

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 175

Country: Marshall Islands

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Jan-2022	Feb-2022	Mar-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Majuro (1954-2022)	120.1	223.3	498.1	147.6	263.4	192.4	65/68
Kwajalein (1945-2022)	31.8	163.8	281.2	45.0	116.2	84.6	72/78

TABLE 2: Three-month Total Rainfall for January to March 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Majuro (1954-2022)	841.5	Above normal	489.5	706.6	594.0	53/68
Kwajalein (1945-2022)	476.8	Above normal	198.8	364.3	245.4	61/78

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 May and May to July 2022

Monthly: May	Seasonal: May to July
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for May 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Geospatial data extracted from Frontier Marine Institute (2020), Maritime Boundary Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2020M), version 1.1. Available online at http://www.marine.gov.au</p> <p>Model run: 04/04/2022 Issued: 07/04/2022</p>	<p>Tercile rainfall probabilities for May to July 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Geospatial data extracted from Frontier Marine Institute (2020), Maritime Boundary Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2020M), version 1.1. Available online at http://www.marine.gov.au</p> <p>Model run: 04/04/2022 Issued: 07/04/2022</p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for May 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Geospatial data extracted from Frontier Marine Institute (2020), Maritime Boundary Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2020M), version 1.1. Available online at http://www.marine.gov.au</p> <p>Model run: 04/04/2022 Issued: 07/04/2022</p>	<p>Tercile maximum temperature probabilities for May to July 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Geospatial data extracted from Frontier Marine Institute (2020), Maritime Boundary Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2020M), version 1.1. Available online at http://www.marine.gov.au</p> <p>Model run: 04/04/2022 Issued: 07/04/2022</p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for May 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Geospatial data extracted from Frontier Marine Institute (2020), Maritime Boundary Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2020M), version 1.1. Available online at http://www.marine.gov.au</p> <p>Model run: 04/04/2022 Issued: 07/04/2022</p>	<p>Tercile minimum temperature probabilities for May to July 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Geospatial data extracted from Frontier Marine Institute (2020), Maritime Boundary Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2020M), version 1.1. Available online at http://www.marine.gov.au</p> <p>Model run: 04/04/2022 Issued: 07/04/2022</p>

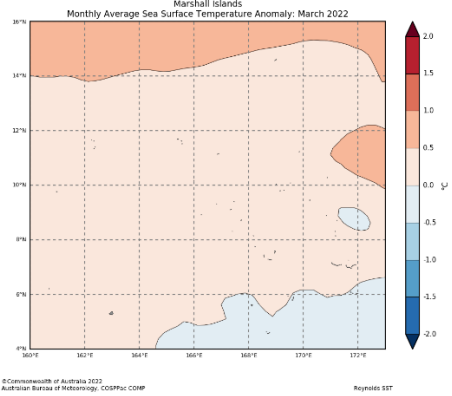
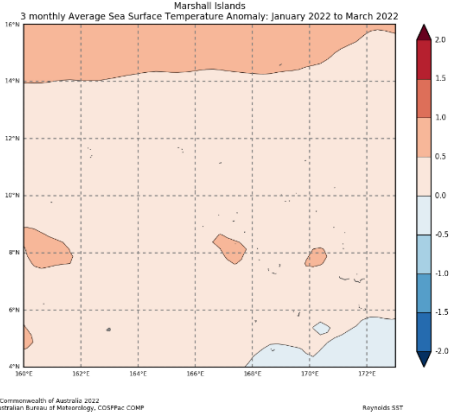
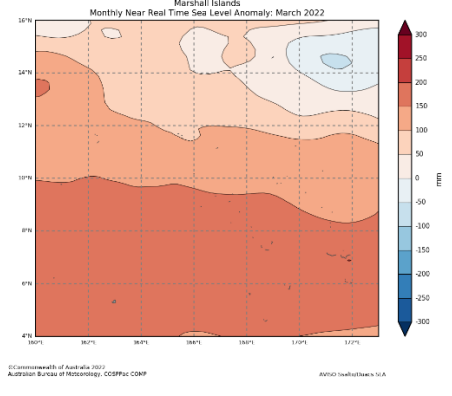
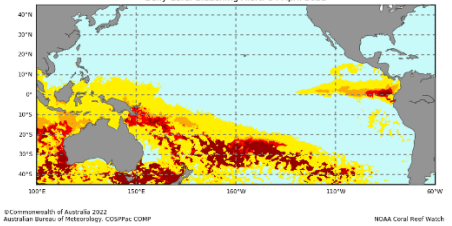
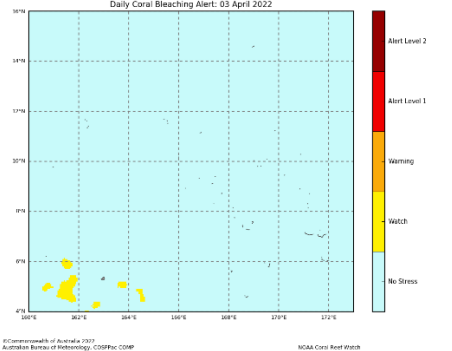
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Part 2: Recent Ocean summary statement

