

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

Country: Kiribati

## 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)				
	Beru (1932-2021)	90.3	65.9	101.7	41.3	137.2	
Butaritari (1931-2021)	410.0	396.4	553.6	192.3	297.8	236.0	83/84
Kanton (1937-2021)				57.7	90.2	70.7	
Kiritimati (1921-2021)	29.6	13.7	30.4	22.7	72.8	39.4	51/97
Tarawa (1950-2021)	139.6	245.8	133.6	88.3	195.4	135.9	36/74
Arorae (1950-2021)	57.6	48.2	151.1	75.7	154.7	110.5	37/55

### Monthly: July 2021 statement

Near normal rainfall was recorded for all stations, with above normal rainfall at Butaritari being the only exception. This was the second wettest July on record at Butaritari.

Rainfall data is not available for Kanton.

**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:  $X \geq 35$

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

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Beru (1932-2021)	257.9	Normal	175.0	295.5	233.4	37/62
Butaritari (1931-2021)	1360.0	Above normal	684.3	867.7	801.9	<b>82/83</b>
Kanton (1937-2021)			182.0	280.1	221.9	
Kiritimati (1921-2021)	73.7	Below normal	125.0	262.3	183.0	18/97
Tarawa (1950-2021)	519.0	Above normal	328.9	510.6	402.4	50/74
Arorae (1950-2021)	256.9	Normal	248.3	427.7	341.0	20/54

**Last three months: May to July 2021 statement:****Rainfall (Table 2):**

*Butaritari and Tarawa were recorded above normal rainfall. Below normal rainfall was received at Kiritimati, while Beru and Arorae recorded near normal rainfall. Kanton could not be analysed due to missing rainfall data. This was the second wettest May to July on record at Butaritari.*

**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:  $10 \leq X < 15$

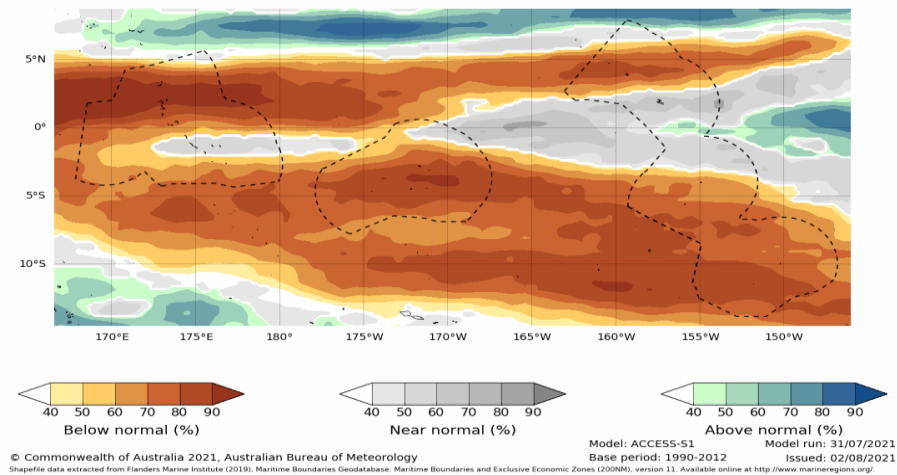
High:  $15 \leq X < 25$

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

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

### 2021 Monthly rainfall (Image 1):

Tercile rainfall probabilities for  
September 2021

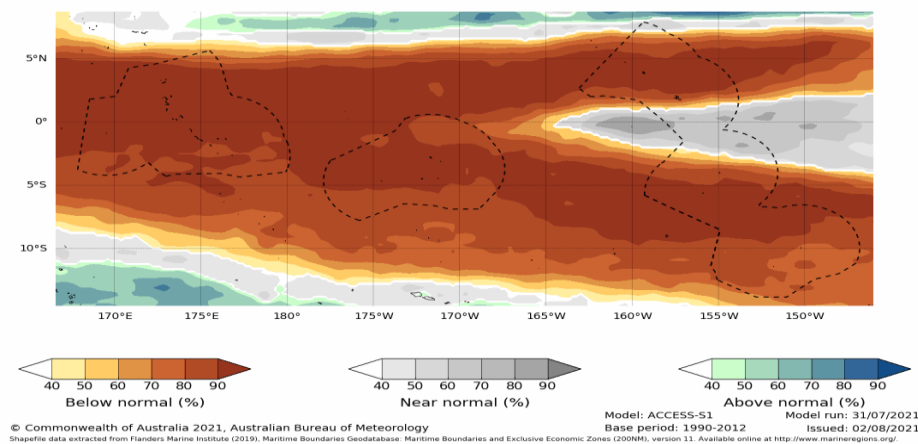


### Monthly rainfall Outlook statements

*The outlook for most parts of the Kiribati (except the southern Gilbert and Kiritimati in the Line groups) for September is very likely to be below normal rainfall. Near normal rainfall is very likely for Kiritimati (Line group) and some parts of Western Kiribati.*

### Seasonal rainfall (Image 2):

Tercile rainfall probabilities for  
September to November 2021



### Seasonal Rainfall Outlook statements

*The outlook for Kiribati for the months of September to November is very likely to be below normal rainfall. Near normal rainfall is very likely for central parts of Eastern Kiribati.*

