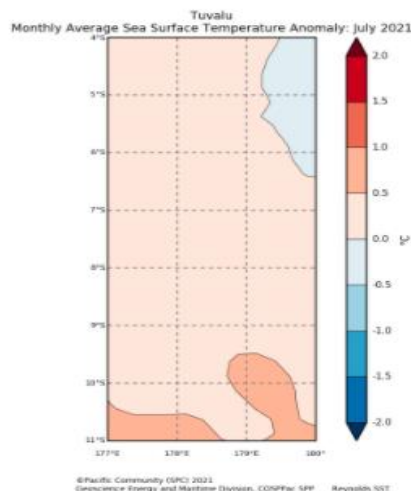
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## Part 2: Recent Ocean summary statement

### Monthly: July 2021

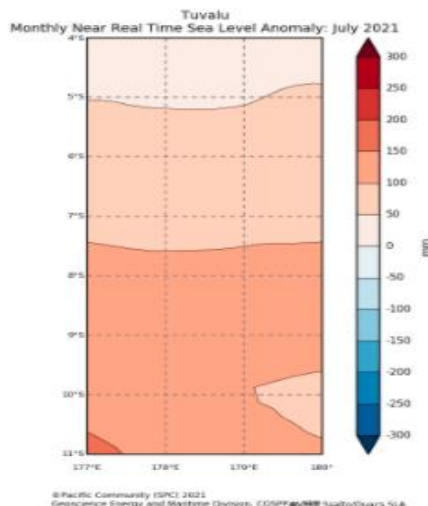
#### Sea Surface Temperature (Image 1):



#### Sea Surface Temperature statement

Most of Tuvalu experienced nearly above average SST in the month of July 2021. Significant warm SSTs were experienced for the whole of Tuvalu. Highest SSTs were 0.0 to 0.5 degrees above average.

