

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 177

Country: Kiribati

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Mar-2022	Apr-2022	May-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Beru (1932-2022)	30.6	88.3	9.2	40.9	98.0	69.2	7/66
Butaritari (1931-2022)	179.4	171.4	68.7	217	326.2	302.1	4/85
Kanton (1937-2022)							
Kiritimati (1921-2022)	11.0	39.1	18.7	30.3	107.1	59.5	23/98
Tarawa (1950-2022)	68.4	9.5	30.4	96.7	170.4	140.4	6/75
Arorae (1950-2022)	6.8	30.2	2.7	60.0	153.0	101.0	1/56

TABLE 2: Three-month Total Rainfall for March to May 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Beru (1932-2022)	128.1	Below normal	158.7	380.0	264.0	19/65
Butaritari (1931-2022)	419.5	Below normal	746.4	1087.7	942.6	8/85
Kanton (1937-2022)						
Kiritimati (1921-2022)	68.8	Below normal	303.1	470.7	368.0	6/97
Tarawa (1950-2022)	108.3	Below normal	329.8	672.7	503.6	4/75
Arorae (1950-2022)	39.7	Below normal	249.7	520.0	355.0	1/54

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

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

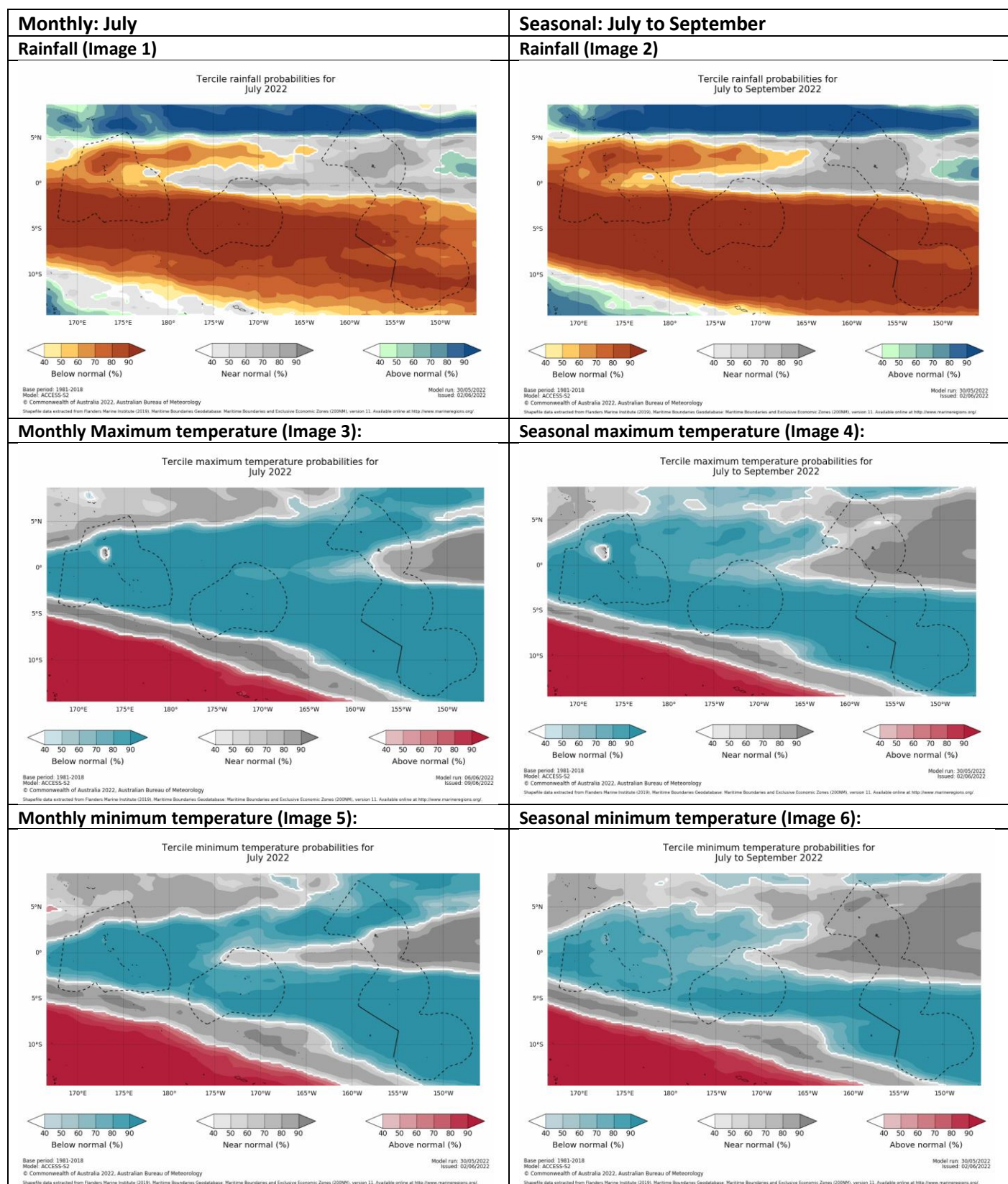
Moderate $5 \leq X < 10$

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 July and July to September 2022