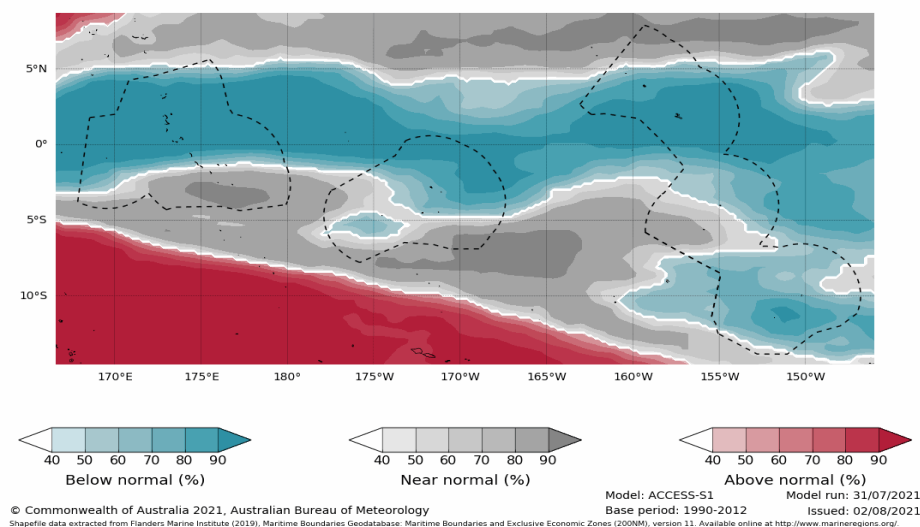
**NB: The X LEPS % score has been categorised as follows:**

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:  $X \geq 35$

## Monthly Maximum temperature (Image 3):

Tercile maximum temperature probabilities for  
September 2021

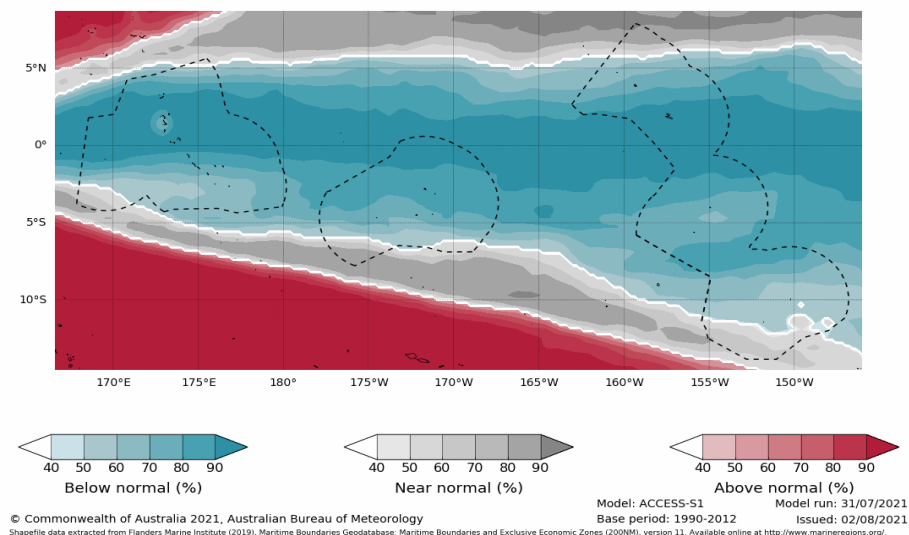


## Monthly Maximum Outlook statements

*The maximum temperature outlook for Kiribati (except the southern Gilbert and central parts of the Line group) for September is very likely to be below normal. However, the outlook for Southern Gilbert and central parts of the Line groups are very likely to be near normal.*

## Seasonal maximum temperature (Image 4):

Tercile maximum temperature probabilities for  
September to November 2021



## Seasonal maximum temperature Outlook statement

*The maximum temperature outlook across the Kiribati region is likely to be below normal for September to November 2021.*

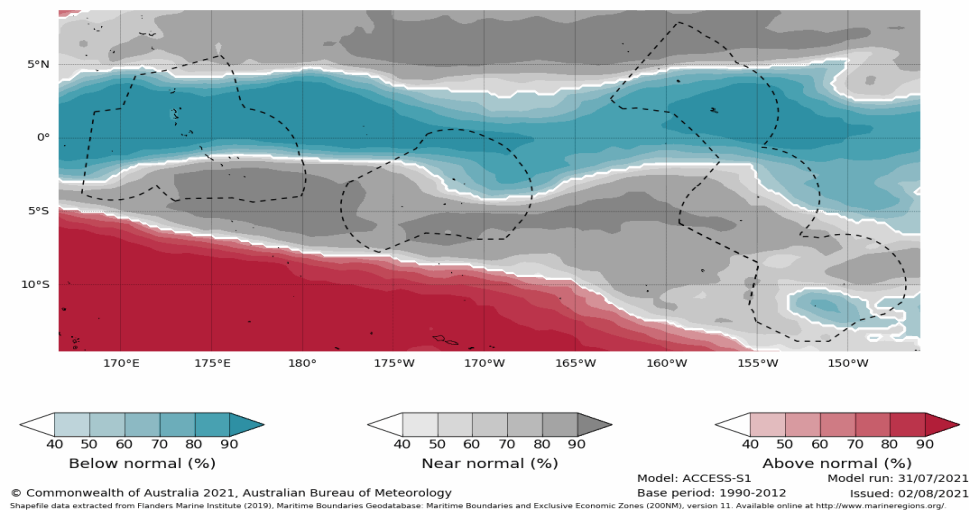
**NB: The X LEPS % score has been categorised as follows:**

