

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 177

Country: Palau

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Mar-2022	Apr-2022	May-2022				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Koror Airport (1951-2022)	253.2	555.5	612.7	258.1	355.3	300.4	70/71

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

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Koror Airport (1951-2022)	1421.4	Above normal	678.2	860.6	778.6	71/71

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

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

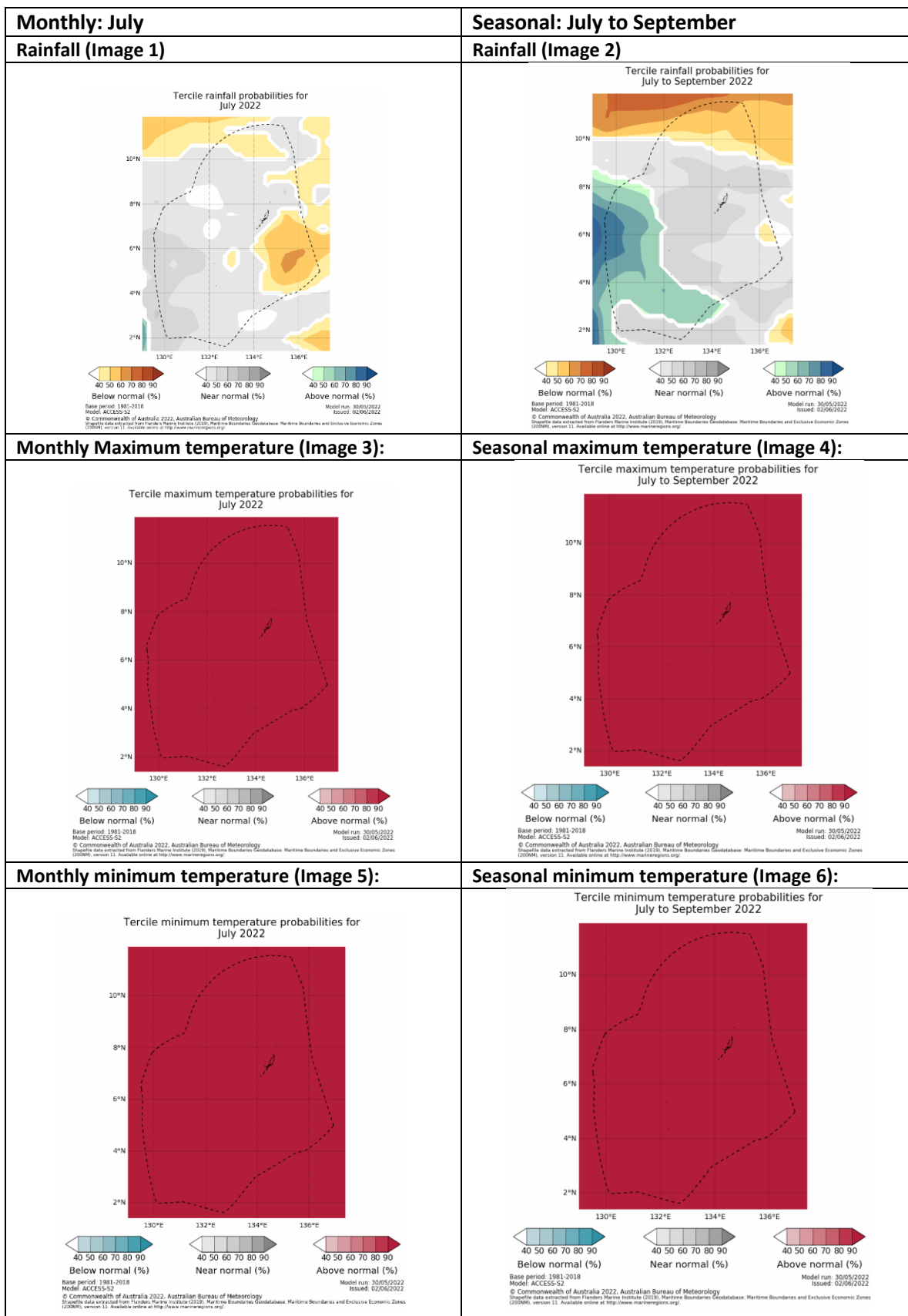
Moderate $5 \leq X < 10$

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 July and July to September 2022

