Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 167

Country: Republic of the Marshall Islands (RMI)

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	May- 2021	Jun-2021	Jul-2021				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				Naiik
Majuro (1954-2021)	731.8	235.7	239.3	260.1	356.7	301.5	17/68
Kwajalein (1945-2021)	214.6	117.1	204.5	219.4	277.3	248.9	22/77

Monthly: July 2021 statement

Below normal rainfall was recorded at both Majuro and Kwajalein in the Marshall Islands for the month of July 2021.

TABLE 2: Three-month Total Rainfall for May to July 2021

Station	Three-month Total		33%tile	67%tile	Median	Rank
Majuro (1954-2021)	1206.8	Above normal	784.7	951.1	847.4	63/67
Kwajalein (1945-2021)	536.2	Below normal	582.2	800.9	690.6	20/77

Last three months: May to July 2021 statement:

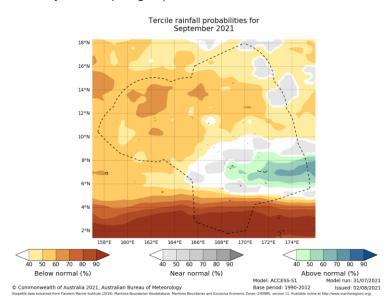
For the last three months, (May to July) above normal rainfall was recorded at Majuro but below normal recorded at Kwajalein. This was the fifth wettest May to July on record at Majuro.

 $Very \ Low: \ X < 0.0 \\ Low: \ 0 \le X < 5 \\ Moderate \ 5 \le X < 10 \\ Good: \ 10 \le X < 15 \\ High: \ 15 \le X < 25 \\$

Very High: $25 \le X < 35$ Exceptional: $X \ge 35$

Part 1i. Monthly and Seasonal Outlooks for September and September to November 2021

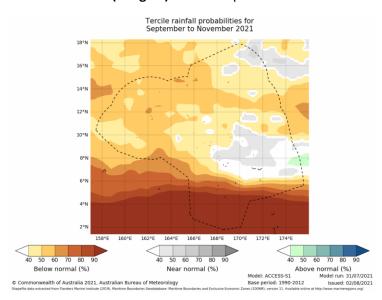
Monthly rainfall (Image 1):



Monthly rainfall Outlook statements

The outlook for the RMI for September is likely to be below normal at the northern islands including Kwajalein, especially the islands at the north-western part. For the islands at the southern part, the outlook is likely to be near-normal to above normal. The outlook for Majuro and the islands at southeast is likely to be above normal.

Seasonal rainfall (Image 2): Insert map



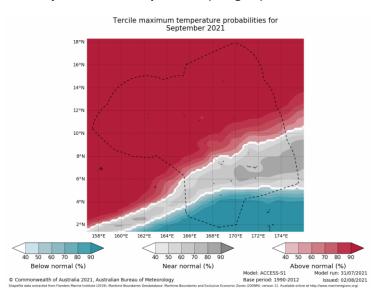
Seasonal Rainfall Outlook statements

The outlook for the RMI is likely to be below normal across the northern part of the country including Kwajalein for September. For Majuro there is little guidance as the changes of above normal, normal and below normal are similar. For the islands that are located southeast of the region, the outlook for September is likely to be near-normal.

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

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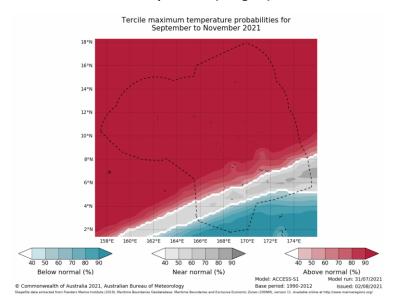
Monthly Maximum temperature (Image 3):



Monthly Maximum Outlook statements

The maximum temperature outlook for the RMI for September is very likely to be above normal across the northern part of the region. The outlook for the islands at the southern part including Majuro is likely to be near-normal to above normal.