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:  $X \geq 35$

## Monthly minimum temperature (Image 5):

Tercile minimum temperature probabilities for  
September 2021

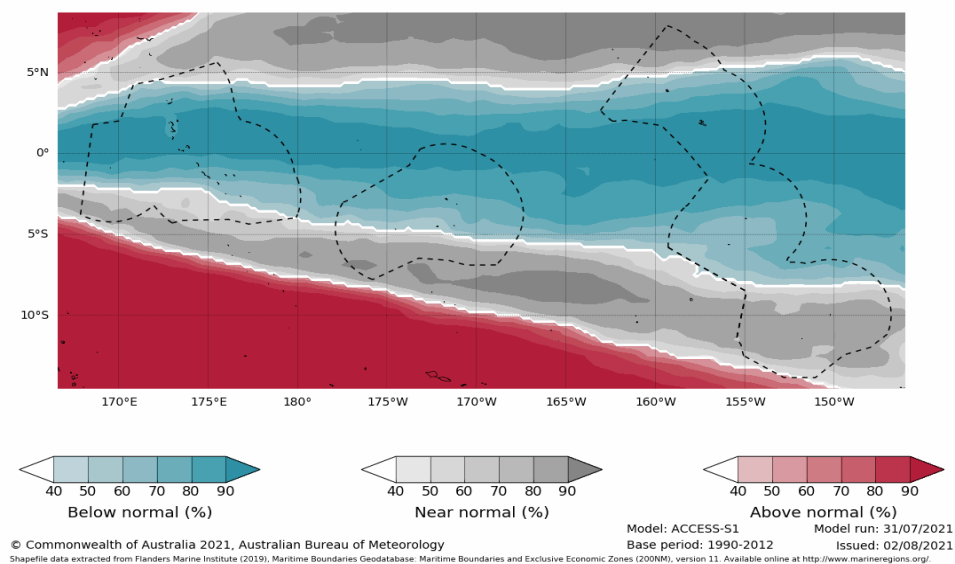


## Monthly Minimum Outlook statements

*The minimum temperature outlook for northern and central Gilbert group, northern Phoenix and northern Line Group are very likely to be below normal. However, the southern islands of all the Kiribati groups are very likely to be near normal.*

## Seasonal minimum temperature (Image 6):

Tercile minimum temperature probabilities for  
September to November 2021



## Seasonal minimum temperature Outlook statement

*The seasonal minimum temperature outlook is very likely to be above normal for Northern and Central parts of all the Kiribati groups while the Southern parts are likely to be near normal.*

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

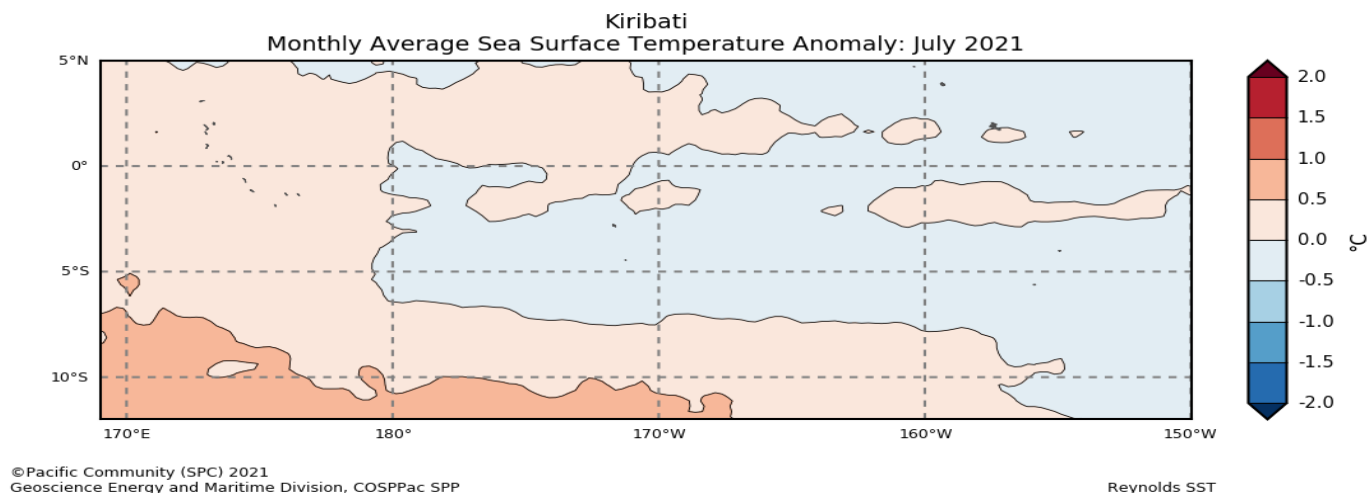
Very Low:  $X < 0.0$       Low:  $0 \leq X < 5$       Moderate:  $5 \leq X < 10$       Good:  $10 \leq X < 15$       High:  $15 \leq X < 25$

