

Country: Marshall Islands

Part 1: Recent climate

TABLE 1: Monthly Rainfall

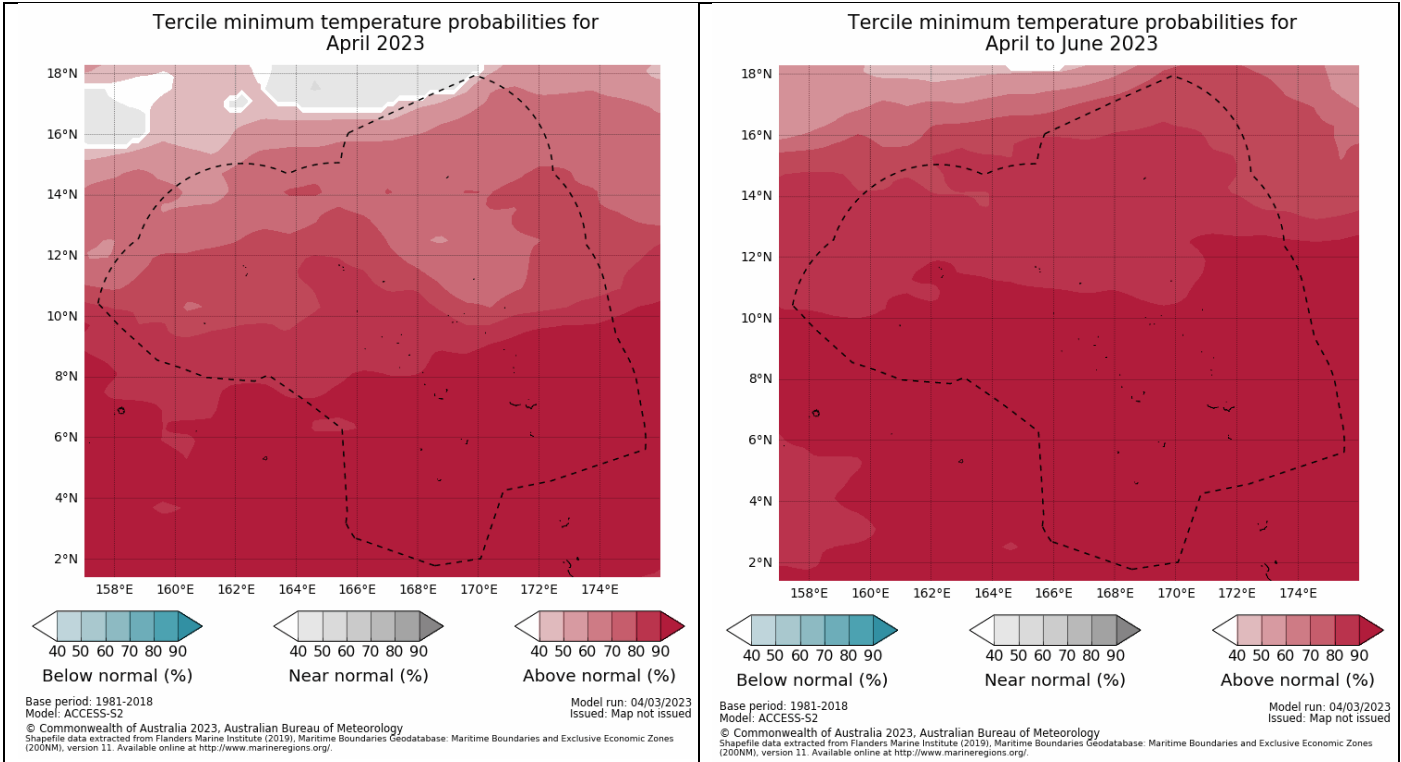
Station (include data period)	Dec-2022	Jan-2023	Feb-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Majuro (1954-2023)	261.6	308.4	241.6	111.9	239.4	172.9	49/69
Kwajalein (1945-2023)	149.4	179.8	33.5	39.2	100.1	69.1	24/79

TABLE 2: Three-month Total Rainfall for December 2022 to February 2023

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Majuro (1954-2023)	811.6	Above normal	583.8	765.4	665.7	50/69
Kwajalein (1945-2023)	362.7	Normal	307.9	437.3	392.3	37/77

