

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 203

Country: Palau

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	May-2024	Jun-2024	Jul-2024				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Koror (1951-2024)	203.5	400.6	545.1	340.6	498.3	415.5	56/74

TABLE 2: Three-month Total Rainfall for May to July 2024

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Koror (1951-2024)	1149.2	Normal	1017.1	1303.8	1167.3	35/73

# Part 1i. Monthly and Seasonal Outlooks for September and September to November 2024

Monthly: September	Seasonal: September to November
<p><b>Rainfall (Image 1)</b></p> <p>Tercile rainfall probabilities for September 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 05/08/2024 Issued: 07/08/2024</p> <p>© Commonwealth of Australia 2024, Bureau of Meteorology, supported by COSPPac</p> <p>-- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p><b>Rainfall (Image 2)</b></p> <p>Tercile rainfall probabilities for September to November 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 05/08/2024 Issued: 07/08/2024</p> <p>© Commonwealth of Australia 2024, Bureau of Meteorology, supported by COSPPac</p> <p>-- EEZ border V11 (Flanders Marine Institute, 2019).</p>
<p><b>Monthly Maximum temperature (Image 3):</b></p>	<p><b>Seasonal maximum temperature (Image 4):</b></p>
<p>Tercile maximum temperature probabilities for September 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 05/08/2024 Issued: 07/08/2024</p> <p>© Commonwealth of Australia 2024, Bureau of Meteorology, supported by COSPPac</p> <p>-- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p>Tercile maximum temperature probabilities for September to November 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 05/08/2024 Issued: 07/08/2024</p> <p>© Commonwealth of Australia 2024, Bureau of Meteorology, supported by COSPPac</p> <p>-- EEZ border V11 (Flanders Marine Institute, 2019).</p>
<p><b>Monthly minimum temperature (Image 5):</b></p>	<p><b>Seasonal minimum temperature (Image 6):</b></p>
<p>Tercile minimum temperature probabilities for September 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 05/08/2024 Issued: 07/08/2024</p> <p>© Commonwealth of Australia 2024, Bureau of Meteorology, supported by COSPPac</p> <p>-- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p>Tercile minimum temperature probabilities for September to November 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 05/08/2024 Issued: 07/08/2024</p> <p>© Commonwealth of Australia 2024, Bureau of Meteorology, supported by COSPPac</p> <p>-- EEZ border V11 (Flanders Marine Institute, 2019).</p>

# Part 2: Recent Ocean Observation

## Monthly/Three months: July 2024 and May to July 2024

Monthly: July 2024	Last three months: May to July 2024:
<p><b>Sea Surface Temperature (Image 1):</b></p> <p>Monthly Average Sea Surface Temperature Anomaly: July 2024</p> <p>Palau</p> <p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>Reynolds SST</p>	<p><b>Sea Surface Temperature (Image 4):</b></p> <p>3 monthly Average Sea Surface Temperature Anomaly: May 2024 to July 2024</p> <p>Palau</p> <p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>Reynolds SST</p>
<p><b>Sea level (Image 2):</b></p> <p>Monthly Near Real Time Sea Level Anomaly: July 2024</p> <p>Palau</p> <p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>AVISO SeaWiFS/QuikSCAT SLA</p>	
<p><b>Daily coral bleaching alert (Image 3):</b></p> <p>Daily Coral Bleaching Alert: 04 August 2024</p> <p>Palau</p> <p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Daily Coral Bleaching Alert: 04 August 2024</p> <p>Pacific Ocean</p> <p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

# Part 2i. Monthly and Seasonal Outlooks for September and September to November 2024

Monthly: September	Seasonal: September to November
<p><b>Monthly sea surface temperature (Image 5):</b></p> <p>Difference from average sea surface temperature forecast for September 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 05/08/2024 Issued: 07/08/2024</p> <p>--- EEZ border V11 (Flinders Marine Institute, 2019).</p>	<p><b>Seasonal sea surface temperature (Image 6):</b></p> <p>Difference from average sea surface temperature forecast for September to November 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 05/08/2024 Issued: 07/08/2024</p> <p>--- EEZ border V11 (Flinders Marine Institute, 2019).</p>
<p><b>Monthly sea level (Image 7):</b></p> <p>Difference from average sea surface height forecast for September 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 05/08/2024 Issued: 07/08/2024</p> <p>--- EEZ border V11 (Flinders Marine Institute, 2019).</p>	<p><b>Seasonal sea level (Image 8):</b></p> <p>Difference from average sea surface height forecast for September to November 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 05/08/2024 Issued: 07/08/2024</p> <p>--- EEZ border V11 (Flinders Marine Institute, 2019).</p>
<p><b>4-week Coral Bleaching (Image 9):</b></p> <p>Palau 4 Weeks Coral Bleaching Outlook: 11 August 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 11 August 2024</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