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

## Part 2: Recent Ocean summary statement

Monthly: July 2021

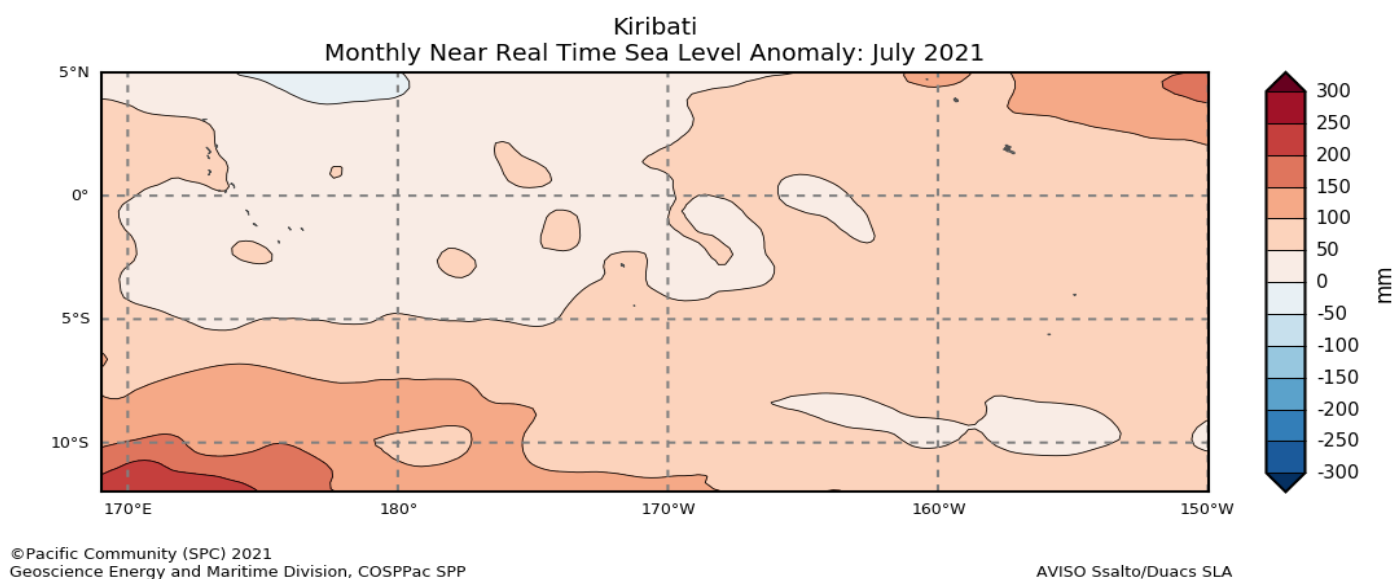
Sea Surface Temperature (Image 1):



### Sea Surface Temperature statement

*The Phoenix and Line groups experienced below average SST (less than  $-0.5^{\circ}\text{C}$ ) while the Gilbert group experienced warmer or above average SST (less than  $0.5^{\circ}\text{C}$ ) in the month of July 2021.*

Sea level (Image 2):



### Sea level statement

*The sea level anomaly across Kiribati in July 2021 was near normal and higher than normal, with majority of the archipelago in the range of 50 to 100 mm above average. This additional sea level anomaly needs to be considered when using the tide calendars by adding it onto the high/low tide levels.*