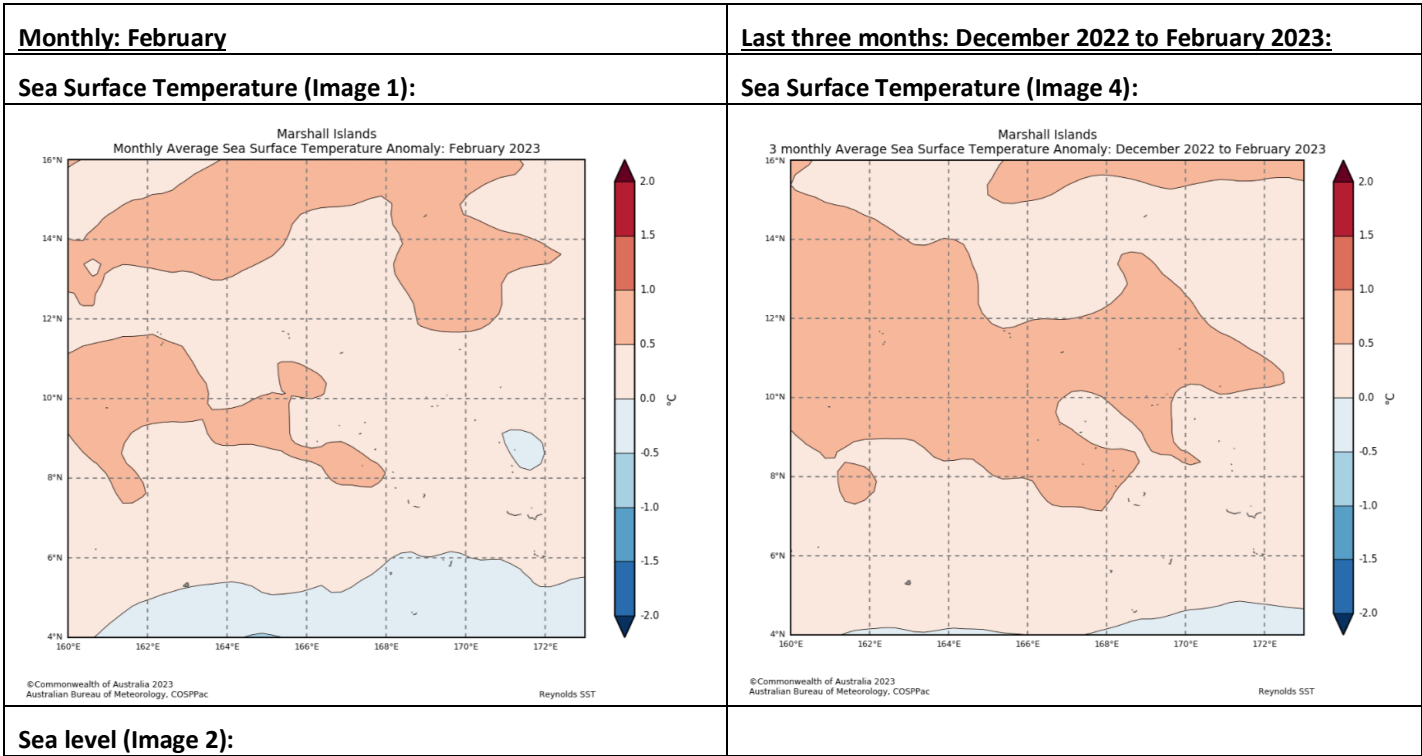
Part 1i. Monthly and Seasonal Outlooks for April and April to June 2023