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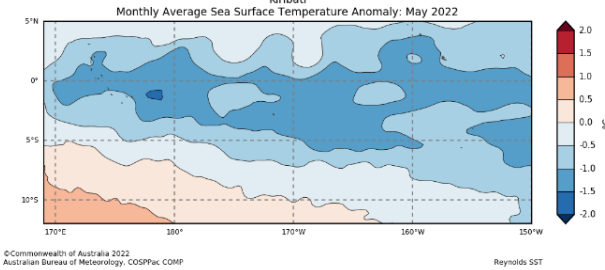
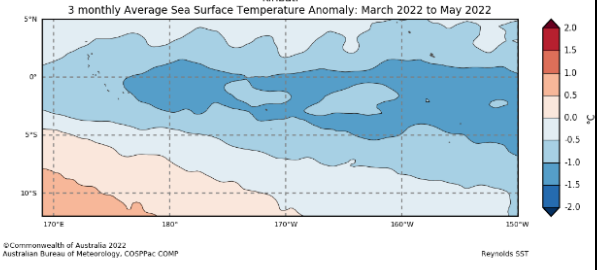
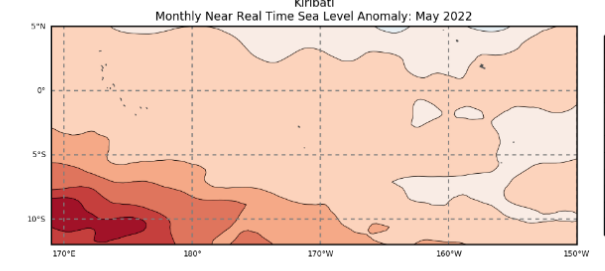
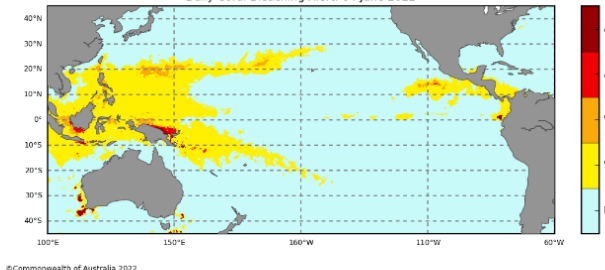
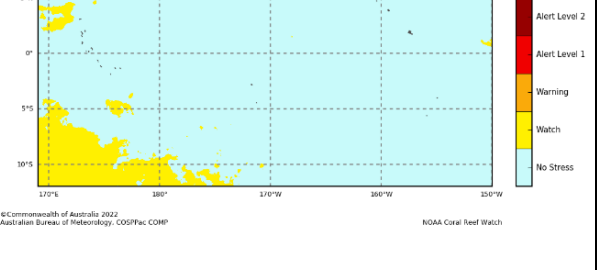
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Part 2: Recent Ocean summary statement

Monthly: May 2022

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

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Part 2i. Monthly and Seasonal Outlooks for July and July to September 2022

Monthly: July	Seasonal: July to September
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for July 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2000M), version 11. Available online at http://www.marinegaps.org/</p> <p>Model run: 11/06/2022 Issued: 13/06/2022</p>	<p>Difference from average sea surface temperature forecast for July to September 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2000M), version 11. Available online at http://www.marinegaps.org/</p> <p>Model run: 11/06/2022 Issued: 13/06/2022</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for July 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/05/2022 Issued: 07/06/2022</p>	<p>Difference from average sea surface height forecast for July 2022 to September 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/05/2022 Issued: 07/06/2022</p>
4-week Coral Bleaching (Image 9):	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 03 July 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>NOAA Coral Reef Watch</p>	<p>Kiribati 4 Weeks Coral Bleaching Outlook: 03 July 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>NOAA Coral Reef Watch</p>

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Summary Statement

Monthly and last three months: May 2022/March to May 2022 statement (Highly significant changes)

Below normal rainfall was received at all stations. Arorae, Butaritari, Tarawa and Beru recorded their 1st, 4th and 6th driest records for May, respectively.

For the last three months, all stations recorded below normal rainfall. Arorae, Tarawa, Kiritimati and Butaritari recorded their 1st, 4th, 6th driest for March to May records, respectively.

Part 1i. Monthly and Seasonal Outlooks for July and July to September 2022

Monthly /Seasonal rainfall and temperature Outlook statements (Highly significant changes)

Below normal rainfall is very likely for all the Kiribati region however, the northern most parts of the Line and Phoenix is very likely to be normal for next month and next 3 months.

Temperature pattern outlooks is quite similar with for next month and 3 months which is very likely to below normal for all the Kiribati region except for the northern most parts of the Line group which is very likely to be normal for the 3 months period.

Part 2: Recent Ocean summary statement

Monthly and last three months: May/March to May 2022 (Highly significant changes)

Kiribati experienced below average SST ranging from -0.5 to -1.5 degrees for the last one- and three-months periods.

For May 2022, above normal sea level differences of 50-100mm was experienced for Gilbert, Phoenix Islands, and parts of Line Islands.

Daily coral bleaching alert for 4th June indicates 'Watch' for waters near Gilbert Islands with remainder of Kiribati showing no thermal stress.

Part 2i. Monthly and Seasonal Outlooks for July and July to September 2022

Ocean Variable statement (Highly significant changes)

The monthly SST outlook reveals normal to below average SST for Kiribati with significant differences of -0.8 to -2.0 degrees over Gilbert Islands for July 2022. The seasonal SST outlook reveals normal to below average SST differences of 0.4 to -0.8 degrees.

The monthly and seasonal sea level height have a similar pattern where Gilbert and some parts of the northern Phoenix groups are expected to be above average while normal at across central Kiribati and below normal at southern parts of the Line group.

The 4-week coral bleaching alert indicating a 'watch' level for the northern Gilbert group while no thermal stress for the rest of the Kiribati groups.

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

Product	Date: May 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	6 th	Government and Non-Government Organisations and public subscribed to the products.	118	40	22
Ocean Outlook	6 th	Government and Non-Government Organisations and public subscribed to the products.	118	40	22
Media release	6 th	National Media and KMS Staff	53	23	30
Total			171	63	52

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