

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 174

Country: Marshall Islands

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Dec-2021	Jan-2022	Feb-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Majuro (1954-2022)	222.5	120.1	223.3	111	239.3	165.2	45/68
Kwajalein (1945-2022)	95	31.8	163.8	39.3	103.9	71.6	70/78

TABLE 2: Three-month Total Rainfall for December 2021 to February 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Majuro (1954-2022)	565.9	Below normal	587.3	770.8	670.7	19/68
Kwajalein (1945-2022)	290.6	Below normal	317.9	437.3	394.1	20/78

NB: The X LEPS % score has been categorised as follows:

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

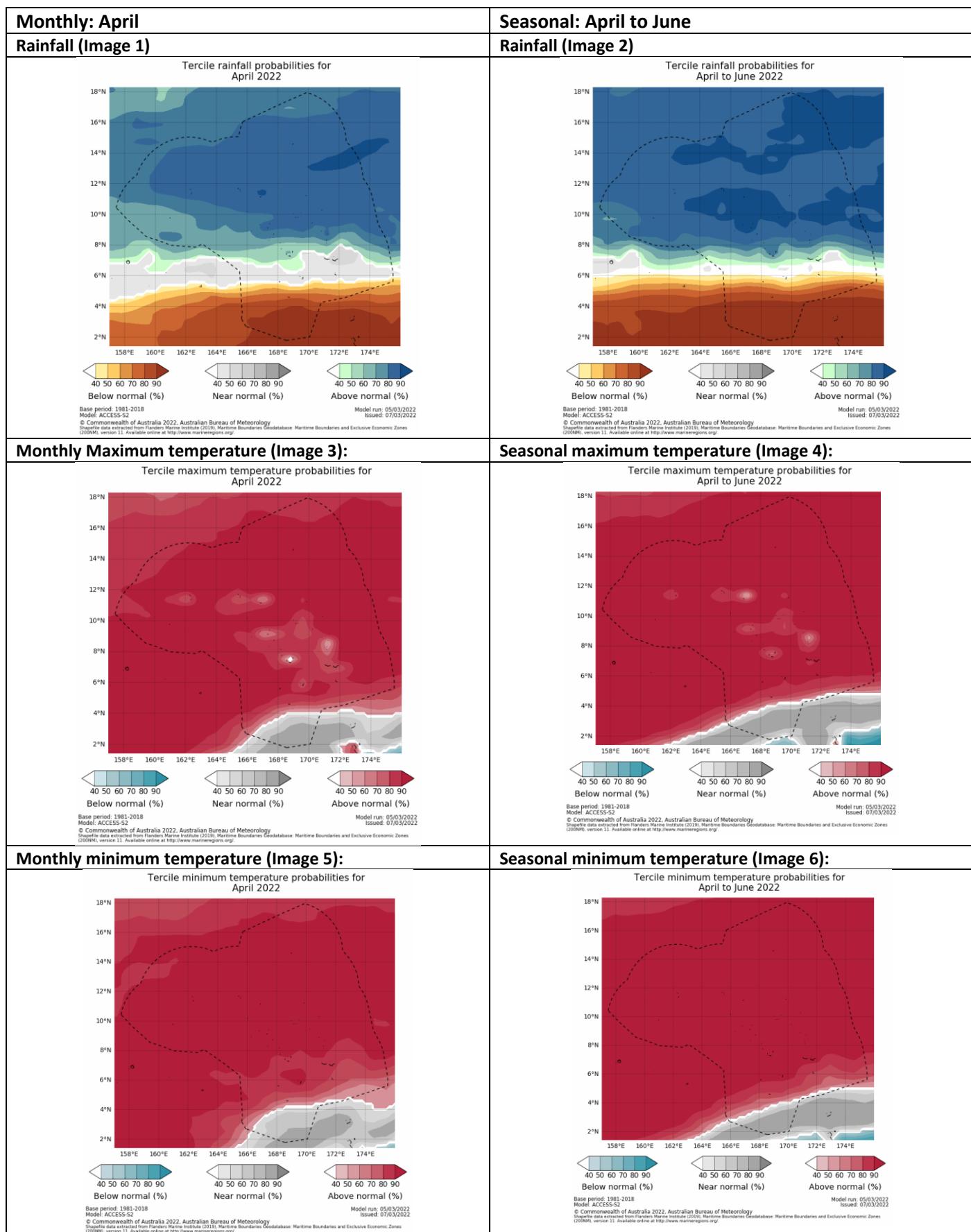
Moderate $5 \leq X < 10$

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 April and April to June 2022