#### Sea level (Image 2):



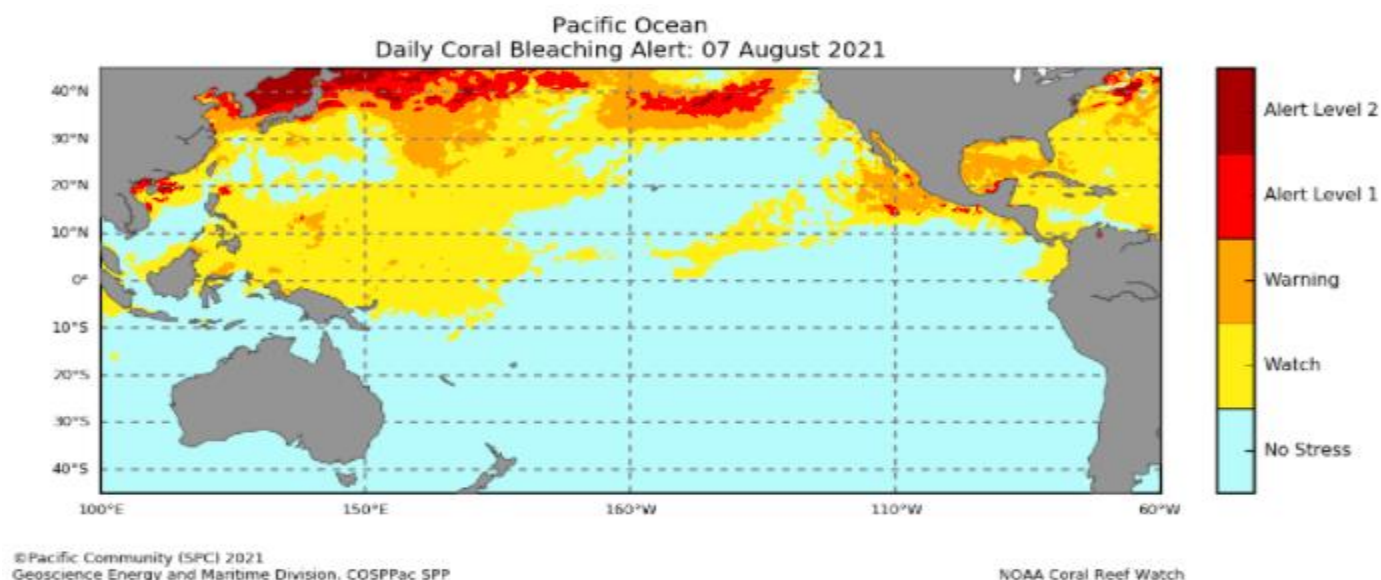
#### Sea level statement

The sea level anomaly across Tuvalu in July 2021 was significantly higher than normal, with majority of the central and southern group in the range of 100 to 150 mm above average, while, northern group in the range of 50 to 100 mm above average. This additional sea level anomaly needs to be taken into account when using the tide calendars by adding it onto the high/low tide levels.

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### Daily coral bleaching alert (Image 3):

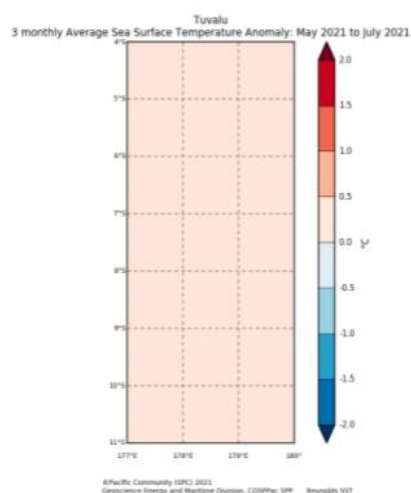


### Daily bleaching alert statement

Warm SSTs experienced across Tuvalu has resulted in a **Watch level in the north west with remainder of Tuvalu at no stress level.**

### Last three months: May to July 2021:

### Sea Surface Temperature (Image 4):



### Last three months Sea Surface Temperature statement

For the May to July 2021 period, near average SSTs were experienced for all Tuvalu atolls.

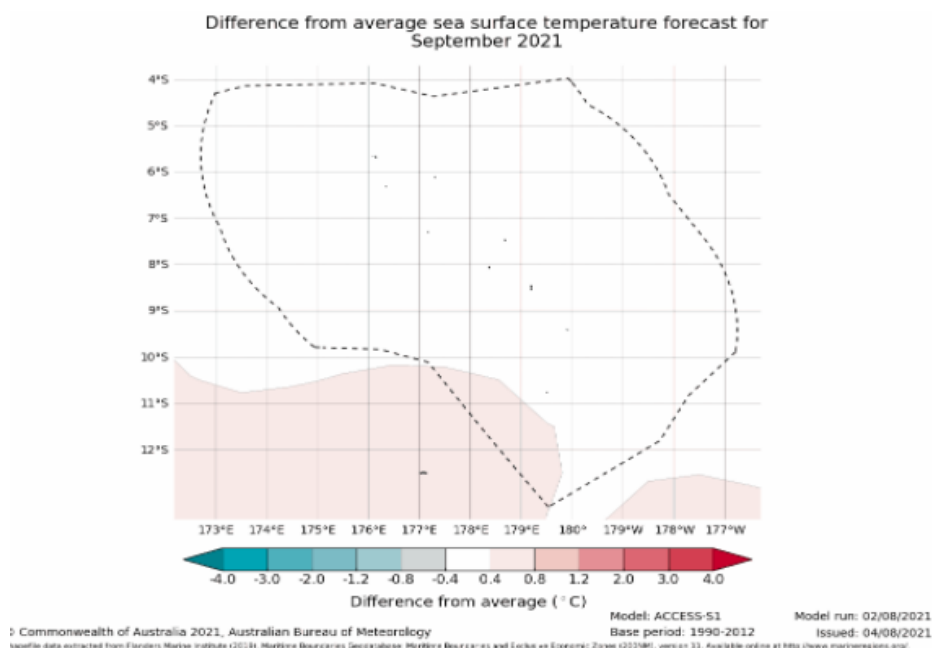
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## Part 2i. Monthly and Seasonal Outlooks for September and September to November 2021