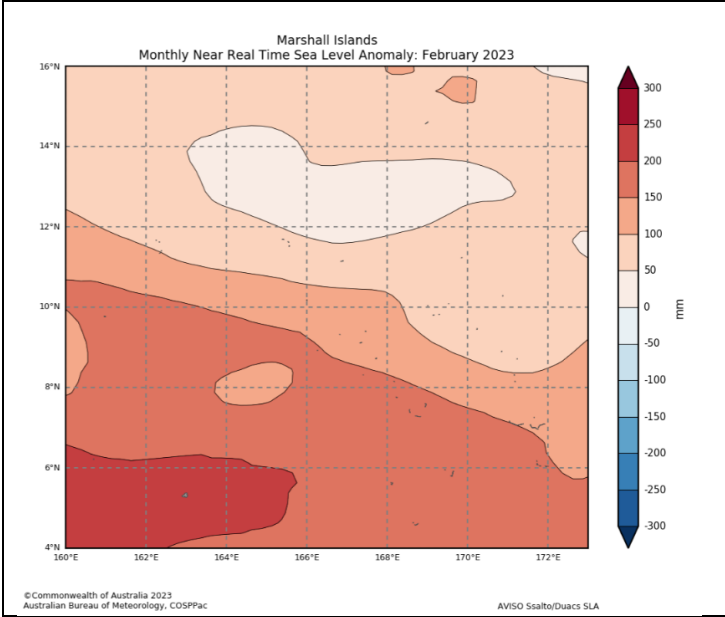
<p><b>Monthly: April</b></p> <p><b>Rainfall (Image 1)</b></p> <p>Tercile rainfall probabilities for April 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.marinerregions.org/">http://www.marinerregions.org/</a></p>	<p><b>Seasonal: April to June</b></p> <p><b>Rainfall (Image 2)</b></p> <p>Tercile rainfall probabilities for April to June 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 <a href="http://www.marinerregions.org/">http://www.marinerregions.org/</a></p>
<p><b>Monthly Maximum temperature (Image 3):</b></p> <p>Tercile maximum temperature probabilities for April 