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

Very Low:  $X < 0.0$

Low:  $0 \leq X < 5$

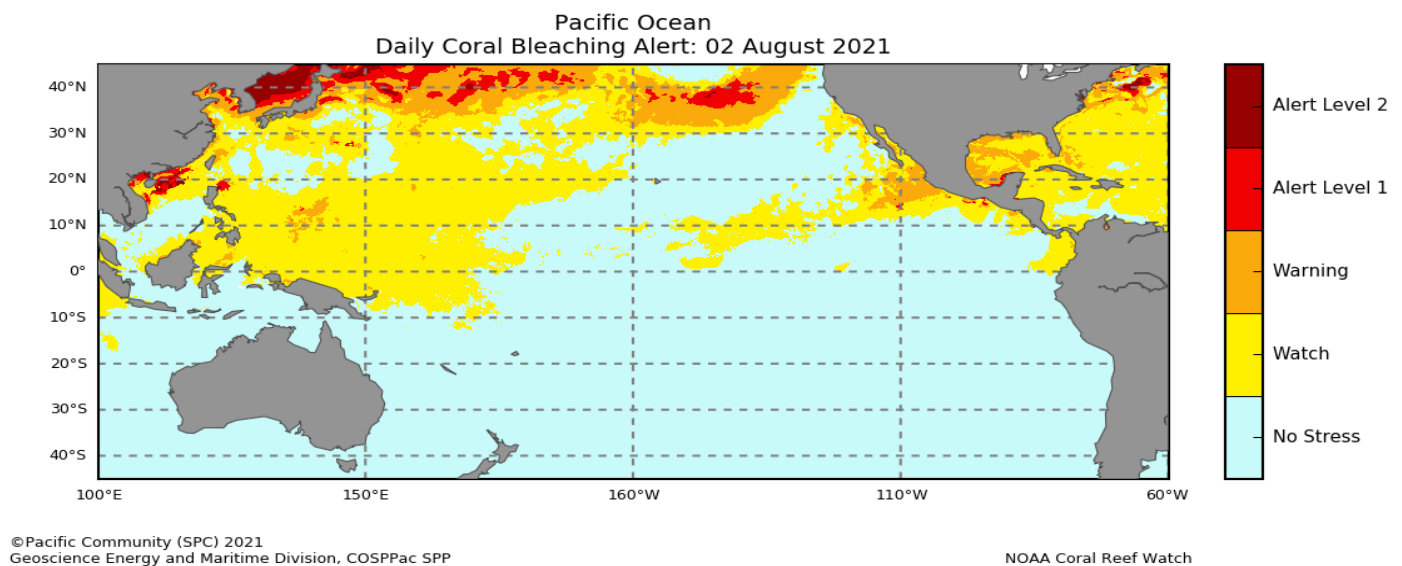
Moderate  $5 \leq X < 10$

Good:  $10 \leq X < 15$

High:  $15 \leq X < 25$

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

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

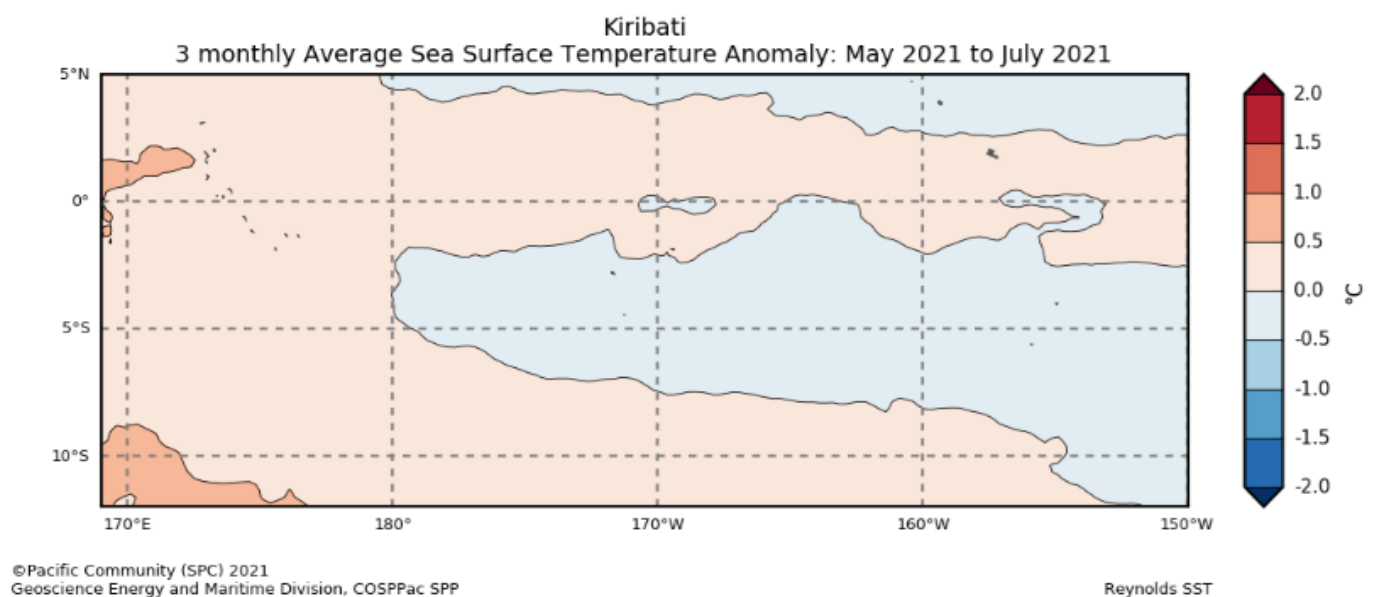


### Daily bleaching alert statement

*Warm SSTs experienced mostly in the Gilbert group and has resulted in a 'watch' coral bleaching alert status while the Phoenix and some part of the Line groups experienced no thermal stress.*

### 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, warmer than average SSTs ranges from 0 to 0.5°C were experienced in the Gilbert group and Christmas Island in the Line group. The Phoenix and the rest of the line islands experienced cooler than the average SST ranging from 0 to -0.5°C.*

