

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 197

Country: Republic of Marshall Islands

Part 1: Recent climate

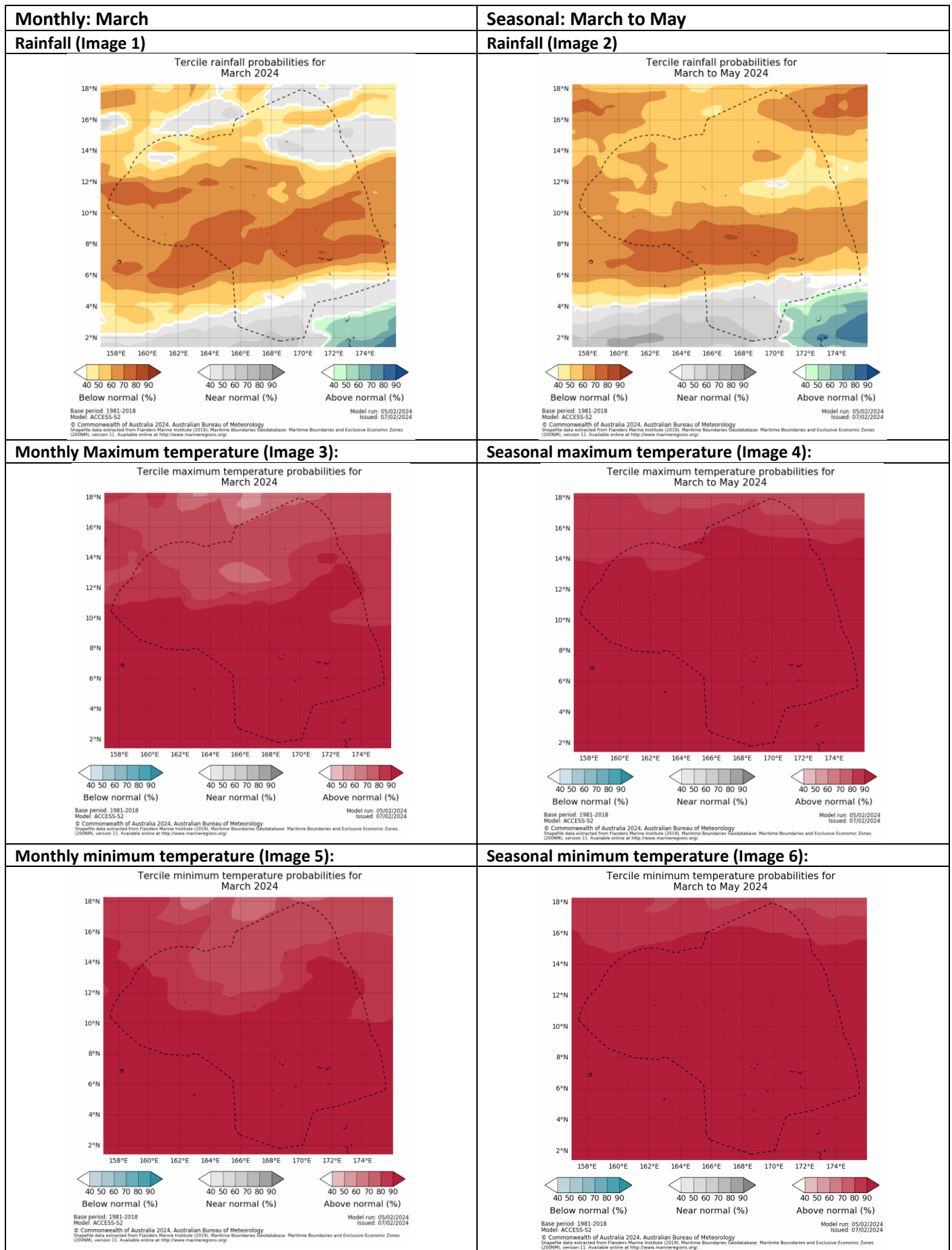
TABLE 1: Monthly Rainfall

Station (include data period)	Nov-2023	Dec-2023	Jan-2024				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Majuro (1954-2024)	343.2	202.2	111.3	155.7	238.1	206.2	13/70
Kwajalein (1945-2024)	448.3	188.5	42.2	59.3	128.9	89.4	19/80

TABLE 2: Three-month Total Rainfall for November 2023 to January 2024

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Majuro (1954-2024)	656.7	Below normal	740.1	917.5	837.0	15/70
Kwajalein (1945-2024)	679.0	Above normal	523.3	649.3	582.7	60/78