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 <a href="http://www.marinerregions.org/">http://www.marinerregions.org/</a></p>	<p><b>Seasonal maximum temperature (Image 4):</b></p> <p>Tercile maximum temperature probabilities for April to June 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 <a href="http://www.marinerregions.org/">http://www.marinerregions.org/</a></p>
<p><b>Monthly minimum temperature (Image 5):</b></p>	<p><b>Seasonal minimum temperature (Image 6):</b></p>



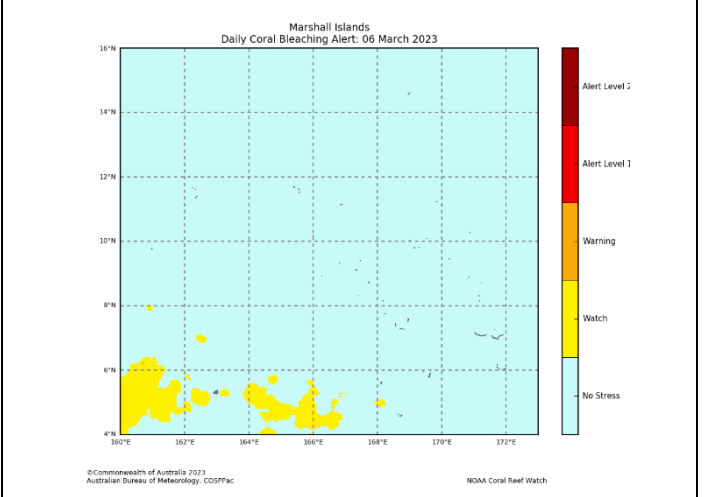
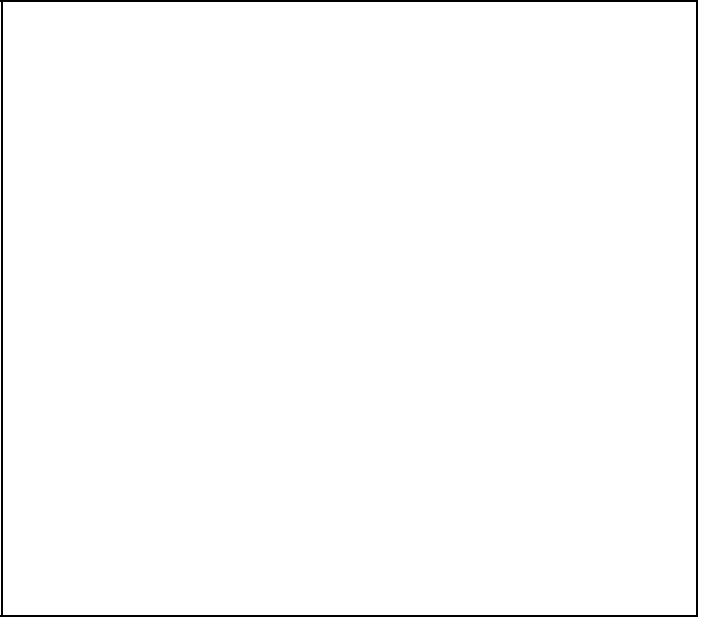
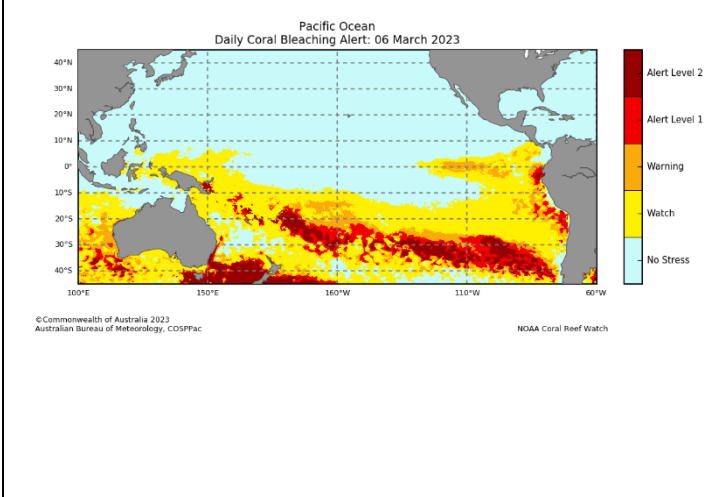
Part 2: Recent Ocean Observation