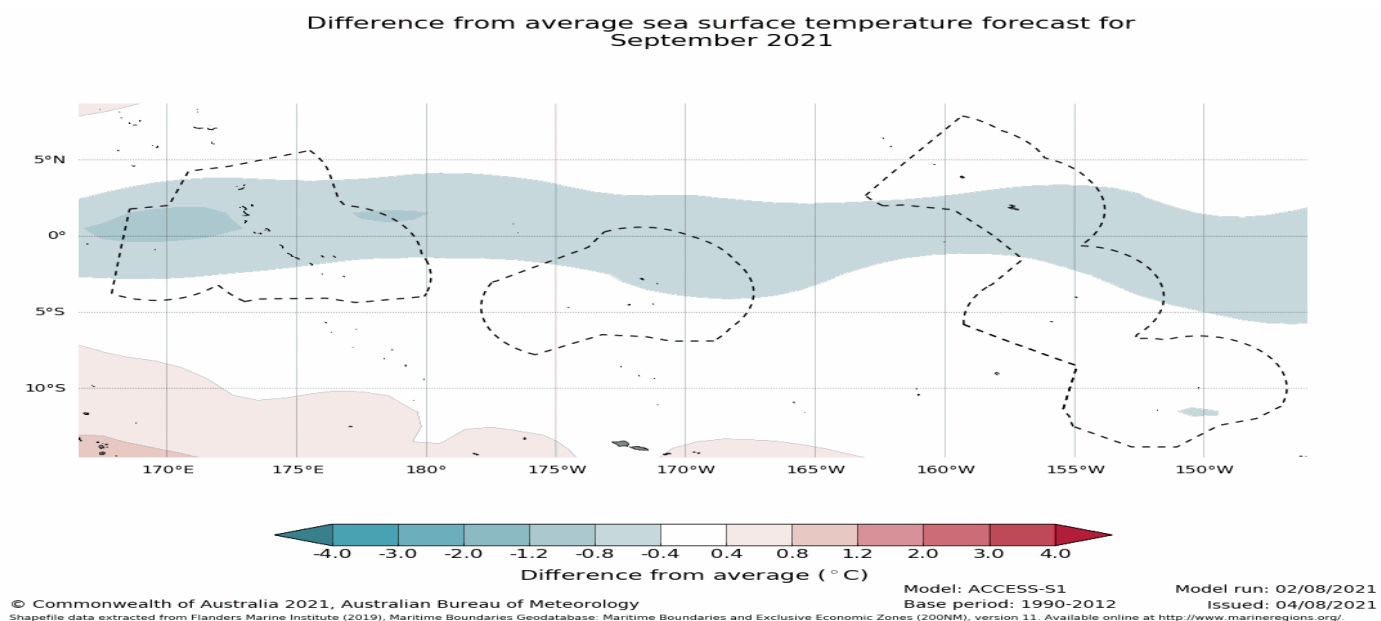
**NB: The X LEPS % score has been categorised as follows:**

Very Low:  $X < 0.0$       Low:  $0 \leq X < 5$       Moderate:  $5 \leq X < 10$       Good:  $10 \leq X < 15$       High:  $15 \leq X < 25$

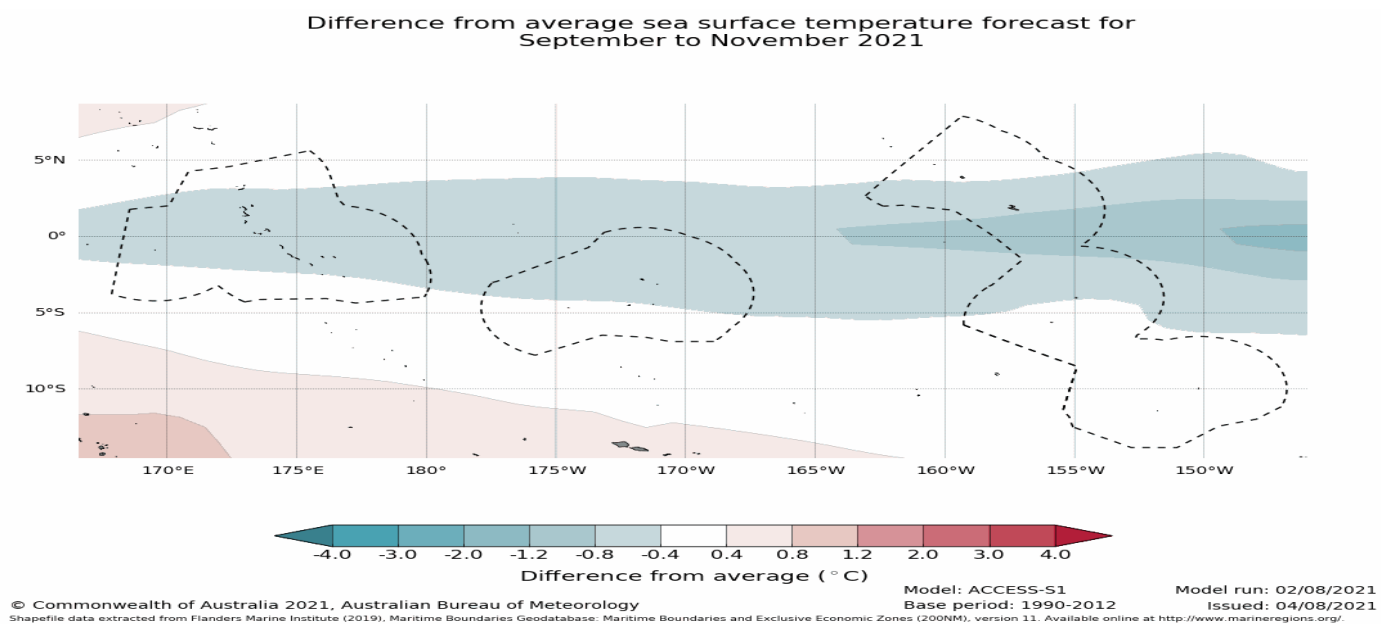
Very High:  $25 \leq X < 35$       Exceptional:  $X \geq 35$

