

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 183

Country: Kiribati

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Sep-2022	Oct-2022	Nov-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Beru (1932-2022)	14.7	16.1	0.1	20.7	68.2	36.7	6/66
Butaritari (1931-2022)	186.9	159.8	23.2	110.0	215.3	162.1	9/85
Kanton (1937-2022)				3.8	24.6	9.9	
Kiritimati (1921-2022)	4.0	63.0	0.9	4.0	21.0	11.0	10/89
Tarawa (1950-2022)	92.5	103.3	20.2	41.8	128.9	69.0	15/75
Arorae (1950-2022)	16.6	8.3	1.4	29.6	111.0	53.0	6/56

TABLE 2: Three-month Total Rainfall for September to November 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Beru (1932-2022)	30.9	Below normal	73.0	221.7	119.0	5/65
Butaritari (1931-2022)	369.9	Below normal	389.3	582.6	482.0	28/85
Kanton (1937-2022)			50.5	128.5	77.0	
Kiritimati (1921-2022)	67.9	Above normal	22.0	59.7	45.2	65/88
Tarawa (1950-2022)	216.0	Normal	159.0	367.0	256.5	34/75
Arorae (1950-2022)	26.3	Below normal	140.4	347.3	224.3	1/55

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

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

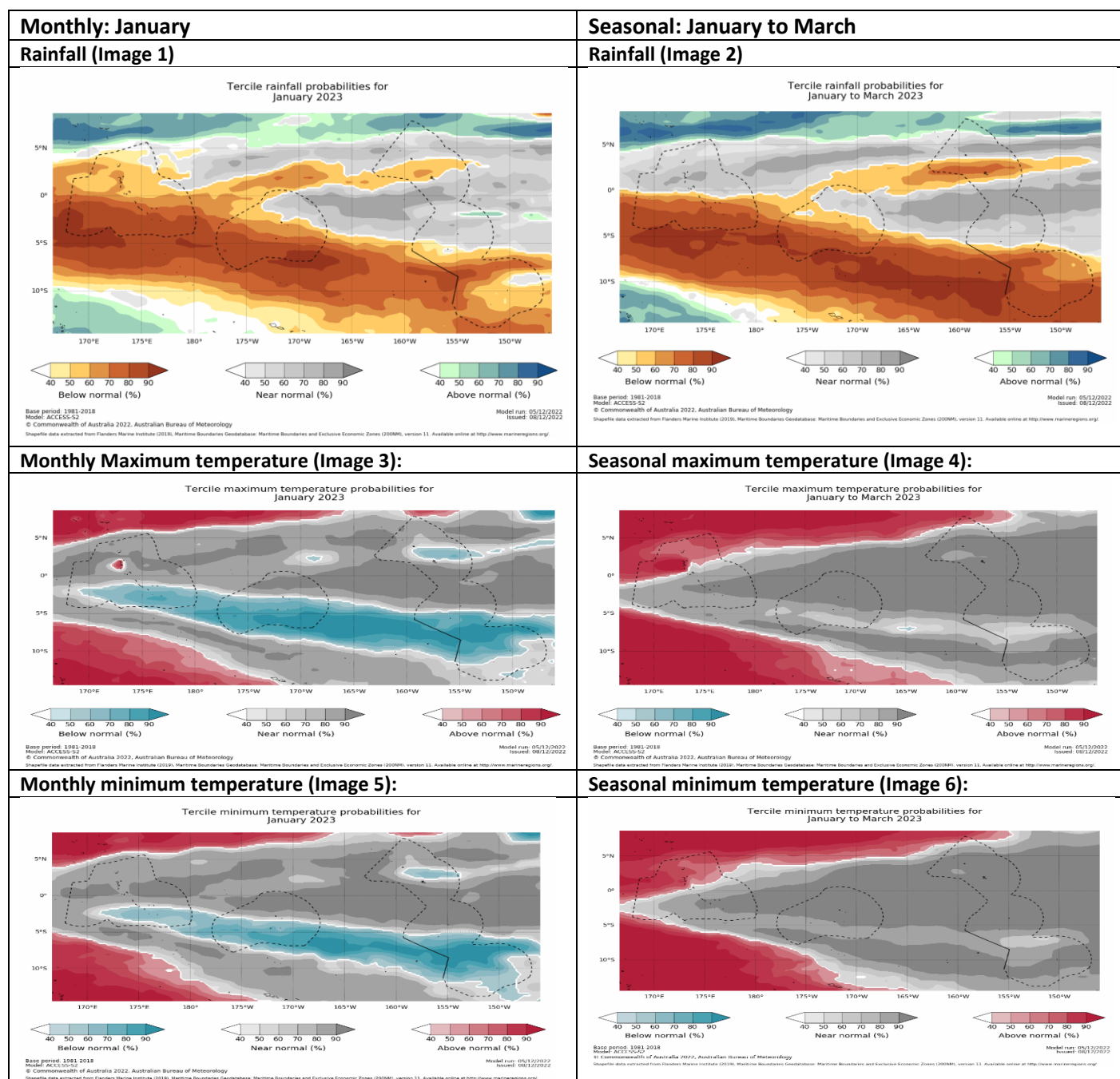
