

Country: Republic of the Marshall Islands

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Aug-2023	Sep-2023	Oct-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Majuro (1954-2023)	281.2	159.3	278.9	292.2	397.6	357.3	21/70
Kwajalein (1945-2023)	199.6	167.6	291.1	253.9	351.7	297.4	38/79

TABLE 2: Three-month Total Rainfall for August to October 2023

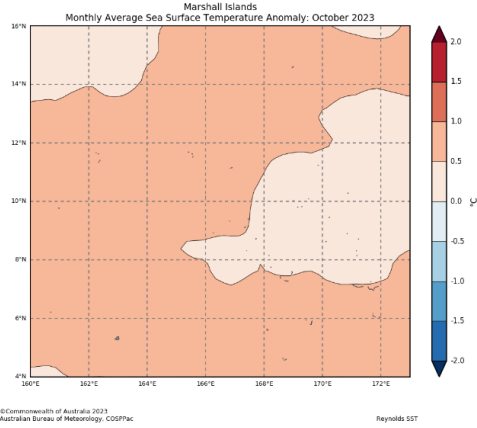
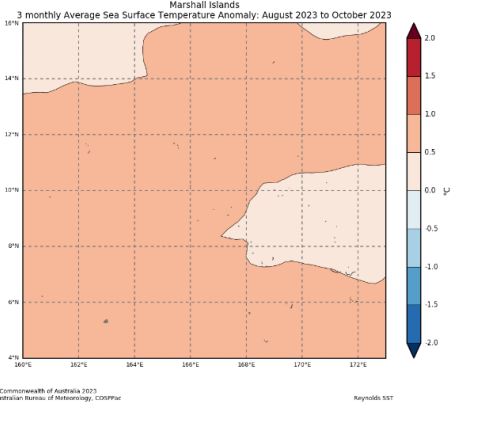
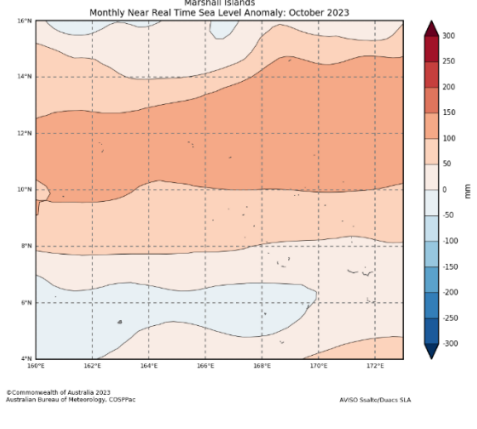
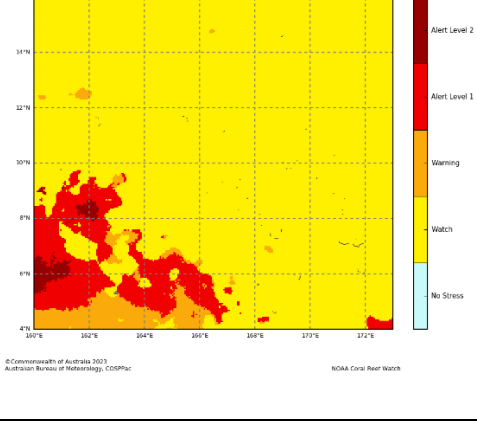
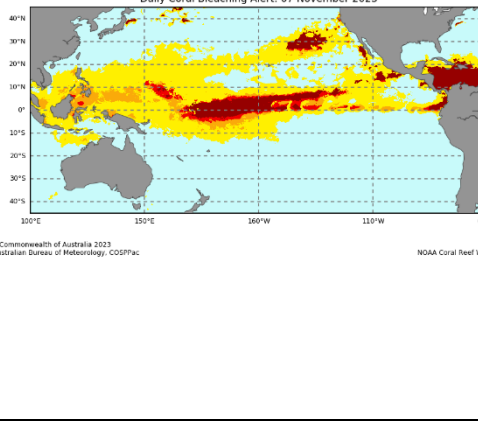
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Majuro (1954-2023)	719.4	Below normal	885.9	1037.3	972.2	6/70
Kwajalein (1945-2023)	658.3	Below normal	755.6	902.3	857.2	13/79

Part 1i. Monthly and Seasonal Outlooks for December and December 2023 to February 2024