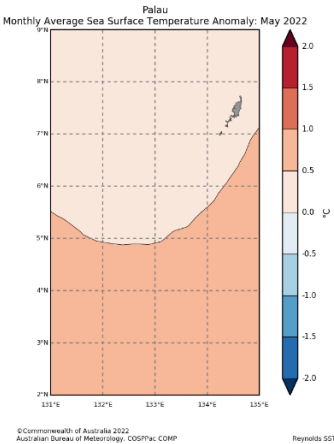
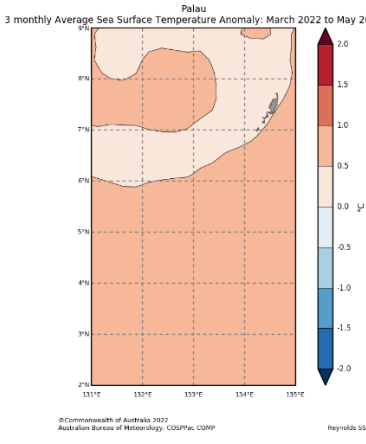
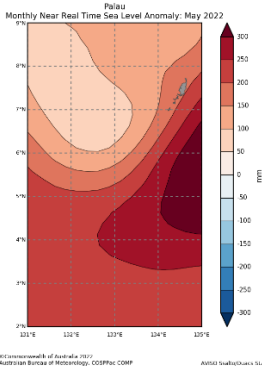
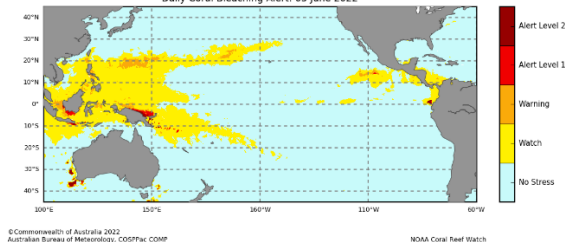
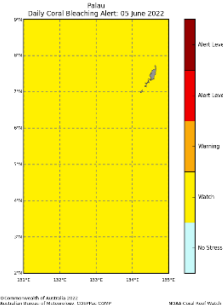


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Part 2: Recent Ocean summary statement

Monthly: May 2022

Monthly: May	Last three months: March to May 2022:
<p>Sea Surface Temperature (Image 1):</p>  <p>Palau Monthly Average Sea Surface Temperature Anomaly: May 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac, COMIP Reynolds SST</p>	<p>Sea Surface Temperature (Image 4):</p>  <p>Palau 3 monthly Average Sea Surface Temperature Anomaly: March 2022 to May 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac, COMIP Reynolds SST</p>
<p>Sea level (Image 2):</p>  <p>Palau Monthly Near Real Time Sea Level Anomaly: May 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac, COMIP AVISO SeaWiFS/SeaWIFS SIA</p>	
<p>Daily coral bleaching alert (Image 3):</p>  <p>Pacific Ocean Daily Coral Bleaching Alert: 05 June 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac, COMIP NOAA Coral Reef Watch</p>	 <p>Palau Daily Coral Bleaching Alert: 05 June 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac, COMIP NOAA Coral Reef Watch</p>

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

Monthly: July	Seasonal: July to September
<p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for July 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries (Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004)), version 11. Available online at http://www.marine.gov.au/</p> <p>Model run: 06/06/2022 Issued: 08/06/2022</p>	<p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for July to September 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries (Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004)), version 11. Available online at http://www.marine.gov.au/</p> <p>Model run: 06/06/2022 Issued: 08/06/2022</p>
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for June 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/05/2022 Issued: 07/06/2022</p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for June 2022 to August 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/05/2022 Issued: 07/06/2022</p>
<p>4-week Coral Bleaching (Image 9):</p> <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 03 July 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p> <p>NOAA Coral Reef Watch</p>	<p>Pacific 4 Weeks Coral Bleaching Outlook: 03 July 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p> <p>NOAA Coral Reef Watch</p>

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Summary Statement

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

Above normal rainfall was recorded at Koror for May 2022, the second wettest May in 71 years of records.

Above normal rainfall was recorded at Koror for the period March to May 2022, the highest rank in 71 years of records.