## Summary Statement

### Monthly and last three months: July 2024/May to July 2024 statement

The rainfall for July was above normal at Koror station while near-normal for the past three months.

## Part 1i. Monthly and Seasonal Outlooks for September and September to November 2024

### Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for September is very likely to be above normal over Palau.

The rainfall for September to November is very likely to be above normal over Palau.

Maximum and minimum temperatures during September and averaged over September to November are very likely to be above normal over the entire country.

## Part 2: Recent Ocean summary statement

### Monthly and last three months: July 2024/May to July 2024

July and averaged over May to July, ocean temperatures around majority of Palau were 0.5 to 1.0°C above normal.

Averaged over May to July, ocean temperatures around Sonsorol were 1.0 to 1.5°C above normal.

July sea levels around the main islands and the southwest islands were 200mm to 250mm and 50mm to 150mm, above normal, respectively.

As of 4th August, there is a coral bleaching 'Watch' for Palau.

## Part 2i. Monthly and Seasonal Outlooks for September and September to November 2024

### Ocean Variable statement

September and averaged over September to November, ocean temperatures around Palau are predicted to be 0.4 to 1.2°C above normal.

September and averaged over September to November, sea levels around Palau are predicted to be near-normal.

The 4-week coral bleaching outlook shows a 'Watch' for Palau.

### IN BRIEF for Teleconference

- Rainfall was above normal for July and near-normal for May to July.
- The rainfall outlook generally indicates above normal very likely in September and September to November across majority of Palau.
- SSTs were above normal for July and May to July. The outlook shows above normal SSTs for the next one and three months.
- Sea-surface heights (SSHs) were above normal for July. Near-normal sea surface heights are predicted for September and September to November.

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

Product	Date: July 2024	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Disability	Age group	Comments (If there are comments from you Stakeholders)
Data Infographic of Monthly 24-Hour Rainfall and Average Temperatures across Manual and Automated Weather Stations	2	WSO Palau, WFO Guam, PEAC, climate scientists, Palau Public Utilities, US Drought Monitor, Coral Reef Research Foundation, social media platform	24+	17+	7+			Post Impressions: 546 Post Reach: 540 Engagement: 21 Likes: 3 Shares: 4
NIWA Island Climate Update (ICU) Video	3	Social media	1+	1+	0+			Post Impressions: 128 Post Reach: 121 Engagement: 6
Palau ICU	3	WSO Palau and social media	15+	11+	4+			Post Impressions: 661 Post Reach: 581 Engagement: 16 Shares: 7
PICASO and APCC local Climate bulletin	3	WSO Palau and social media	15+	10+	5+			Post Impressions: 667 Post Reach: 577 Engagement: 22 Shares: 7
Palau EAR Watch	9	WSO Palau and social media	14+	10+	4+			Post Impressions: 459 Post Reach: 417 Engagement: 7 Shares: 3

Monthly Climate Briefing								
Ocean and Climate Outlook Forum Updates	17	WSO Palau and social media	16+	10+	6+			Post Impressions: 860 Post Reach: 731 Engagement: 23 Shares: 6
Palau Climate and Ocean Bulletin	18	WSO Palau and social media	13+	9+	4+			Post Impressions: 706 Post Reach: 572 Engagement: 32 Shares: 7
Basics and Advanced Climate, Ocean and Access-S workshop	12-26	BoM, CO SPPac, MET and Climate offices, SPREP, SPC, SPREP post shared on social media	31+	17+	14+			Post Impressions: 706 Post Reach: 572 Engagement: 32 Shares: 7 Likes: 6 Hearts: 8
<b>Total</b>			<b>129+</b>	<b>85+</b>	<b>44+</b>			<b>+ to include group emails and social media</b>