Moderate $5 \leq X < 10$

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 January and January to March 2023



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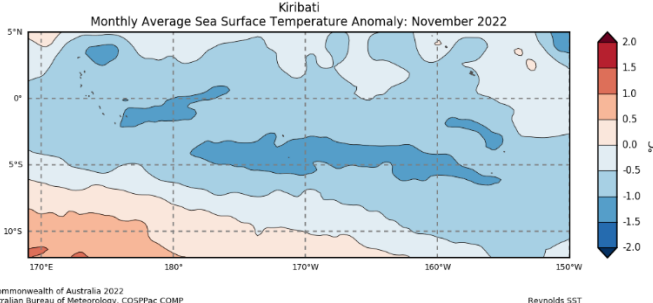
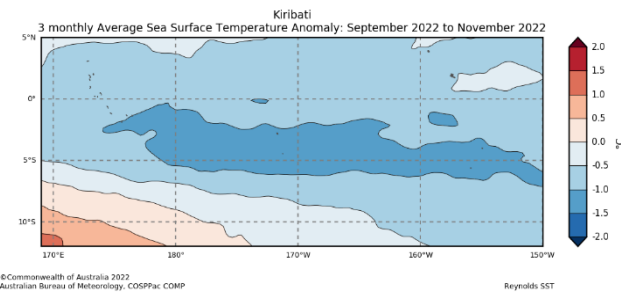
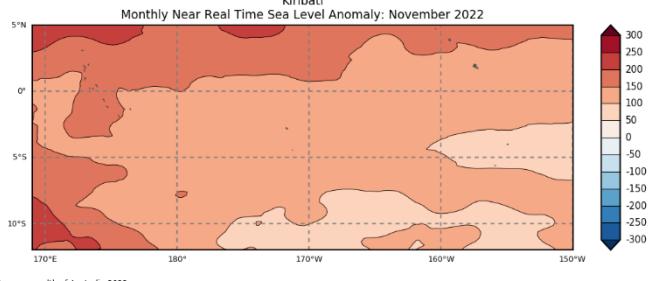
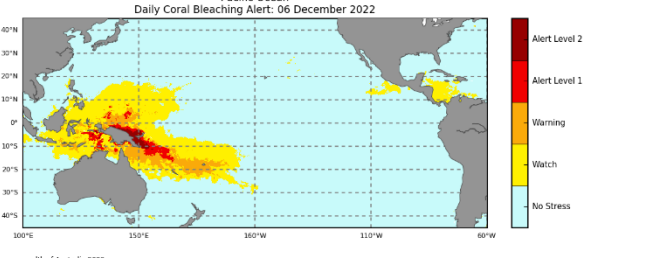
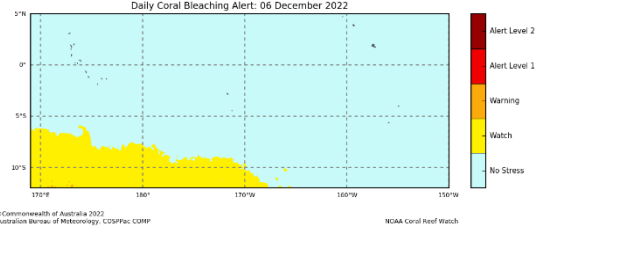
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Part 2: Recent Ocean Observation

Monthly/Three months: November 2022 and September to November 2022

Monthly: November	Last three months: September to November 2022:
<p>Sea Surface Temperature (Image 1):</p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP Reynolds SST</p>	<p>Sea Surface Temperature (Image 4):</p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP Reynolds SST</p>
<p>Sea level (Image 2):</p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP AVISO SeaLands/Duacs SLA</p>	
<p>Daily coral bleaching alert (Image 3):</p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP NOAA Coral Reef Watch</p>	 <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP NOAA Coral Reef Watch</p>