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

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



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



### Monthly and Seasonal Sea Surface Temperature statement

*The monthly and seasonal outlook for the Kiribati region is expected to be close to average and below average temperature ranging from 0.4 to -0.8 degrees.*

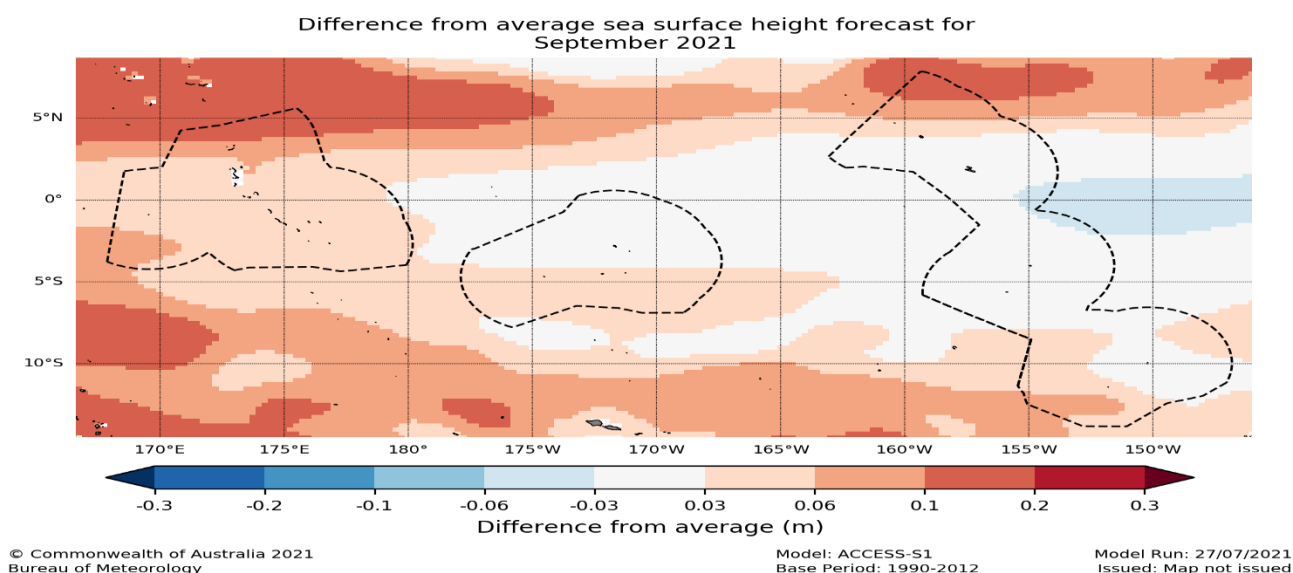
**NB: The X LEPS % score has been categorised as follows:**

Very Low:  $X < 0.0$       Low:  $0 \leq X < 5$       Moderate:  $5 \leq X < 10$       Good:  $10 \leq X < 15$       High:  $15 \leq X < 25$

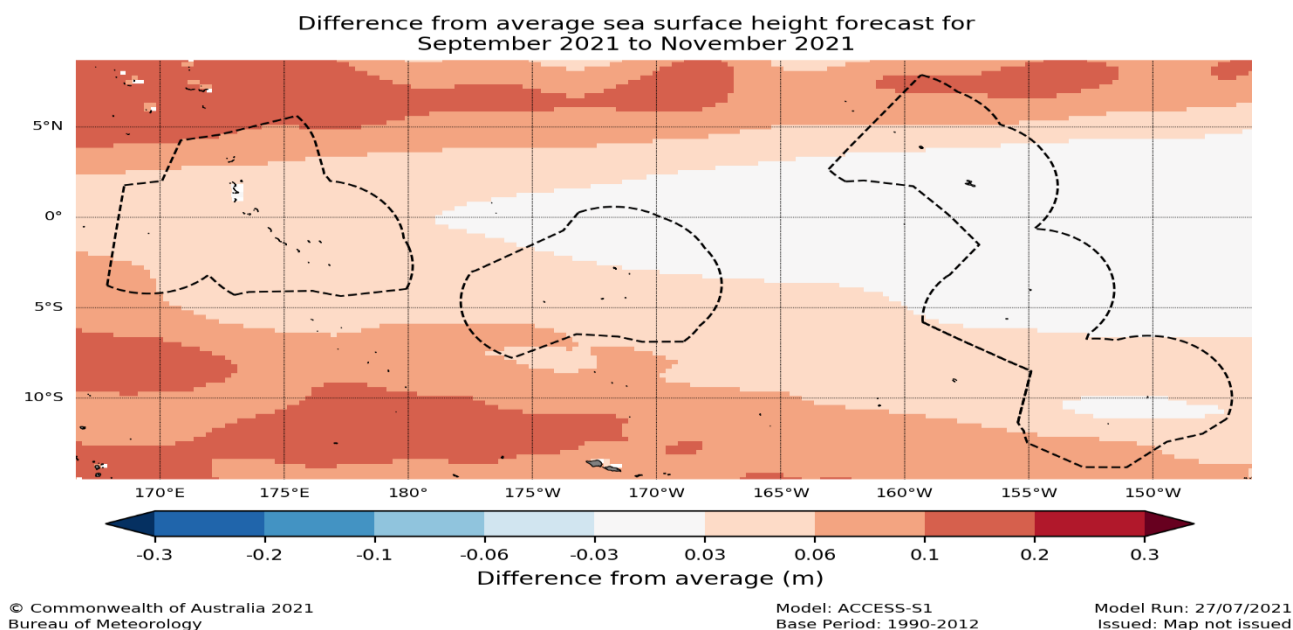
Very High:  $25 \leq X < 35$       Exceptional:  $X \geq 35$