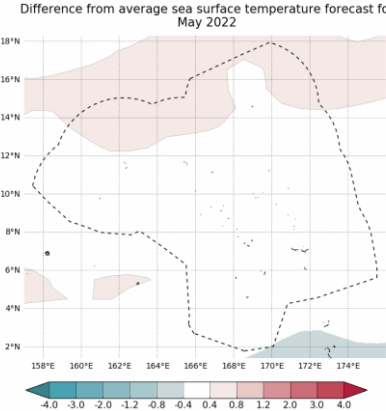
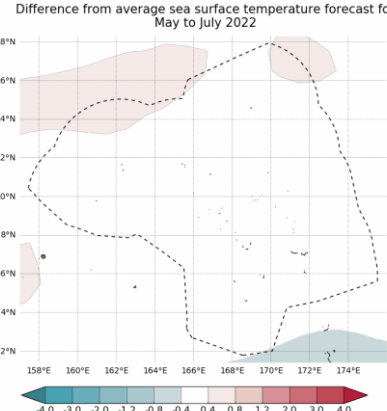
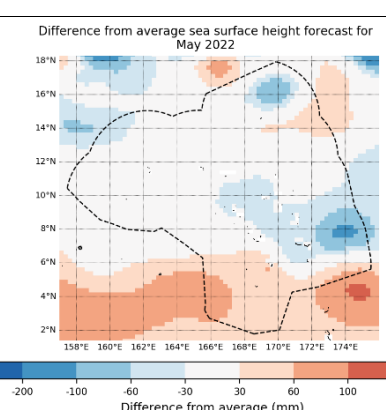
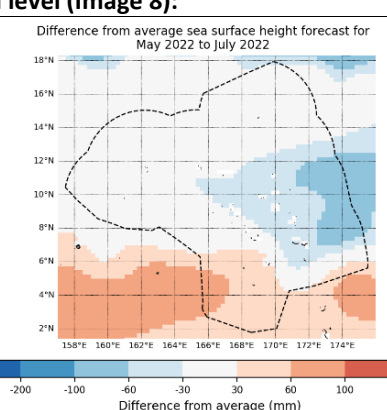
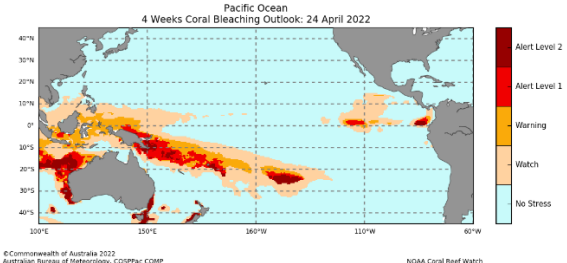
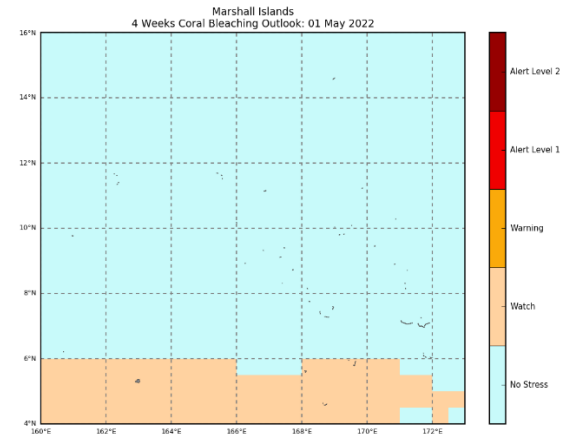
Monthly: March 2022

