

# Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 187

Country: Kiribati

## Part 1: Recent climate

**TABLE 1: Monthly Rainfall**

Station (include data period)	Jan-2023	Feb-2023	Mar-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Beru (1932-2023)	15.5	18.4	1.4	26.0	137.0	55.3	6/67
Butaritari (1931-2023)	173.1	257.9	240.4	187.4	402.0	282.0	37/86
Kanton (1937-2023)				19.2	64.9	33.6	
Kiritimati (1921-2023)	32.7	14.8	81.3	71.2	153.3	95.0	38/98
Tarawa (1950-2023)	120.6	135.2	76.5	112.8	270.9	171.0	21/76
Arorae (1950-2023)	12.7	5.5	24.0	41.0	190.3	86.5	18/57

**TABLE 2: Three-month Total Rainfall for January to March 2023**

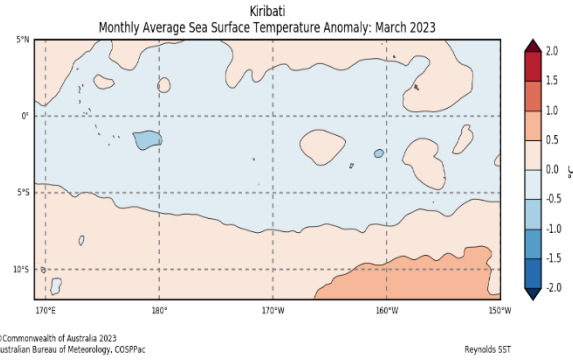
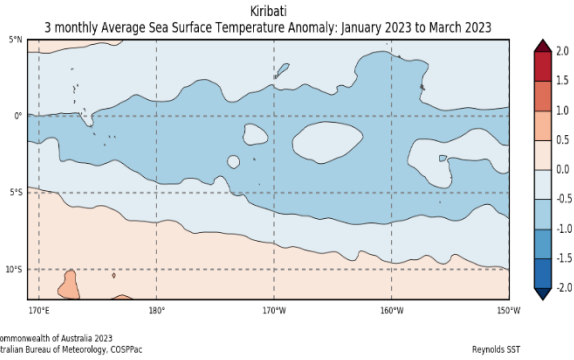
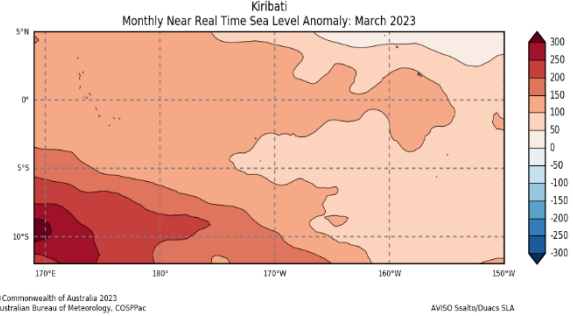
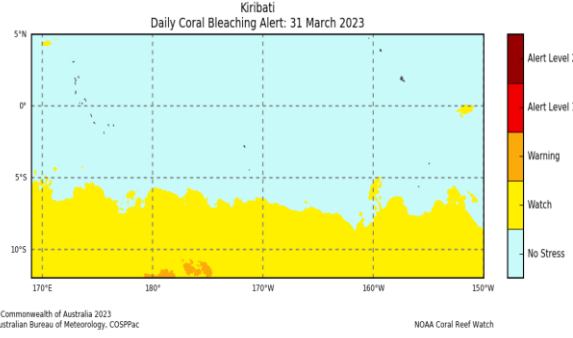
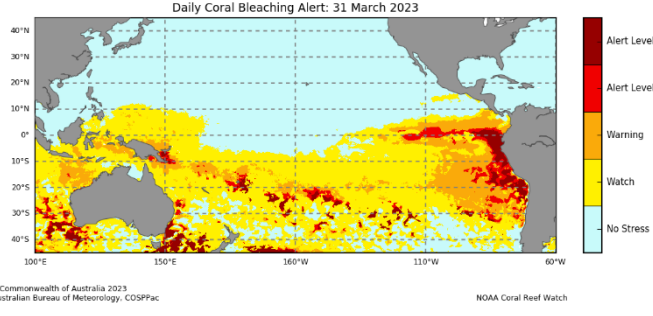
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Beru (1932-2023)	35.3	Below normal	130.0	493.0	280.6	10/67
Butaritari (1931-2023)	671.4	Below normal	676.5	1119.0	829.7	29/86
Kanton (1937-2023)			45.3	215.8	111.9	
Kiritimati (1921-2023)	128.8	Normal	104.7	278.5	197.0	30/97
Tarawa (1950-2023)	332.3	Below normal	345.7	937.6	647.4	25/76
Arorae (1950-2023)	42.2	Below normal	157.0	669.0	393.0	7/56