## Monthly sea level (Image 7):



## Seasonal sea level (Image 8):



## Monthly and Seasonal sea level statement

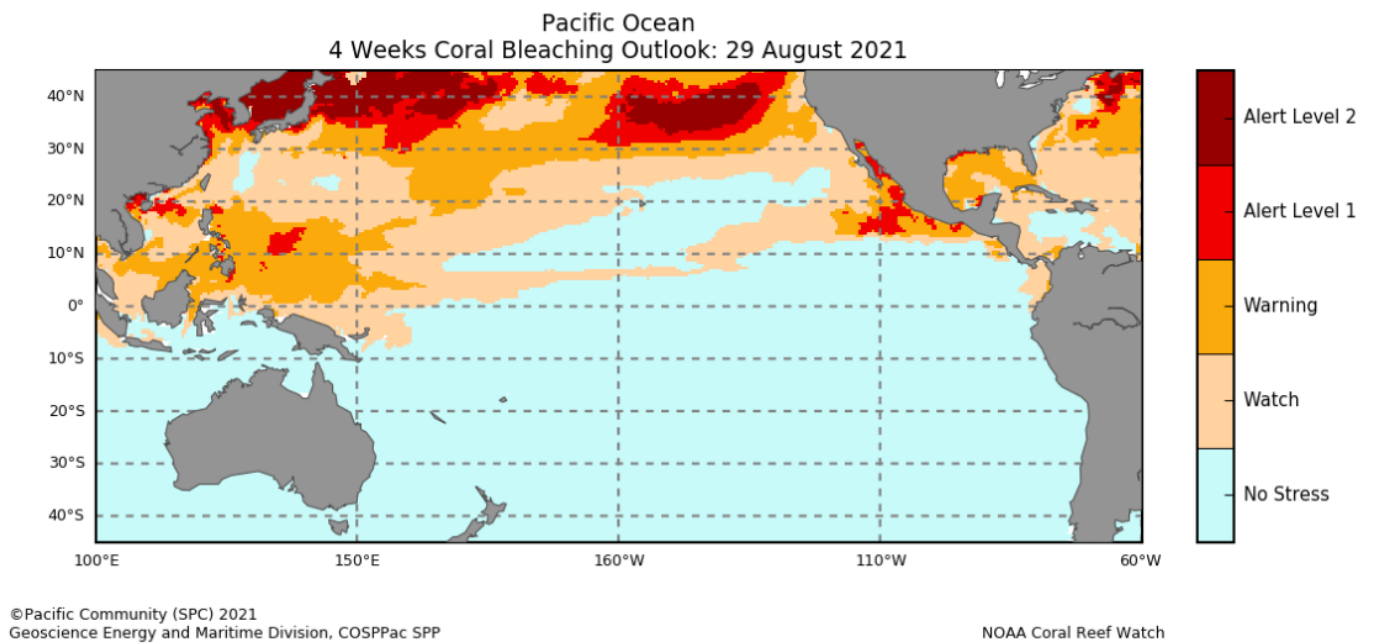
*Both monthly and seasonal outlooks for Kiribati show a significant sea surface heights difference of -0.03 to 0.6 metres. This additional sea level anomaly needs to be taken into account when communicating high tides to the public as the highest tide for Kiribati is in November.*

**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:  $X \geq 35$

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



#### 4-weeks Coral Bleaching statement

*The outlook shows no stress of coral bleaching for most of Kiribati with Northern most parts of Gilbert Islands on 'watch' warning.*

**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:  $X \geq 35$

**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	6th July	Government Sectors, Non- Government Organisations, Fisheries (coastal and offshore) sector, SPREP, General Public and internal staffs	240	45	73
EAR Watch	7th July	Government Sectors, Non- Government Organisations, Fisheries (coastal and offshore) sector, SPREP, General Public and internal staffs	118	45	73
Monthly media release	7th July	Media experts	44	25	19
Ocean Outlook	6th July	Government Sectors, Non- Government Organisations, Fisheries (coastal and offshore) sector, SPREP, General Public and internal staffs	240	45	73
<b>Total</b>			<b>284</b>	<b>70</b>	<b>92</b>

Note: 122 from the total number of participants for Climate bulletins (240) are from the Line group, however, we couldn't identify the number of females and males.

**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:  $X \geq 35$