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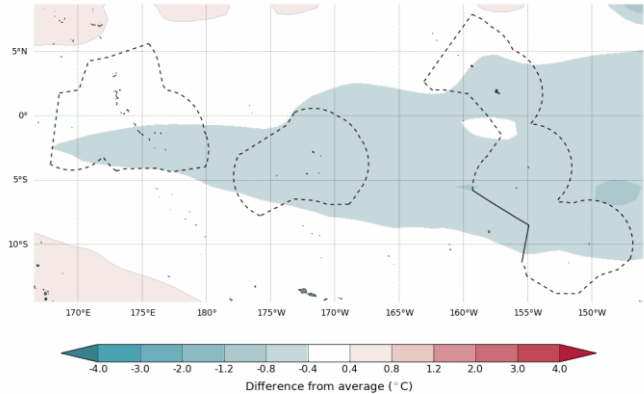
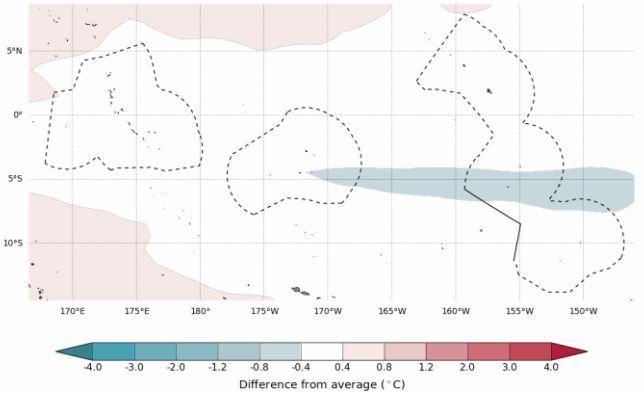
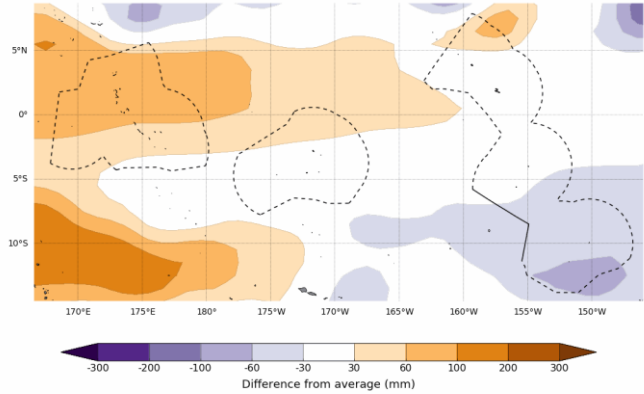
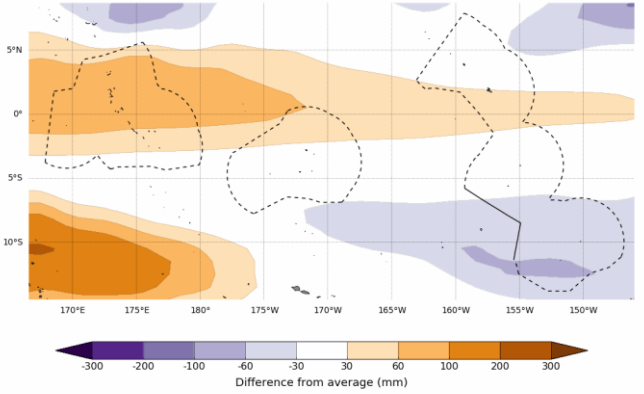
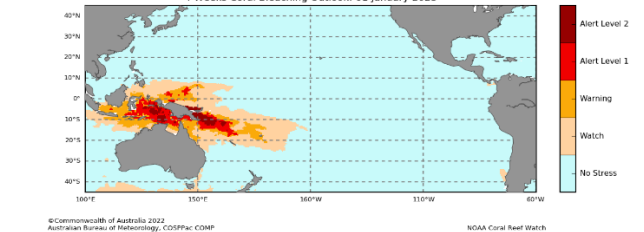
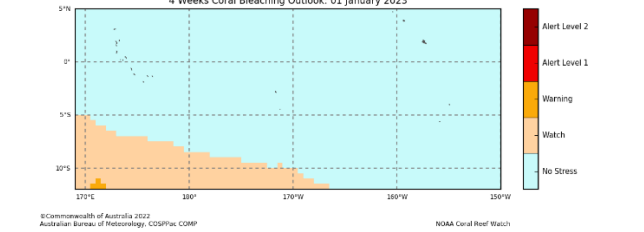
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Part 2i. Monthly and Seasonal Outlooks for January and January to March 2023