Seasonal maximum temperature (Image 4):



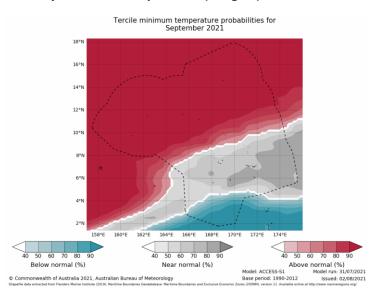
Seasonal maximum temperature Outlook statement

The maximum temperature outlook for the northern part of the RMI including Kwajalein for September is very likely to be above normal. The outlook for the southern region including Majuro and the islands at southeast is likely to be near-normal to above normal.

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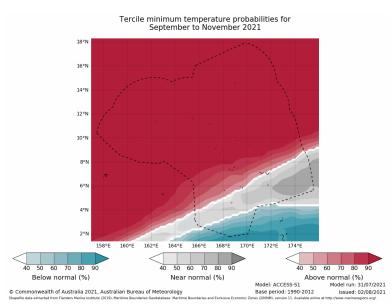
Monthly minimum temperature (Image 5):



Monthly Minimum Outlook statements

The minimum temperature outlook for the RMI for September is very likely to be above normal across the northern part of the country. The outlook for the southern region is likely to be near-normal including Majuro and the islands that are located at southeast of the country.

Seasonal minimum temperature (Image 6):



Seasonal minimum temperature Outlook statement

The minimum temperature outlook for the RMI for September to November is very likely to be above normal across the central to northern parts of the country including Kwajalein. The exception is for Majuro and the islands at southeast of the country, the outlook is likely to be near-normal.

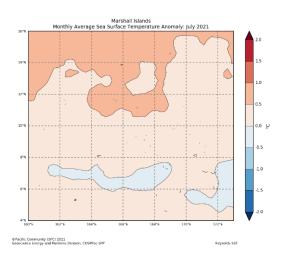
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Part 2: Recent Ocean summary statement

Monthly: July 2021

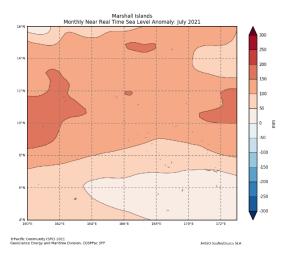
Sea Surface Temperature (Image 1):



Sea Surface Temperature statement

Most of the islands in the RMI experienced warmer than average SSTs for the month of July 2021, except for some of the islands at the southern part of the country including Arno atoll located east of Majuro which experienced below average SST. Significant warm SSTs were experienced on the northern side of Kwajalein. Highest SSTs were 1.0 to 1.5 degrees above average, further north of the country.

Sea level (Image 2):



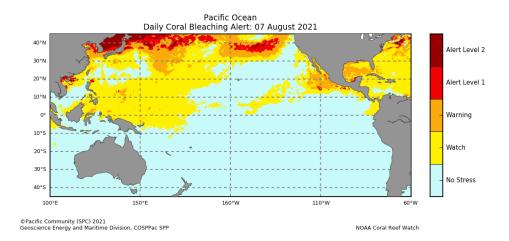
Sea level statement

The sea level anomaly across the RMI in July 2021 was significantly higher than normal, with majority of the island groups in the range of 100 to 150 mm above average. This additional sea level anomaly needs to be taken into account when using the tide calendars by adding it onto the high/low tide levels.

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Daily coral bleaching alert (Image 3):

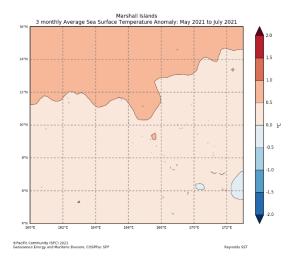


Daily bleaching alert statement

Warm SSTs experienced across the RMI has resulted in a 'watch' coral bleaching alert status for much of the region.