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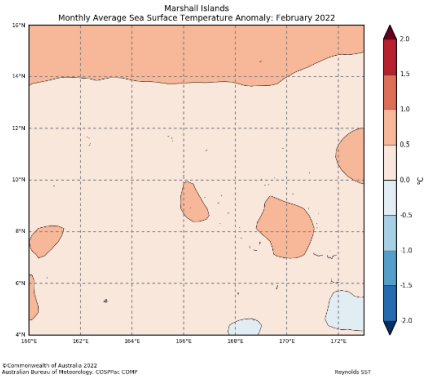
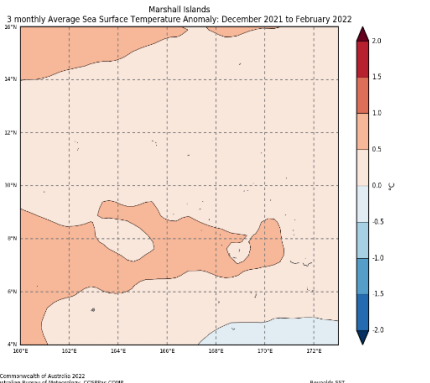
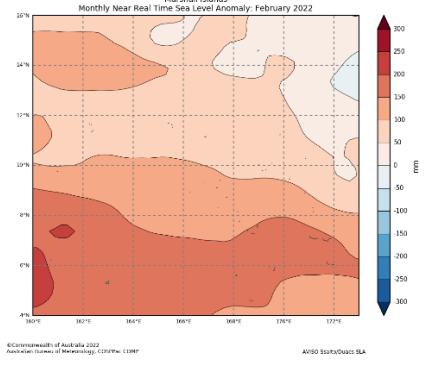
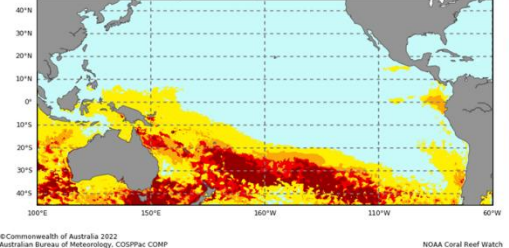
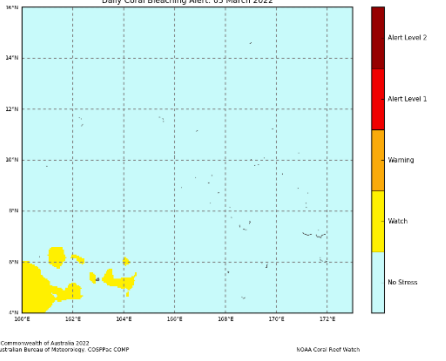
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Part 2: Recent Ocean summary statement

Monthly: February 2022

Monthly: February	Last three months: December 2021 to February 2022:
<p>Sea Surface Temperature (Image 1):</p>  <p>Marshall Islands Monthly Average Sea Surface Temperature Anomaly: February 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p> <p>Reynolds SST</p>	<p>Sea Surface Temperature (Image 4):</p>  <p>Marshall Islands 3 monthly Average Sea Surface Temperature Anomaly: December 2021 to February 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p> <p>Reynolds SST</p>
<p>Sea level (Image 2):</p>  <p>Marshall Islands Monthly Near Real Time Sea Level Anomaly: February 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p> <p>AVISO SeaWiFS SLA</p>	
<p>Daily coral bleaching alert (Image 3):</p>  <p>Pacific Ocean Daily Coral Bleaching Alert: 05 March 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p> <p>NOAA Coral Reef Watch</p>	 <p>Marshall Islands Daily Coral Bleaching Alert: 05 March 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p> <p>NOAA Coral Reef Watch</p>