Monthly: December	Seasonal: December to February
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for December 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023. Australian Bureau of Meteorology Shoreline data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/. Model run: 06/11/2023 Issued: 08/11/2023</p>	<p>Tercile rainfall probabilities for December 2023 to February 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023. Australian Bureau of Meteorology Shoreline data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/. Model run: 06/11/2023 Issued: 08/11/2023</p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for December 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023. Australian Bureau of Meteorology Shoreline data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/. Model run: 06/11/2023 Issued: 08/11/2023</p>	<p>Tercile maximum temperature probabilities for December 2023 to February 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023. Australian Bureau of Meteorology Shoreline data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/. Model run: 06/11/2023 Issued: 08/11/2023</p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for December 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023. Australian Bureau of Meteorology Shoreline data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/. Model run: 06/11/2023 Issued: 08/11/2023</p>	<p>Tercile minimum temperature probabilities for December 2023 to February 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023. Australian Bureau of Meteorology Shoreline data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/. Model run: 06/11/2023 Issued: 08/11/2023</p>

Part 2: Recent Ocean Observation

Monthly/Three months: October and August to October 2023

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

Part 2i. Monthly and Seasonal Outlooks for December and December 2023 to February 2024

<p>Monthly: December</p> <p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for December 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 (2006M), version 11. Available online at http://www.maritimergions.org/</p> <p>Model run: 06/11/2023 Issued: 08/11/2023</p>	<p>Seasonal: December to February</p> <p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for December 2023 to February 2024</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 (2006M), version 11. Available online at http://www.maritimergions.org/</p> <p>Model run: 06/11/2023 Issued: 08/11/2023</p>
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for December 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 (2006M), version 11. Available online at http://www.maritimergions.org/</p> <p>Model run: 06/11/2023 Issued: 08/11/2023</p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for December 2023 to February 2024</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 (2006M), version 11. Available online at http://www.maritimergions.org/</p> <p>Model run: 06/11/2023 Issued: 08/11/2023</p>
<p>4-week Coral Bleaching (Image 9):</p> <p>Marshall Islands 4 Weeks Coral Bleaching Outlook: 03 December 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: 03 December 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: October 2023/August to October 2023 statement

Rainfall for October and over August to October was well below normal at both Majuro. For Kwajalein, normal rainfall was recorded during October and below normal rainfall was recorded during August to October. Majuro had its sixth driest August-October on record.

Part 1i. Monthly and Seasonal Outlooks for December and December 2023 to February 2024

Monthly /Seasonal rainfall and temperature Outlook statements

December rainfall is likely to be below normal over most parts of the RMI, including at Majuro and Kwajalein. In the far northwestern part of the country, however, the outlook shows above normal rainfall is likely. The rainfall for December 2023 to February 2024 is also very likely to be below normal over the most parts of the country, but in the far north of the country, above normal is likely to very likely.

Maximum and minimum temperatures during December and averaged over December 2023 to February 2024 are likely or very likely to be above normal across the RMI.

Part 2: Recent Ocean summary statement

Monthly and last three months: October 2023/August to October 2023

The ocean temperatures for October near the islands at south, west, and northern RMI including Kwajalein, were above normal ranging from 0.5 to 1.0°C. The islands to the east including Majuro, ocean temperatures were near normal ranging from 0.0 to 0.5°C. Averaged over three months (August to October), ocean temperatures were near normal for Majuro, and the remaining parts of RMI including Kwajalein, ocean temperatures were 0.5 to 1.0 above normal.

Sea levels for October at the central and northern part of the RMI including Kwajalein were above normal with 50mm to 200mm. However, the islands located at the southern part of the country including Majuro, sea level were near normal.

Coral bleaching alert at WATCH status for most parts of the RMI, except for an area at the southwestern part, the status was on ALERT 1.

Part 2i. Monthly and Seasonal Outlooks for December and December to February 2024

Ocean Variable statement

December ocean temperatures across the central RMI are predicted to be at 0.4 to 0.8°C above normal, while 0.8 to 1.2°C above normal are likely for the northern and southern part of country. Averaged over December to February, the ocean temperatures across the central RMI are predicted to be at 0.4 to 0.8°C above normal, except for the northern part of the country, ocean temperatures are predicted to be at 0.8 to 1.2 above normal.

December and averaged over December to February, sea levels at the central east of the RMI are predicted to be around 60mm to 100mm above normal. However, the areas located at the south and west, sea levels are predicted to be near normal.

The coral bleaching outlook is predicted at WARNING and ALERT 1 status for areas located far southern part of the country. The remaining majority is at NO STRESS status for the next four weeks.

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

Product	Date: October 2023	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
Climate Bulletin						
EAR Watch						
Monthly Climate Briefing	10/18/23	Office of the Chief Secretary and the National Disaster Management Office	6	4	2	
Ocean Outlook						
Climate data request						
Total			6	4	2	