

Country: Republic of the Marshall Islands

Part 1: Recent climate

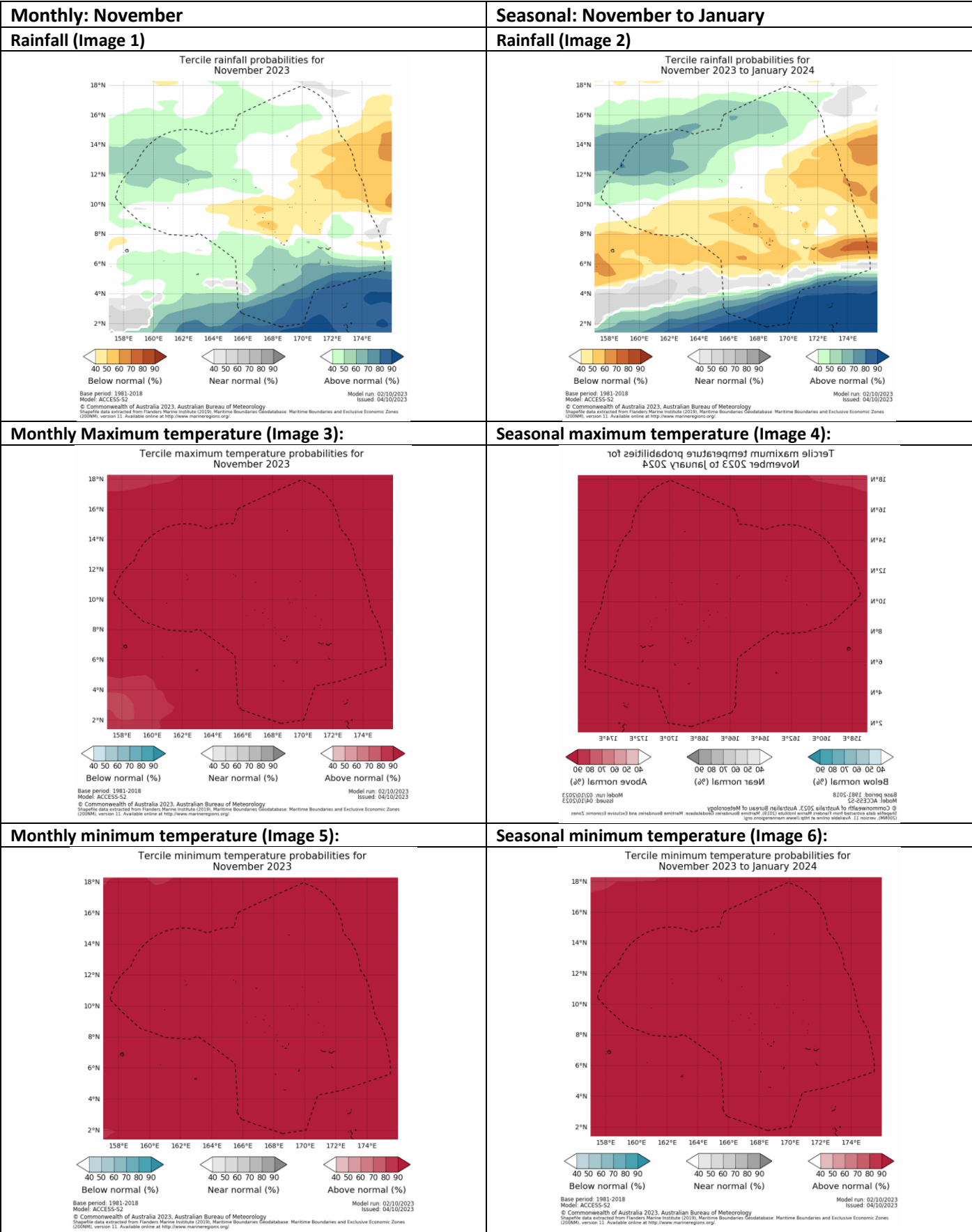
TABLE 1: Monthly Rainfall

	Jul-2023	Aug-2023	Sep-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Majuro (1954-2023)	199.9	281.2	159.3	264.0	365.2	315.2	
Kwajalein (1945-2023)	113.0	199.6	167.6	229.4	299.8	268.0	6/79