Monthly: January	Seasonal: January to March
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<div><p>Difference from average sea surface temperature forecast for January 2023</p><p>Difference from average (°C)</p><p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, 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 http://www.maritimesg.org/</p><p>Model run: 10/12/2022 Issued: 12/12/2022</p></div>	<div><p>Difference from average sea surface temperature forecast for January to March 2023</p><p>Difference from average (°C)</p><p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, 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 http://www.maritimesg.org/</p><p>Model run: 10/12/2022 Issued: 12/12/2022</p></div>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<div><p>Difference from average sea surface height forecast for January 2023</p><p>Difference from average (mm)</p><p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, 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 http://www.maritimesg.org/</p><p>Model run: 10/12/2022 Issued: 12/12/2022</p></div>	<div><p>Difference from average sea surface height forecast for January to March 2023</p><p>Difference from average (mm)</p><p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, 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 http://www.maritimesg.org/</p><p>Model run: 10/12/2022 Issued: 12/12/2022</p></div>
4-week Coral Bleaching (Image 9):	
<div><p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 01 January 2023</p><p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p><p>NOAA Coral Reef Watch</p></div>	<div><p>Kiribati 4 Weeks Coral Bleaching Outlook: 01 January 2023</p><p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p><p>NOAA Coral Reef Watch</p></div>

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Summary Statement

Monthly and last three months: November 2022/September to November 2022 statement

Below normal rainfall was received at all Kiribati Islands for the month of November 2022. Beru recorded its sixth driest November on record.

For the three-month period, rainfall was above normal at Kiritimati, normal at Tarawa, while Beru, Butaritari and Arorae recorded below normal rainfall. Arorae recorded its driest September to November on record, while Beru had its fifth driest.

Kanton rainfall data is not available.

Part 1i. Monthly and Seasonal Outlooks for January and January to March 2023

Monthly /Seasonal rainfall and temperature Outlook statements

Rainfall for January is very likely to be below normal over most parts of the Kiribati region. The main exception is the Central Line Group where near-normal rainfall is likely, but near-normal is also likely in the far north of the Gilbert and Line Islands, as well as in northern parts of the Phoenix Group.

Rainfall for January to March is very likely to be below normal over most parts of southern Gilbert Group, Phoenix Group and Northern and Southern of the Line Group. However, there are some parts in the northern Gilbert and Phoenix Group, including the northern and central Line Group where the rainfall is likely to be near-normal.

Maximum and minimum temperatures for January are very likely to be near-normal for most northern regions of the Kiribati island groups. In the southern parts of each group, temperatures are likely or very likely to be below normal.

For January to March, the maximum and minimum temperatures are very likely to be near-normal over the Kiribati region, except for the northern parts of Gilbert group where temperatures are very likely to be above normal.

Part 2: Recent Ocean summary statement

Monthly and last three months: November/September to November 2022

The ocean temperature for November was below average ranging from -1.5 to -0.5 degrees across the Kiribati region.

Sea levels for November was above normal at utmost 200mm.

Coral bleaching alert shows no thermal stress.

Part 2i. Monthly and Seasonal Outlooks for January and January to March 2023

Ocean Variable statement

The sea surface temperature outlook for January anticipates below normal of utmost -0.8 degrees in southern parts of the Gilbert group, and whole Phoenix region including Line islands Group.

The seasonal sea surface temperature outlook for January to March expects near-normal degrees over the Kiribati region, except for central Line Islands Group and western Phoenix group with below normal of utmost -0.8 degrees.

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The monthly sea level outlook for January shows above normal sea level differences of utmost 60mm to 100mm over the northern Gilbert islands. However, the southern Line Islands reveals below normal differences of utmost -60mm. The rest of the islands in Kiribati region show near normal sea level height differences.

The 4-week coral bleaching alert predicts no thermal stress.

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

Product	Date: November 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	11 th	Government and Non-Government Organisations and Public subscribed to the products	118	45	73
EAR Watch	17 th	KMS staff	9	3	6
Media Release	11 th	National Media and KMS Staff	53	23	30
Ocean Outlook	11 th	Government and Non-Government Organisations and Public subscribed to the products	118	45	73
Total			180	71	109

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