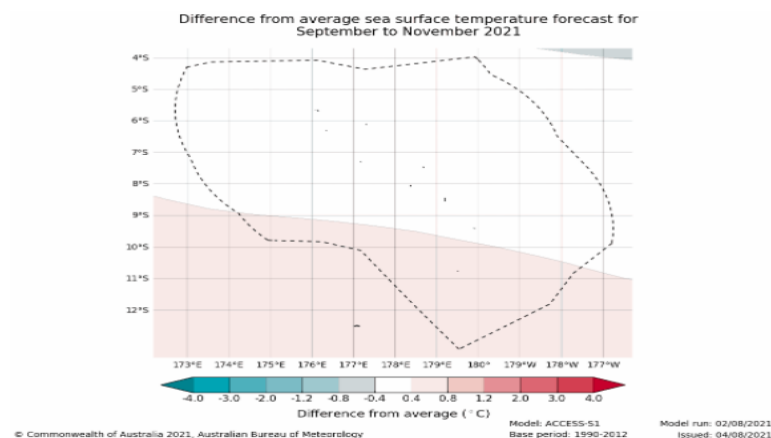
### Monthly sea surface temperature (Image 5):



### Monthly sea surface temperature statement

The outlook for Tuvalu shows a near normal likely SST for September.

### Seasonal sea surface temperature (Image 6):



### Seasonal Sea Surface Temperature statement

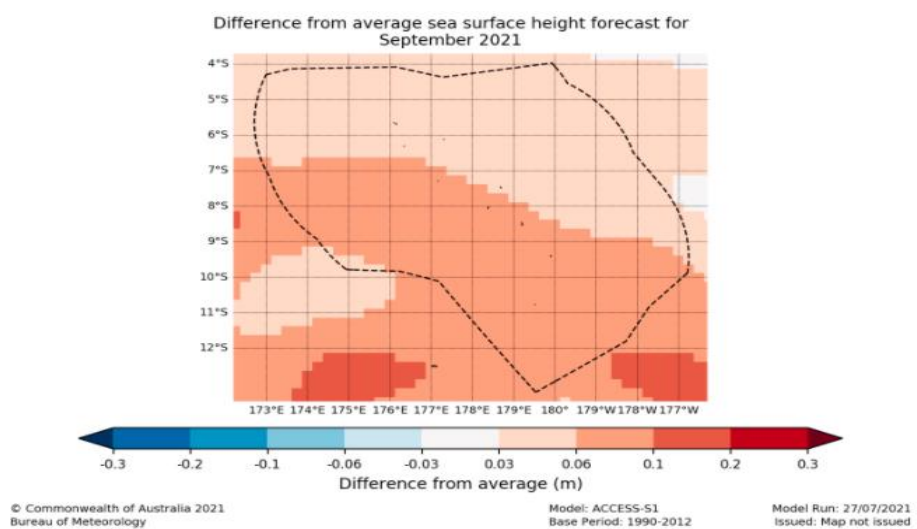
The outlook for the Tuvalu shows SSTs are likely to be close to average for the September to November period. The outlook for Niulakita or the south extends of the EEZ shows a significant temperature difference of 0.4-0.8°C above normal for the September to November period.

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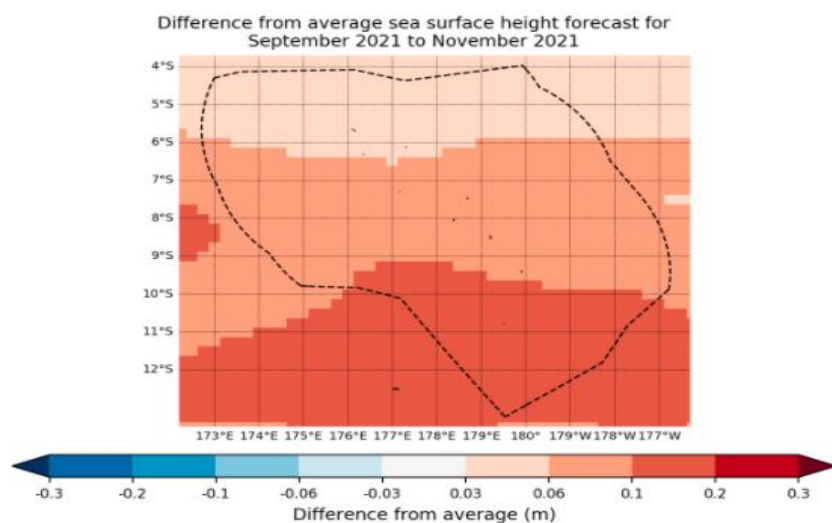
## Monthly sea level (Image 7):