TABLE 2: Three-month Total Rainfall for July to September 2023

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
	Majuro (1954-2023)	640.4	Below normal	830.1	973.4	
Kwajalein (1945-2023)	480.2	Below normal	722.7	848.1	773.7	2/79

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

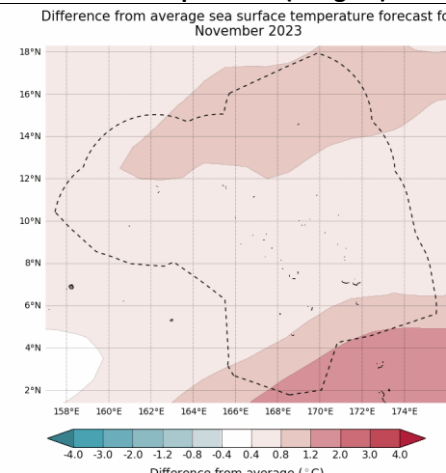
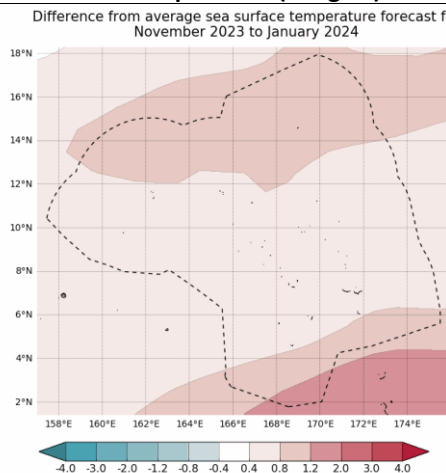
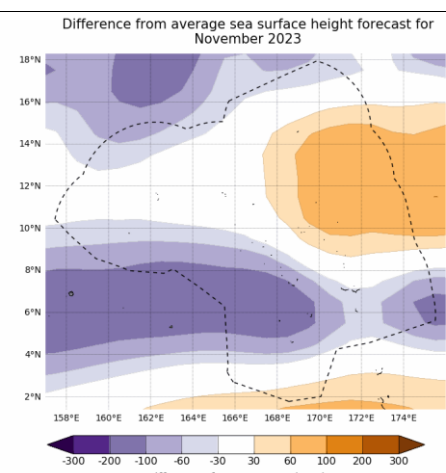
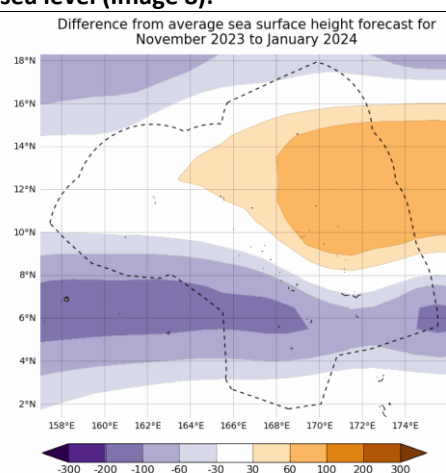
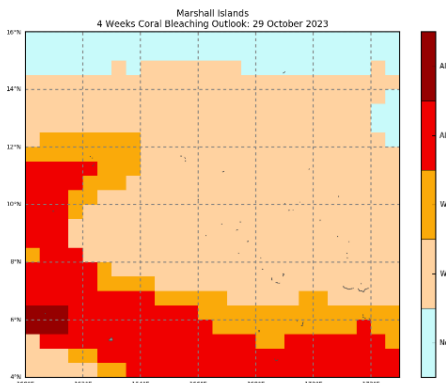
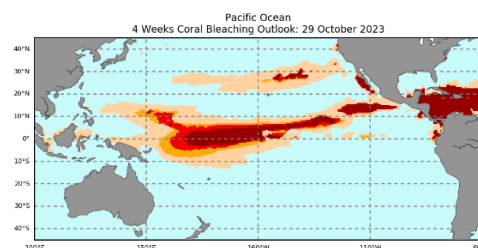