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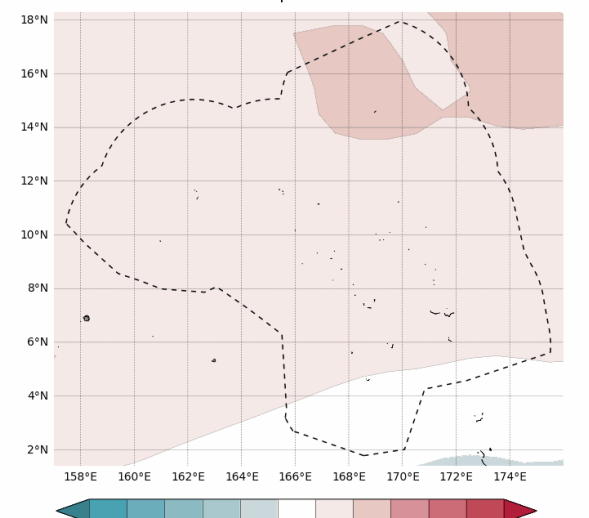
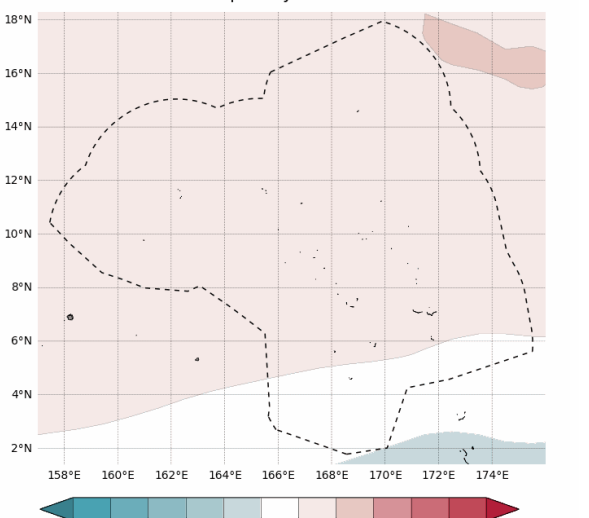
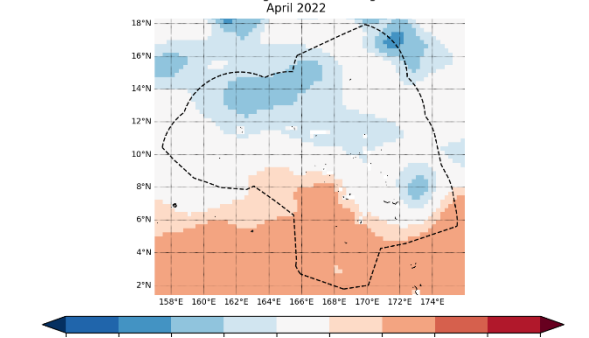
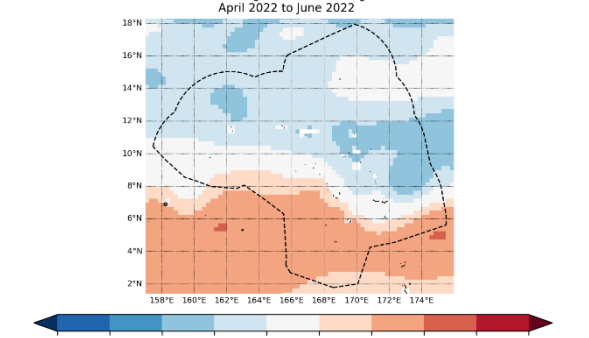
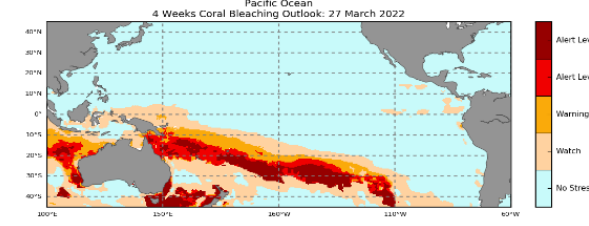
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Part 2i. Monthly and Seasonal Outlooks for April and April to June 2022

Monthly: April	Seasonal: April to June
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for April 2022</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Seafile data extracted from Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/</p> <p>Model run: 07/03/2022 Issued: 09/03/2022</p>	<p>Difference from average sea surface temperature forecast for April to June 2022</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Seafile data extracted from Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/</p> <p>Model run: 07/03/2022 Issued: 09/03/2022</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for April 2022</p>  <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/02/2022 Issued: 09/03/2022</p>	<p>Difference from average sea surface height forecast for April 2022 to June 2022</p>  <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/02/2022 Issued: 09/03/2022</p>
4-week Coral Bleaching (Image 9):	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 27 March 2022</p>  <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, CSIRO, CSIRO</p> <p>NORCA Coral Reef Watch</p>	

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Summary Statement

Monthly and last three months: February 2022/December 2021 to February 2022 statement (Highly significant changes)

Normal rainfall was recorded at Majuro while above-normal rainfall recorded at Kwajalein for the month of February 2022.

For the period of December 2021 to February 2022, both Majuro and Kwajalein recorded below normal rainfall.

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

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

The rainfall outlook for April 2022 is very likely to be above normal at both Majuro and Kwajalein. The outlook for the RMI for the period April to June is very likely to be above normal for most part of the country.

The monthly and seasonal minimum and maximum temperature outlook is very likely to be above normal for most of the islands in the RMI.

Part 2: Recent Ocean summary statement

Monthly and last three months: February/December 2021 to February 2022 (Highly significant changes)

Most of the islands experienced neutral SST with portions experiencing 0.5-1°C during the month of February 2022. For the period (December to February), most of the islands also experienced neutral conditions with western parts of Majuro having SST of 0.5-1.0°C.

The monthly sea level anomaly was significantly higher than normal at Majuro and nearby atolls ranging from 150 to 200 mm. While Kwajalein and rest of the islands observed sea level higher than normal ranging from 50 to 150 mm during the month of February 2022.

NO STRESS status for Coral Bleaching was in place for most of the RMI during the month of February 2022.

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

Ocean Variable statement (Highly significant changes)

The monthly and seasonal outlook for the RMI archipelago shows a significant temperature difference of 0.4 to 0.8°C. The monthly and seasonal outlook for southwest RMI shows a significant sea surface heights difference of 60 to 100 mm, while below average sea levels for the central and northern atolls with -60 to -100 mm.

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

Product	Date: February 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin					
EAR Watch					
Monthly Climate Briefing	02/18/2022	CSO & NDMO	6	3	3
Ocean Outlook					
Climate data request					
Total			6	3	3

CSO- Chief Secretary Office

NDMO- National Disaster Management Office

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