## Monthly sea level statement

The outlook for Tuvalu shows sea level likely to be close to average for September. In the central and southern group it is predicted to reach 0.06 to 0.1 metres above normal.

## Seasonal sea level (Image 8):



## Seasonal sea level statement

The outlook across Tuvalu shows sea level likely to be close to average for September to November. Niulakita is predicted to reach 0.2 to 0.3 metres above normal.

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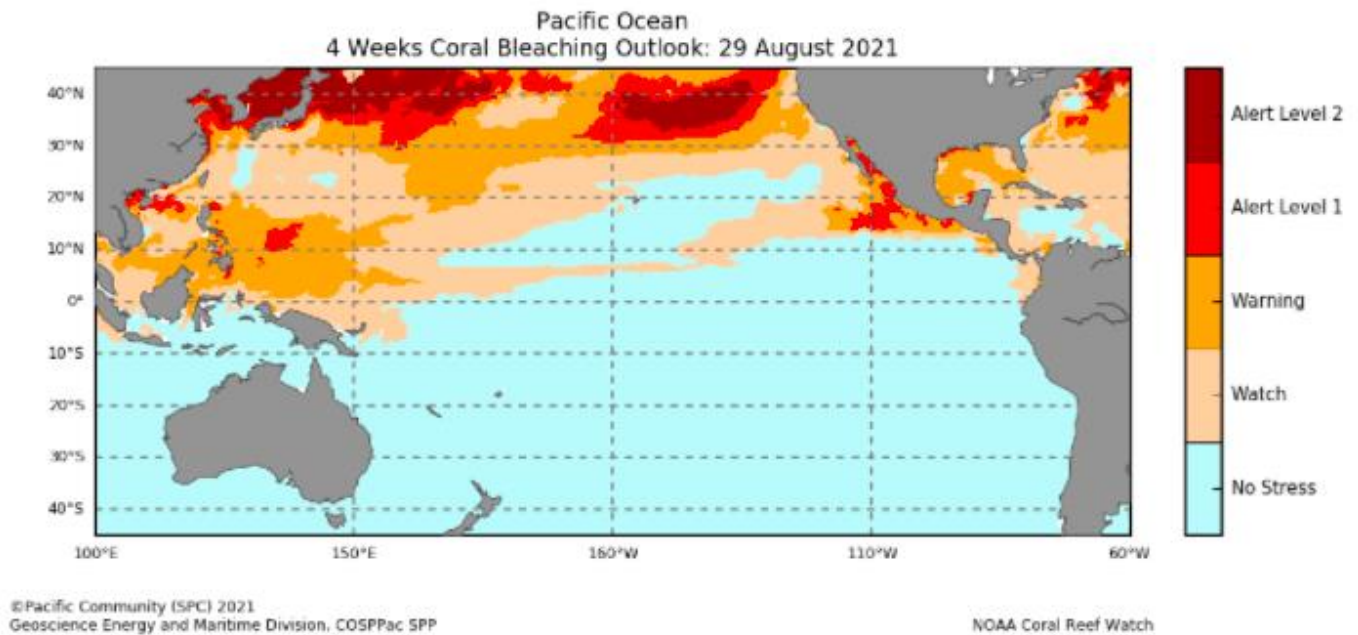
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#### 4-week Coral Bleaching (Image 9):



#### 4-weeks Coral Bleaching statement

The outlook for the Tuvalu shows no thermal stress on coral reefs.

**TABLE 3: Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders**

Product	Date: July 2021	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin					
EAR Watch					
Monthly Climate Briefing					
Ocean Outlook					
Total					

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