Monthly/Three months: February 2023 and December 2022 to February 2023

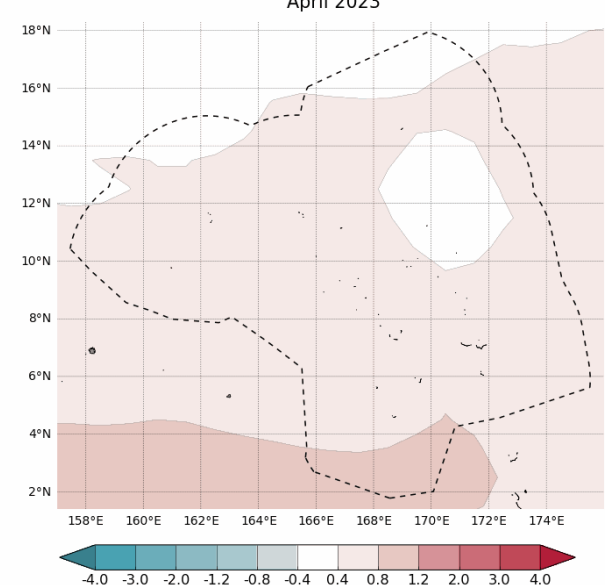
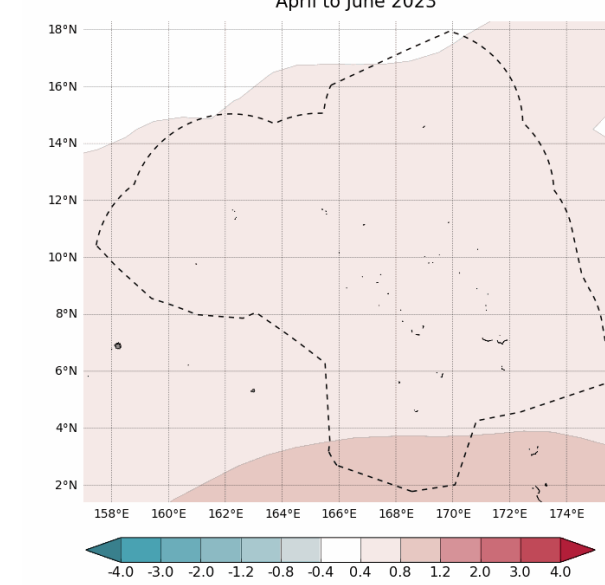
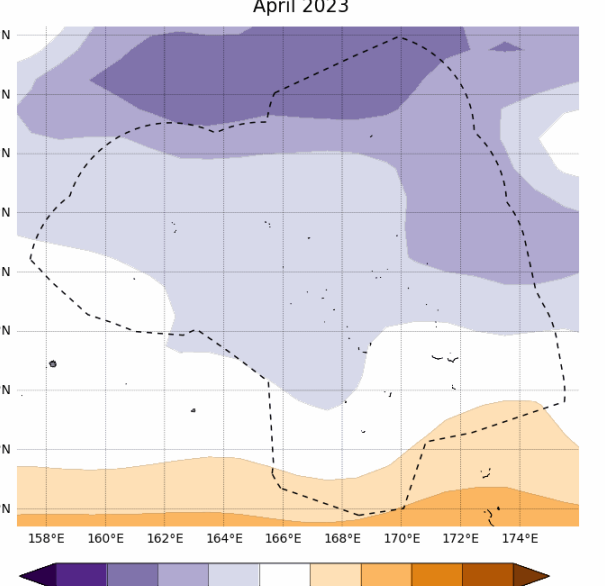
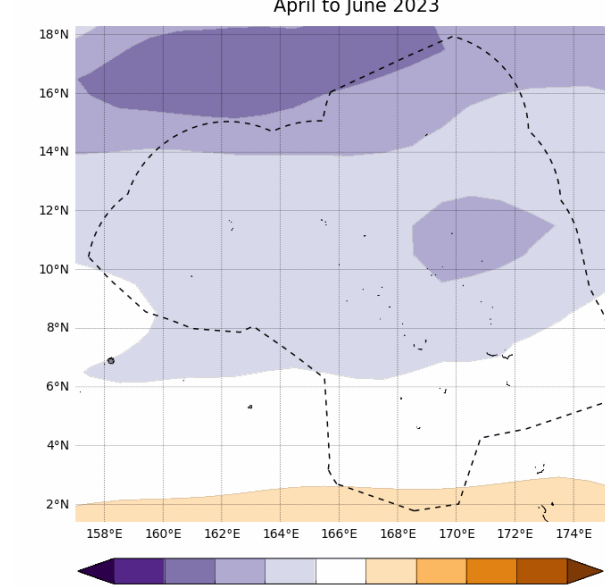