Last three months: May to July 2021:

Sea Surface Temperature (Image 4):



Last three months Sea Surface Temperature statement

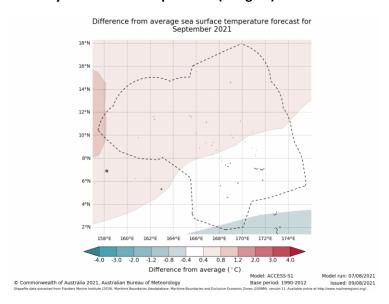
For the May to July 2021 period, warmer than average SSTs were experienced across northern part of the country including Kwajalein in the range of 1.0 to 1.5 degrees above average. The exception is for the central and southern islands, which experienced closer to average SSTs.

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Part 2i. Monthly and Seasonal Outlooks for September and September to November 2021

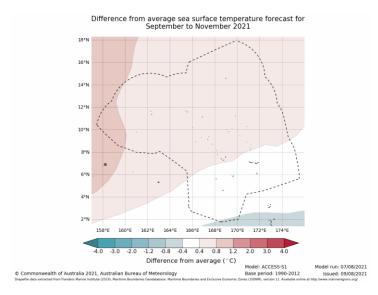
Monthly sea surface temperature (Image 5):



Monthly sea surface temperature statement

The outlook across northern part of the RMI shows a significant temperature difference of 0.4-0.8°C for September. The outlook for the Southern region show average temperatures.

Seasonal sea surface temperature (Image 6):



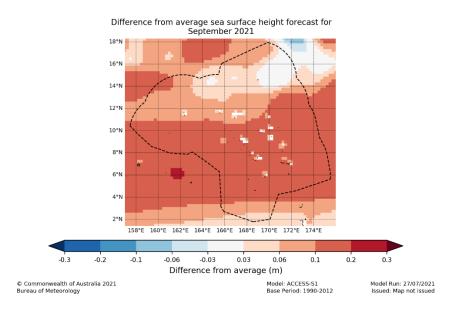
Seasonal Sea Surface Temperature statement

The outlook for the RMI shows SSTs are likely to be close to slightly above average for the September to November period. The outlook for the southern region including Majuro shows average temperatures.

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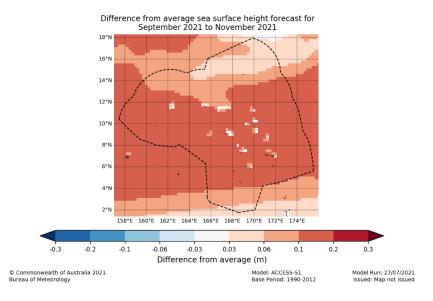
Monthly sea level (Image 7):



Monthly sea level statement

The outlook across the central and southern parts of the RMI shows sea level likely to be above normal up to 0.2 m for September. In the north, Kwajalein is predicted to reach only 0.03 to 0.06 metres above normal.

Seasonal sea level (Image 8):



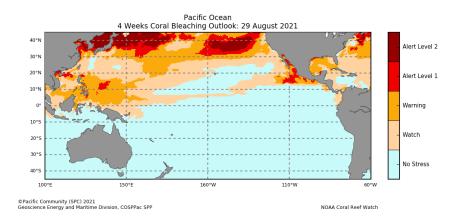
Seasonal sea level statement

The outlook across the RMI shows sea level likely to be above average for September to November up to 0.2 m. The exception is for the islands at north including Kwajalein which is predicted to reach only 0.03 to 0.06 metres above normal. This additional sea level anomaly needs to be taken into account when using the tide calendars by adding it onto the high/low tide levels.

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

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4-week Coral Bleaching (Image 9):



4-weeks Coral Bleaching statement

The outlook for the RMI shows there are no coral bleaching alerts.

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

Product	Date: July 2021	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin					
EAR Watch					
Monthly Climate Briefing	23 July	NDMO	6	3	3
Ocean Outlook					
		Total	6	3	3

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Very High: $25 \le X < 35$ Exceptional: $X \ge 35$