# Part 1i. Monthly and Seasonal Outlooks for March and March to May 2024

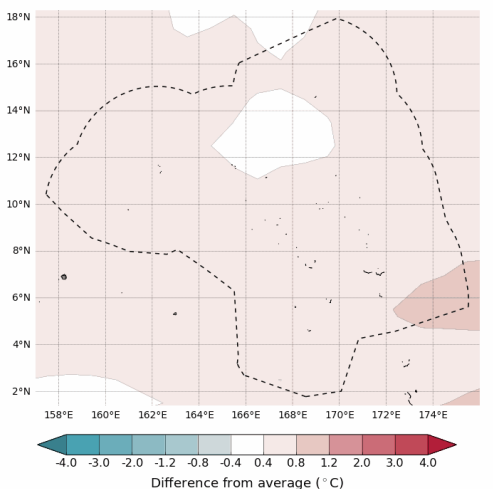
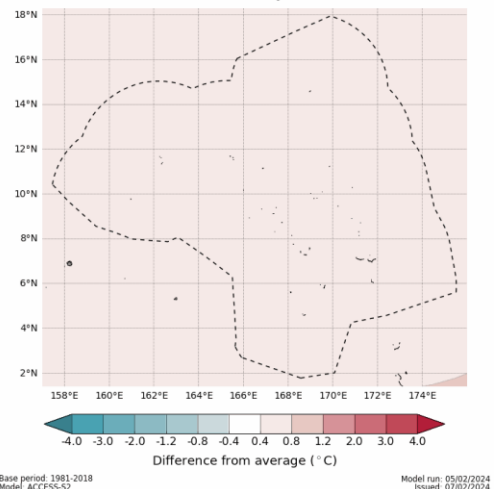
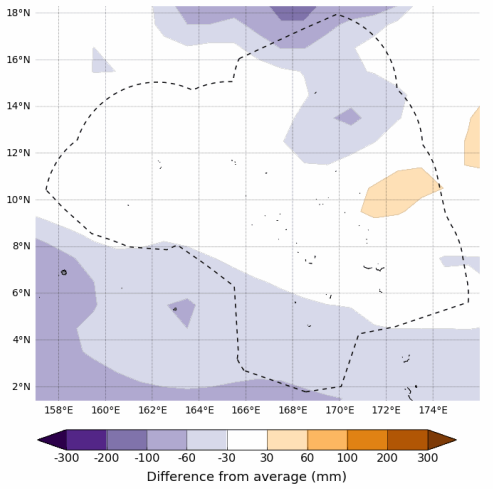
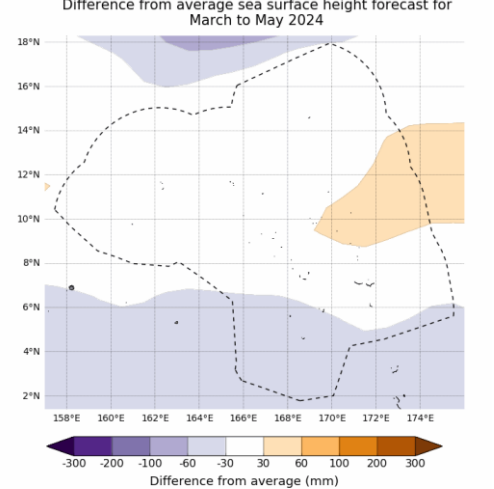
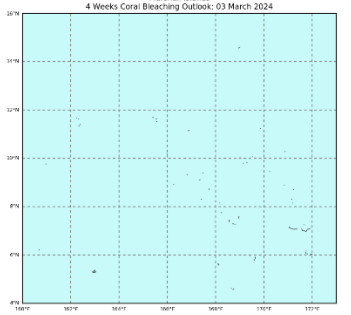
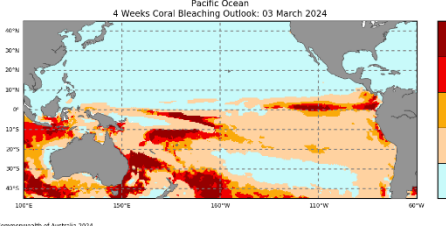


# Part 2: Recent Ocean Observation

## Monthly/Three months: January 2024 and November 2023 to January 2024

<p><b>Monthly: January 2024</b></p>	<p><b>Last three months: November 2023 to January 2024:</b></p>
<p><b>Sea Surface Temperature (Image 1):</b></p> <p>Marshall Islands Monthly Average Sea Surface Temperature Anomaly: January 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>Reynolds SST</p>	<p><b>Sea Surface Temperature (Image 4):</b></p> <p>Marshall Islands 3 monthly Average Sea Surface Temperature Anomaly: November 2023 to January 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>Reynolds SST</p>
<p><b>Sea level (Image 2):</b></p> <p>Marshall Islands Monthly Near Real Time Sea Level Anomaly: January 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>AVISO SeaLtoDuacs SLA</p>	
<p><b>Daily coral bleaching alert (Image 3):</b></p> <p>Marshall Islands Daily Coral Bleaching Alert: 07 February 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Pacific Ocean Daily Coral Bleaching Alert: 07 February 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

