

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 172

Country: Kiribati

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Oct-2021	Nov-2021	Dec-2021				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Beru (1932-2021)	9.6	29.2	8.6	66.1	207.2	115.1	10/65
Butaritari (1931-2021)	8.8	50.6	95.6	170.5	326.2	251.5	10/84
Arorae (1950-2021)	31.4	29.6	62.1	76.0	281.0	147.0	16/55
Kiritimati (1921-2021)	4.2	0.6	4.3	4.2	45.1	12.5	30/87
Tarawa (1950-2021)	0.9	13.8	12.6	98.4	267.7	174.2	3/74

TABLE 2: Three-month Total Rainfall for October to December 2021

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Beru (1932-2021)	47.4	Below normal	124.0	335.9	230.0	12/64
Butaritari (1931-2021)	155.0	Below normal	459.2	722.0	547.1	5/84
Arorae (1950-2021)	123.1	Below normal	183.3	480.7	294.0	13/55
Kiritimati (1921-2021)	9.1	Below normal	24.0	69.2	46.7	15/80
Tarawa (1950-2021)	27.3	Below normal	250.3	490.0	338.0	2/74

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 February and February to April 2022

Monthly	Seasonal
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for February 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapfile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimergions.org/</p> <p>Model run: 03/01/2022 Issued: 06/01/2022</p>	<p>Tercile rainfall probabilities for February to April 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapfile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimergions.org/</p> <p>Model run: 03/01/2022 Issued: 06/01/2022</p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for February 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapfile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimergions.org/</p> <p>Model run: 03/01/2022 Issued: 06/01/2022</p>	<p>Tercile maximum temperature probabilities for February to April 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapfile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimergions.org/</p> <p>Model run: 03/01/2022 Issued: 06/01/2022</p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for February 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapfile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimergions.org/</p> <p>Model run: 03/01/2022 Issued: 06/01/2022</p>	<p>Tercile minimum temperature probabilities for February to April 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapfile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimergions.org/</p> <p>Model run: 03/01/2022 Issued: 06/01/2022</p>

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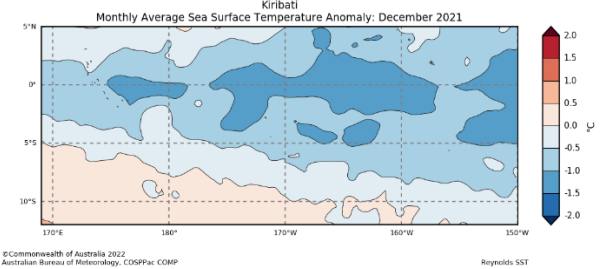
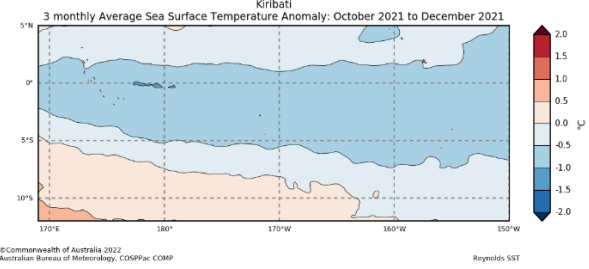
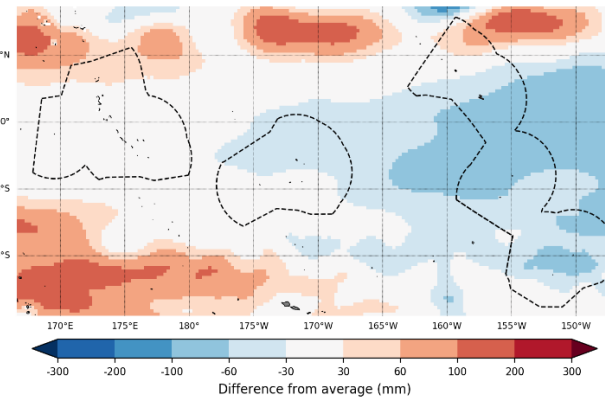
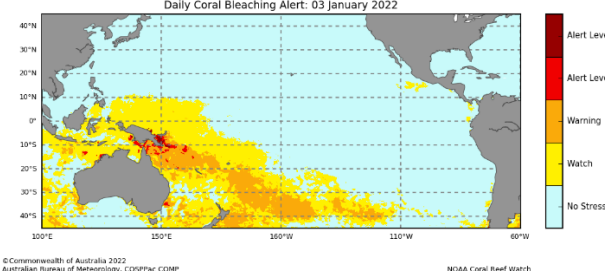
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Part 2: Recent Ocean summary statement

Monthly: December 2021

Monthly: December	Last three months: October to December 2021:
Sea Surface Temperature (Image 1):	Sea Surface Temperature (Image 4):
	
Sea level (Image 2):	
	
Daily coral bleaching alert (Image 3):	
	

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Part 2i. Monthly and Seasonal Outlooks for February and February to April 2022

Monthly: February	Seasonal: February to April
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for February 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 (2000R), version 11. Available online at http://www.marinegovernors.org/</p>	<p>Difference from average sea surface temperature forecast for February to April 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 (2000R), version 11. Available online at http://www.marinegovernors.org/</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
Left blank- map not updated	Left blank- map not updated
4-week Coral Bleaching (Image 9):	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 09 January 2022</p> <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2021 Australian Bureau of Meteorology, COSPac COMP NOAA Coral Reef Watch</p>	

Summary Statement

Monthly and last three months: December 2021/October to December statement (*Highly significant changes*)

Below normal rainfall was recorded at Arorae, Beru, Butaritari, and Tarawa while Kiritimati recorded normal rainfall for December. Beru recorded its third driest December on record. . . For October to December period, rainfall was below normal at all five sites (Arorae, Beru, Butaritari, Tarawa and Kiritimati. Taraawa and Butaritari recorded their second and fifth driest October to December period on record respectively.

Rainfall data is not available for Kanton at time of reporting.

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Part 1i. Monthly and Seasonal Outlooks for February and February to April 2022

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

The rainfall outlook for Kiribati islands for February is likely to be below normal except for northern and southern Gilbert group which near-normal rainfall is likely. Outlooks for February to April 2022 indicates below normal rainfall very likely for all of Kiribati.

Below normal temperatures are likely at Phoenix and Line islands, near normal likely at northern and southern ends of Gilbert while Tarawa and nearby islands are likely to be above normal for February and February to April 2022.

Part 2: Recent Ocean summary statement

Monthly and last three months: December/October to December 2021 (*Highly significant changes*)

Most of the Kiribati islands experienced cooler conditions throughout October to December 2021 with temperature going as low as 1.5°C. An increase in sea level was experienced on the northern side of Gilbert group by 0.2m with rest of the Kiribati group experiencing higher than normal sea level conditions. There was no thermal stress over the islands at current.

Part 2i. Monthly and Seasonal Outlooks for February and February to April 2022

Ocean Variable statement (*Highly significant changes*)

The outlook for the Kiribati islands shows cooling to continue for most of Kiribati with temperature difference of 0.4-1°C cooler than normal for February to April 2022. No stress of corals is favoured for next one and three months. Seasonal sea level outlook is not updated at time of reporting.

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

Product	Date: December 2021	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	30 th	Government and Non-Government Organisations and general public subscribed to the products.	118	40	22
Ocean Outlook	30 th	Government and Non Government Organisations and general public subscribed to the products.	118	40	22
Media Release	30 th	National Media and KMS Staffs	53	23	30
Tide Calendar and extreme spring tide table	21 st	Government and Non Government Organisations and general public subscribed to the products.	118	40	22

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Total	171	63	52
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