Part 2: Recent Ocean Observation

Monthly/Three months: September and July to September 2023

Monthly: September	Last three months: July to September 2023:
<div>Sea Surface Temperature (Image 1):</div> <div><p>Marshall Islands</p><p>Monthly Average Sea Surface Temperature Anomaly: September 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>	<div>Sea Surface Temperature (Image 4):</div> <div><p>Marshall Islands</p><p>3 monthly Average Sea Surface Temperature Anomaly: July 2023 to September 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>
<div>Sea level (Image 2):</div> <div><p>Marshall Islands</p><p>Monthly Near Real Time Sea Level Anomaly: September 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>AVISO SeaWiDACS SLA</p></div>	
<div>Daily coral bleaching alert (Image 3):</div> <div><p>Marshall Islands</p><p>Daily Coral Bleaching Alert: 08 October 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>	<div><p>Pacific Ocean</p><p>Daily Coral Bleaching Alert: 08 October 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>

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

Monthly: October	Seasonal: October to December
<p>Monthly sea surface temperature (Image 5):</p>  <p>Difference from average sea surface temperature forecast for November 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 (200NM), version 11. Available online at http://www.maritimeregions.org/</p> <p>Model run: 02/10/2023 Issued: 04/10/2023</p>	<p>Seasonal sea surface temperature (Image 6):</p>  <p>Difference from average sea surface temperature forecast for November 2023 to January 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 (200NM), version 11. Available online at http://www.maritimeregions.org/</p> <p>Model run: 02/10/2023 Issued: 04/10/2023</p>
<p>Monthly sea level (Image 7):</p>  <p>Difference from average sea surface height forecast for November 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 (200NM), version 11. Available online at http://www.maritimeregions.org/</p> <p>Model run: 02/10/2023 Issued: 04/10/2023</p>	<p>Seasonal sea level (Image 8):</p>  <p>Difference from average sea surface height forecast for November 2023 to January 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 (200NM), version 11. Available online at http://www.maritimeregions.org/</p> <p>Model run: 02/10/2023 Issued: 04/10/2023</p>
<p>4-week Coral Bleaching (Image 9):</p>  <p>Marshall Islands 4 Weeks Coral Bleaching Outlook: 29 October 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: 29 October 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: September 2023/July to September 2023 statement

Rainfall for September and over July to September was well below normal at both Majuro and Kwajalein. Majuro had its third driest September and July-September on record, while Kwajalein had its sixth driest September and second driest July-September.

Part 1i. Monthly and Seasonal Outlooks for November and November 2023 to January 2024

Monthly /Seasonal rainfall and temperature Outlook statements

November rainfall is likely to be above normal over the southern and northwestern parts of the RMI, including at Majuro and Kwajalein. In the central part of the country, however, the outlook shows below normal rainfall is likely.

The rainfall for November 2023 to January 2024 is likely to be above normal over northwestern RMI, and the far south of the country. In the southern and central part of the country where Majuro and Kwajalein are located, rainfall is very likely to be below normal.

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

Part 2: Recent Ocean summary statement

Monthly and last three months: September 2023/July to September 2023

The ocean temperatures for September across the whole RMI, including Majuro and Kwajalein were above normal ranging from 0.5 to 1.0°C. Averaged over three months (July to September), ocean temperatures were near normal for Majuro and Kwajalein, remaining parts of RMI ocean temperatures were 0.5 to 1.0 above normal. Sea levels for September at the central and northern part of the RMI including Kwajalein were above normal with 50mm to 250mm. However, the islands located at the southern part of the country including Majuro, sea level were near normal.

Coral bleaching alert at ALERT 1 status for southwestern parts of RMI, the remaining parts are on WATCH AND WARNING status for most part of the RMI.

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

Ocean Variable statement

November 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 November to January, 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.

November and averaged over November to January, 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 ALERT 1-2 status for areas located far south and western part of the country. The remaining majority is at WATCH status for the next four weeks.

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

Product	Date: September 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	09/20/23	Office of the Chief Secretary and the National Disaster Management Office	6	4	2	
Ocean Outlook						
Climate data request						
Total			6	4	2	