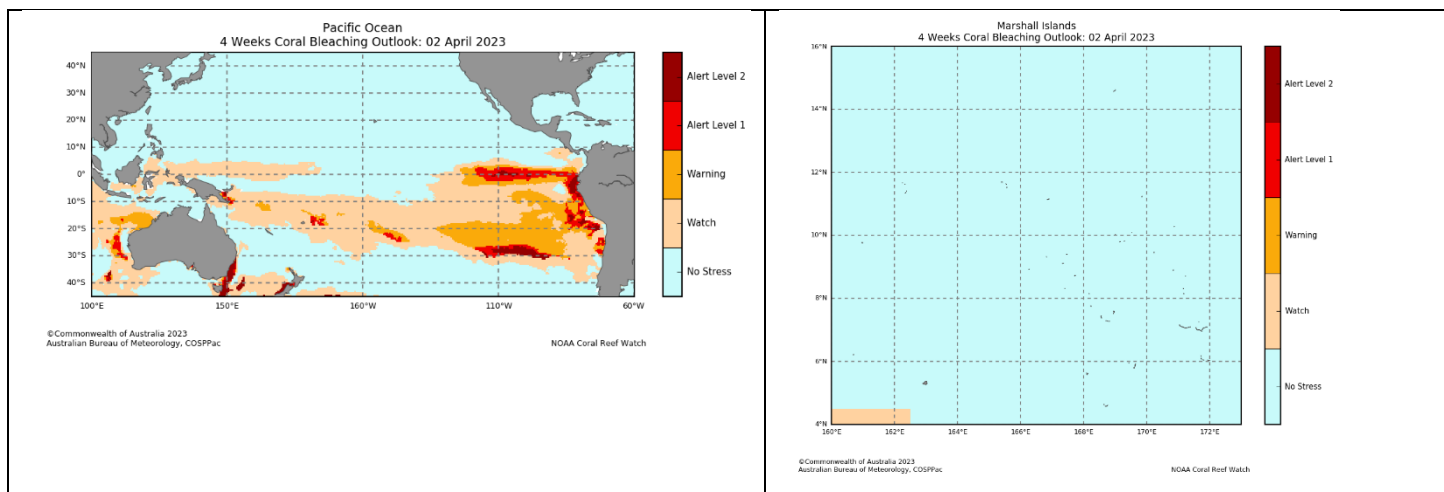


### Daily coral bleaching alert (Image 3):



Part 2i. Monthly and Seasonal Outlooks for April and April to June 2023

<p><b>Monthly: April</b></p> <p><b>Monthly sea surface temperature (Image 5):</b></p> <p>Difference from average sea surface temperature forecast for April 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 <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> <p>Model run: 11/03/2023 Issued: 13/03/2023</p>	<p><b>Seasonal: April to June</b></p> <p><b>Seasonal sea surface temperature (Image 6):</b></p> <p>Difference from average sea surface temperature forecast for April to June 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 <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> <p>Model run: 11/03/2023 Issued: 13/03/2023</p>
<p><b>Monthly sea level (Image 7):</b></p> <p>Difference from average sea surface height forecast for April 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 <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> <p>Model run: 11/03/2023 Issued: 13/03/2023</p>	<p><b>Seasonal sea level (Image 8):</b></p> <p>Difference from average sea surface height forecast for April to June 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 <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> <p>Model run: 11/03/2023 Issued: 13/03/2023</p>
<p><b>4-week Coral Bleaching (Image 9):</b></p>	



## Summary Statement

### Monthly and last three months: February 2023/December 2022 to February 2023 statement

February rainfall was above normal at Majuro, and below normal rainfall at Kwajalein. For the last three months, above normal rainfall was recorded at Majuro, and near-normal was recorded Kwajalein.

## Part 1i. Monthly and Seasonal Outlooks for April and April to June 2023

### Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for April is likely or very likely to be above normal in the central, northwest and far northern parts of RMI, including Majuro and Kwajalein. In the far south, near-normal is likely, but around and to the north of Bikar Atoll the outlook offers little guidance.

The rainfall for April to June is likely or very likely to be above normal in the central and southern region, except for Kwajalein and neighbouring atolls where rainfall is likely to be near-normal. In the northern region, the outlook shows April to June's rainfall is likely to be below normal.

Maximum and minimum temperatures during April and averaged over April to June are likely or very likely to be above normal over RMI.

## Part 2: Recent Ocean summary statement

### Monthly and last three months: February 2023/December 2022 to February 2023

February ocean temperatures around eastern Marshalls were up to 0.5°C near normal. The ocean temperature across the western and northern RMI were up to 1.0°C above normal.

Averaged over December to February, ocean temperatures around western and central region were 0.5 to 1.0°C above normal, while Majuro and southern RMI were 0.0 to 0.5°C near normal.

February sea levels around central and southern RMI were 150mm to 200mm above normal, but further north they were lower, reaching 50mm to 100mm above normal.

Coral bleaching alert reveals not thermal stress for most of the RMI.

## Part 2i. Monthly and Seasonal Outlooks for April and April to June 2023

### Ocean Variable statement

April ocean temperatures across the RMI are predicted to be 0.4 to 0.8°C above normal, except for the north-eastern part of the RMI are predicted to be near-normal.

Averaged over April to June, ocean temperatures across the Marshall Islands are predicted to be 0.4 to 0.8°C above normal.

April sea levels around north and north-eastern RMI are predicted to be -30mm to -100mm below normal, while near-normal sea levels are predicted for the eastern and southern Marshall Islands.

Averaged over April to June, sea levels around the central and northern RMI are predicted to be -30mm to -100mm below normal.

Coral bleaching outlook predicts no thermal stress across the Marshall Islands.

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

Product	Date: February 2023	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin					
EAR Watch					
Monthly Climate Briefing	02/17/23	Chief Secretary Office (CSO) and National Disaster Management Office (NDMO)	7	3	4
Ocean Outlook					
Climate data request					
Total			7	3	4