# Part 2i. Monthly and Seasonal Outlooks for March and March to May 2024

Monthly: March	Seasonal: March to May
<p><b>Monthly sea surface temperature (Image 5):</b></p> <p>Difference from average sea surface temperature forecast for March 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, 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 <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> <p>Model run: 05/02/2024 Issued: 07/02/2024</p>	<p><b>Seasonal sea surface temperature (Image 6):</b></p> <p>Difference from average sea surface temperature forecast for March to May 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, 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 <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> <p>Model run: 05/02/2024 Issued: 07/02/2024</p>
<p><b>Monthly sea level (Image 7):</b></p> <p>Difference from average sea surface height forecast for March 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, 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 <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> <p>Model run: 05/02/2024 Issued: 07/02/2024</p>	<p><b>Seasonal sea level (Image 8):</b></p> <p>Difference from average sea surface height forecast for March to May 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, 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 <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> <p>Model run: 05/02/2024 Issued: 07/02/2024</p>
<p><b>4-week Coral Bleaching (Image 9):</b></p> <p>Marshall Islands 4 Weeks Coral Bleaching Outlook: 03 March 2024</p>  <p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 03 March 2024</p>  <p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

## Summary Statement

### Monthly and last three months: January 2024/November 2023 to January 2024 statement

The rainfall for January was below normal at both Majuro and Kwajalein. For the past three months, rainfall was below normal at Majuro, while Kwajalein had above normal was recorded for Kwajalein.

## Part 1i. Monthly and Seasonal Outlooks for March and March to May 2024

### Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for March is likely or very likely to be below normal over most of the RMI, except the northernmost and southernmost parts, where near-normal rainfall is likely.

The rainfall for March to May is likely or very likely to be below normal over most of the RMI, apart from the far south where near-normal is likely.

Maximum and minimum temperatures during March and averaged over March to May are very likely to be above normal over the entire RMI.

## Part 2: Recent Ocean summary statement

### Monthly and last three months: January 2024/November 2023 to January 2024

January ocean temperatures around the RMI were utmost 1.0°C above normal.

Averaged over November to January, ocean temperatures around the RMI were utmost 1.0°C above normal.

January sea levels in the northern Marshalls were 100mm to 200mm above normal, while 50mm to 100mm above normal in the central and southern Marshalls.

Coral Bleaching was at “WATCH” status in the southern waters of Marshall Islands.

## Part 2i. Monthly and Seasonal Outlooks for March and March to May 2024

### Ocean Variable statement

March ocean temperatures are predicted to be 0.4 to 0.8°C above normal in most of the RMI’s water, with 0.8 to 1.2°C is predicted for a small area east to southeast of Majuro.

Averaged over March to May, ocean temperatures around the RMI are predicted to be 0.4 to 0.8°C above normal.

March sea levels around some part of the northeastern RMI are predicted to be 30mm to 60mm above normal. In the southern RMI, and some parts in the northern RMI sea levels are predicted to be 30mm to 60mm below normal, with near normal for rest of the RMI including Majuro and Kwajalein.

Averaged over March to May, sea levels around the northeastern RMI are predicted to be 30mm to 60mm above normal, while 30mm to 60mm below normal for the southern RMI. Near normal is predicted for most of the central and northern RMI.

Coral bleaching outlook for RMI predicts no thermal stress.

## IN BRIEF for Teleconference

- Rainfall was below normal for both one and three months, except Kwajalein where rainfall was above normal for the last three months.
- The rainfall outlook generally indicates below average most likely in March and March to May
- SSTs were above normal for January and November to January. The outlook predicts above normal SSTs for the next one and three months.
- Sea-surface heights (SSH) were above normal for January. The outlook predicts near-normal sea surface heights for most of RMI for March and March to May.

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

Product	Date: January 2024	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
Climate Bulletin	02/01/2024	National Climate Outlook Forum	31	28	3	
EAR Watch						
Monthly Climate Briefing	01/22/2024	Chief Secretary Office and National Disaster Management Office	6	4	2	
Ocean Outlook	02/02/2024	National Climate Outlook Forum (NCOF) Using Infographic	28	25	3	Apply Laymen's term if possible.
Climate data request						
<b>Total</b>			<b>65</b>	<b>57</b>	<b>8</b>	