Part 1i. Monthly and Seasonal Outlooks for May and May to July 2023

<div>Monthly: May</div> <div>Rainfall (Image 1)</div> <div><div>Tercile rainfall probabilities for May 2023</div><p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p><p>Model run: 08/04/2023 Issued: Map not issued</p></div>	<div>Seasonal: May to July</div> <div>Rainfall (Image 2)</div> <div><div>Tercile rainfall probabilities for May to July 2023</div><p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p><p>Model run: 08/04/2023 Issued: Map not issued</p></div>
<div>Monthly Maximum temperature (Image 3):</div> <div><div>Tercile maximum temperature probabilities for May 2023</div><p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p><p>Model run: 08/04/2023 Issued: Map not issued</p></div>	<div>Seasonal maximum temperature (Image 4):</div> <div><div>Tercile maximum temperature probabilities for May to July 2023</div><p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p><p>Model run: 08/04/2023 Issued: Map not issued</p></div>
<div>Monthly minimum temperature (Image 5):</div> <div><div>Tercile minimum temperature probabilities for May 2023</div><p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p><p>Model run: 08/04/2023 Issued: Map not issued</p></div>	<div>Seasonal minimum temperature (Image 6):</div> <div><div>Tercile minimum temperature probabilities for May to July 2023</div><p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p><p>Model run: 08/04/2023 Issued: Map not issued</p></div>

Part 2: Recent Ocean Observation

Monthly/Three months: March and January to March 2023

<p><b>Monthly: March</b></p> <p><b>Sea Surface Temperature (Image 1):</b></p> 	<p><b>Last three months: January to March 2023:</b></p> <p><b>Sea Surface Temperature (Image 4):</b></p> 
<p><b>Sea level (Image 2):</b></p> 	
<p><b>Daily coral bleaching alert (Image 3):</b></p> 	

Part 2i. Monthly and Seasonal Outlooks for May and May to July 2023

Monthly: May	Seasonal: May to July
<p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for May 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2009M), version 11. Available online at <a href="http://www.marinegions.org/">http://www.marinegions.org/</a></p> <p>Model run: 10/04/2023 Issued: 12/04/2023</p>	<p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for May to July 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2009M), version 11. Available online at <a href="http://www.marinegions.org/">http://www.marinegions.org/</a></p> <p>Model run: 10/04/2023 Issued: 12/04/2023</p>
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for May 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2009M), version 11. Available online at <a href="http://www.marinegions.org/">http://www.marinegions.org/</a></p> <p>Model run: 10/04/2023 Issued: 12/04/2023</p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for May to July 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2009M), version 11. Available online at <a href="http://www.marinegions.org/">http://www.marinegions.org/</a></p> <p>Model run: 10/04/2023 Issued: 12/04/2023</p>
<p>4-week Coral Bleaching (Image 9):</p> <p>Kiribati 4 Weeks Coral Bleaching Outlook: 07 May 2023</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 07 May 2023</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

## Summary Statement

### Monthly and last three months: March 2023/January to March 2023 statement

March rainfall was below normal at Beru and Arorae, normal at Butaritari and Kiritimati while Tarawa received above normal rainfall. Beru posted its 6<sup>th</sup> driest January to March.

For the three-month period, below normal rainfall was received at most stations, the exception being Kiritimati where normal rainfall observed. Arorae recorded its 7<sup>th</sup> driest on record.

## Part 1i. Monthly and Seasonal Outlooks for May and May to July 2023

### Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for May is likely or very likely to be above normal over the whole country except for Southern parts of the Line group which is likely to be below normal to near-normal rainfall.

The rainfall for May to July is very likely to be above normal over the Gilbert group, Northern Phoenix and Line groups. However, the Southern parts of the Phoenix and Line groups are very likely to be below normal to near-normal rainfall.

Maximum and minimum temperatures during May and May to July are very likely to be above normal for all Kiribati groups.

## Part 2: Recent Ocean summary statement

### Monthly and last three months: March 2023/January to March 2023

March ocean temperatures for all the Kiribati groups were 0.0 to -0.5°C near normal.

Averaged over January to March 2023, ocean temperatures for all the Kiribati groups were at -1.0°C below normal.

March sea levels around Kiribati were 0mm to 150mm above normal.

Coral bleaching alert shows no thermal stress for Kiribati.

## Part 2i. Monthly and Seasonal Outlooks for May and May to July 2023

### Ocean Variable statement

May ocean temperatures around Kiribati are predicted to be 0.4° to 1.2°C above normal.

Averaged over May to July, ocean temperatures around Kiribati are predicted to be 0.4 to 2.0°C above normal.

May and May to July Sea levels around the Gilbert, Northern Phoenix and Northern Line groups are predicted to be 30mm to 100mm above normal. Below normal sea levels are predicted for Southern Phoenix and Southern Line groups ranging from -30mm to -100mm below normal.

The 4-weeks coral bleaching outlook shows that Northern Gilbert group will be on warning level while the rest of the Islands will be on watch level.

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

<b>Product</b>	<b>Date: March 2023</b>	<b>Stakeholder</b>	<b>Total Number of Participants</b>	<b>Number of male</b>	<b>Number of female</b>
Climate Bulletin	15 <sup>th</sup>	Government and Non-Government Organisations and Public subscribed to the products	118	45	73
EAR Watch	15th	Island Council Mayors & Clerks, Drought Committee members, KMS Staff	62	35	27
Media release	15th	National Media and KMS Staff	53	23	30
Ocean Outlook	15th	Government and Non-Government Organisations and Public subscribed to the products	118	45	73
<b>Total</b>			<b>233</b>	<b>103</b>	<b>130</b>