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

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

Monthly Rainfall Outlook statement

The outlook for Koror and majority of the country for July 2022 offers little guidance as the chances of above normal, normal and below normal are similar. The outlook for southeast waters within the EEZ for July 2022 is very likely to be below normal

Seasonal Rainfall Outlook statement

The outlook for Koror and majority of the country for the period July to September 2022 is likely to be near normal, while the outlook for the western region within and outside of the EEZ is very likely to be above normal and conversely the outlook for the northern region is very likely to be below normal for the period July to September 2022.

Monthly and Seasonal Temperature Outlook statement

The Maximum and Minimum temperature outlooks for Koror and the whole country is very likely to be above normal for July 2022 and for the period July to September 2022.

Part 2: Recent Ocean summary statement

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

Monthly Sea Surface Temperature (SST) statement

Koror and the northern region observed near normal SSTs in the month of May 2022. Significant warm SSTs of 0.5°C to 1.0°C above average was observed in the southern region for the same period.

Seasonal Sea Surface Temperature (SST) statement

Western Koror experienced near normal conditions while the eastern part of Koror and the whole country experienced above average SSTs for the period March to May 2022. Significant warm SSTs of 0.5°C to 1.0°C above average was observed in northwest waters and the southern region for the same period.

Sea Level statement

Koror and the northern region experienced higher than normal sea level heights for the month of May 2022 with a sea level difference of 150mm to 200mm. The southern region showed significant sea level anomalies of 200mm to 300mm for the same period.

Daily Bleaching Alert statement

Coral bleaching is on a Watch Level for Koror and the whole country.

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

Ocean Variable statement (*Highly significant changes*)

Monthly and Seasonal Sea Surface Temperature (SST) Outlook statements

Monthly Sea Surface Temperature Outlook statement

The outlook for Koror and the whole country shows a significant temperature difference of 0.8°C to 1.2°C for July 2022.

Seasonal Sea Surface Temperature Outlook statement

The outlook for Koror and the whole country shows a significant temperature difference of 0.8°C to 1.2°C for the period July 2022 to September 2022.

Monthly and Seasonal Sea Surface Height Outlook statements

Monthly Sea Surface Height Outlook statement

The monthly outlook for Koror shows sea surface heights are likely to be above average with sea level differences of 60-200mm for July 2022. While the outlook for the outskirts of the country within and outside the EEZ shows a sea level difference 30mm to 200mm for the same period, with significant sea level difference located east of Koror.

Seasonal Sea Surface Heights Outlook statement

The seasonal outlook for Koror shows sea surface heights are likely to be close to average for the period July to September 2022. While the outlook for the outskirts of the country within and outside the EEZ shows a significant sea level difference 60mm to 100mm for the same period.

4-weeks Coral Bleaching Outlook statement

There is a coral bleaching Alert Level 1 for Koror and the northern region and a Warning for the southern region for the next four weeks until the 3rd of July 2022.

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

Product	Date: May 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Day 1 Workshop in Peleliu state with the National Emergency Management Office (NEMO), Palau National Weather Service Office (WSO Palau) and Palau Red Cross Disaster Action Teams: training on initial damage assessments, Tropical Cyclone Refresher course and introduction to Weather Ready Nation. EAR Watch	May 12	Peleliu Government Palau Public Utilities Corporation_Peleliu Peleliu Rangers Women's Association Medical Records personnel Peleliu Police Palau National Communications Corporation	27	13	14
Day 1 Peleliu workshop and EAR Watch:	May 12	NEMO office	7	5	2
Day 1 Peleliu workshop and EAR Watch :	May 12	WSO Palau office	2	1	1
Day 1 Peleliu workshop and EAR Watch :	May 12	Palau Red Cross Society	5	2	3
Day 2 Workshop in Peleliu state with the National Emergency Management Office (NEMO), Palau National Weather Service Office (WSO Palau) and Palau Red Cross Disaster Action Teams: training on initial damage assessments, Tropical Cyclone Refresher course and introduction to Weather Ready Nation.	May 13	Peleliu Government Palau Public Utilities Corporation_Peleliu Peleliu Rangers Women's Association Medical Records personnel Peleliu Police Palau National Communications Corporation	20	9	11
Day 2 Peleliu workshop and EAR Watch:		NEMO office	7	5	2
Day 2 Peleliu workshop and EAR Watch:		WSO Palau office	2	1	1
Day 2 Peleliu workshop and EAR Watch :		Palau Red Cross Society	5	2	3
Total			Day 1: 41	21	20
			Day 2: 34	17	17

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