Monthly: March	Last three months: January to March 2022:
Sea Surface Temperature (Image 1): <div></div>	Sea Surface Temperature (Image 4): <div></div>
Sea level (Image 2): <div></div>	
Daily coral bleaching alert (Image 3): <div></div>	<div></div>

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Part 2i. Monthly and Seasonal Outlooks for May and May to July 2022

Monthly: May	Seasonal: May to July
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
 <p>Difference from average sea surface temperature forecast for May 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology © Australian data extracted from: Pacific Marine Institute (2019), Maritime Boundary and Exclusive Economic Zones (2020), version 1.1. Available online at http://www.maritime.gov.au</p> <p>Model run: 04/04/2022 Issued: 06/04/2022</p>	 <p>Difference from average sea surface temperature forecast for May to July 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology © Australian data extracted from: Pacific Marine Institute (2019), Maritime Boundary and Exclusive Economic Zones (2020), version 1.1. Available online at http://www.maritime.gov.au</p> <p>Model run: 04/04/2022 Issued: 06/04/2022</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
 <p>Difference from average sea surface height forecast for May 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/03/2022 Issued: 31/03/2022</p>	 <p>Difference from average sea surface height forecast for May 2022 to July 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/03/2022 Issued: 31/03/2022</p>
4-week Coral Bleaching (Image 9):	
 <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 24 April 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>NOAA Coral Reef Watch</p>	 <p>Marshall Islands 4 Weeks Coral Bleaching Outlook: 01 May 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>NOAA Coral Reef Watch</p>

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Summary Statement

Monthly and last three months: March 2022/January to March 2022 statement *(Highly significant changes)*

Above normal rainfall was recorded at both Majuro and Kwajalein for the month of March 2022. Majuro recorded its fourth and Kwajalein its seventh wettest March on record.

For the period of January to March 2022, both Majuro and Kwajalein also recorded above normal rainfall.

Part 1i. Monthly and Seasonal Outlooks for May and May to July 2022

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

The rainfall outlook for May 2022 is very likely to be above normal at both Majuro and Kwajalein. The outlook for the Marshall Islands for the period of May to July is very likely to be above normal at most part of the country except for the central west part of the country, the outlook is likely to be normal.

The monthly and seasonal minimum and maximum temperature outlook is very likely to be above normal for most part of the Marshall Islands except for southeast of the country, the outlook is likely to be normal.

Part 2: Recent Ocean summary statement

Monthly and last three months: March/January to March 2022 *(Highly significant changes)*

Most of the islands experienced average to above average SST reaching 0.5°C warmer than normal during the month of March 2022. For the three-month period (January to March), most of the islands have also experienced average to above average SST ranging from 0.0 to 0.5 °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 100 to 150 mm during the month of March 2022.

NO STRESS status for Coral Bleaching was in place for most part of the Marshall Islands during the month of March 2022.

Part 2i. Monthly and Seasonal Outlooks for May and May to July 2022

Ocean Variable statement *(Highly significant changes)*

The monthly and seasonal outlook for the Marshall Islands shows a significant temperature difference of -0.4 to 0.4°C at most part. The monthly and seasonal outlook for the southeast of the Marshall Islands shows below average sea level of -30 to -60 mm, while at most part the outlook shows no significant height in sea level.

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

Product	Date: March 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin					
EAR Watch					
Monthly Climate Briefing	03/25/2022	RMI National Disaster Management Office (NDMO)	6	3	3
Ocean Outlook					
Climate data request					
Total			6	3	3

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