

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 212

Country: Palau

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Feb-2025	Mar-2025	Apr-2025				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Koror (1951-2025)	431.3	267.0	217.4	173.7	254.0	205.5	40/74

TABLE 2: Three-month Total Rainfall for February to April 2025

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Koror (1951-2025)	915.7	Above normal	573.3	775.7	668.5	62/74

# Part 1i. Monthly and Seasonal Outlooks for June and June to August 2025

Monthly: June	Seasonal: June to August
<b>Rainfall (Image 1)</b>	<b>Rainfall (Image 2)</b>
<p style="text-align: center;">Tercile rainfall probabilities for June 2025</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 03/05/2025 Issued: 05/05/2025</p> <p style="text-align: center;">© Commonwealth of Australia 2025, Bureau of Meteorology, supported by COSPPac.</p> <p style="text-align: center;">--- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p style="text-align: center;">Tercile rainfall probabilities for June to August 2025</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 03/05/2025 Issued: 05/05/2025</p> <p style="text-align: center;">© Commonwealth of Australia 2025, Bureau of Meteorology, supported by COSPPac.</p> <p style="text-align: center;">--- EEZ border V11 (Flanders Marine Institute, 2019).</p>
<b>Monthly Maximum temperature (Image 3):</b>	<b>Seasonal maximum temperature (Image 4):</b>
<p style="text-align: center;">Tercile maximum temperature probabilities for June 2025</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 03/05/2025 Issued: 05/05/2025</p> <p style="text-align: center;">© Commonwealth of Australia 2025, Bureau of Meteorology, supported by COSPPac.</p> <p style="text-align: center;">--- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p style="text-align: center;">Tercile maximum temperature probabilities for June to August 2025</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 03/05/2025 Issued: 05/05/2025</p> <p style="text-align: center;">© Commonwealth of Australia 2025, Bureau of Meteorology, supported by COSPPac.</p> <p style="text-align: center;">--- EEZ border V11 (Flanders Marine Institute, 2019).</p>
<b>Monthly minimum temperature (Image 5):</b>	<b>Seasonal minimum temperature (Image 6):</b>
<p style="text-align: center;">Tercile minimum temperature probabilities for June 2025</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 03/05/2025 Issued: 05/05/2025</p> <p style="text-align: center;">© Commonwealth of Australia 2025, Bureau of Meteorology, supported by COSPPac.</p> <p style="text-align: center;">--- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p style="text-align: center;">Tercile minimum temperature probabilities for June to August 2025</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 03/05/2025 Issued: 05/05/2025</p> <p style="text-align: center;">© Commonwealth of Australia 2025, Bureau of Meteorology, supported by COSPPac.</p> <p style="text-align: center;">--- EEZ border V11 (Flanders Marine Institute, 2019).</p>

# Part 2: Recent Ocean Observation

## Monthly/Three months: April and February to April 2025

<p><b>Monthly: April 2025</b></p>	<p><b>Last three months: February to April 2025:</b></p>
<p><b>Sea Surface Temperature Anomaly (Image 1):</b></p>	<p><b>Sea Surface Temperature Anomaly (Image 4):</b></p>
<p><b>Sea level anomaly (Image 2):</b></p>	
<p><b>National daily coral bleaching alert (Image 3):</b></p>	<p><b>Pacific daily coral bleaching alert (Image 3):</b></p>

# Part 2i. Monthly and Seasonal Outlooks for June and June to August 2025

Monthly: June	Seasonal: June to August
<p><b>Monthly sea surface temperature anomaly (Image 5):</b></p> <p>Difference from average sea surface temperature forecast for June 2025</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 05/05/2025 Issued: 07/05/2025</p> <p>© Commonwealth of Australia 2025. Australian Bureau of Meteorology, supported by COSPPac.</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p><b>Seasonal sea surface temperature anomaly (Image 6):</b></p> <p>Difference from average sea surface temperature forecast for June to August 2025</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 05/05/2025 Issued: 07/05/2025</p> <p>© Commonwealth of Australia 2025. Australian Bureau of Meteorology, supported by COSPPac.</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>
<p><b>Monthly sea level anomaly (Image 7):</b></p> <p>Difference from average sea surface height forecast for June 2025</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 05/05/2025 Issued: 07/05/2025</p> <p>© Commonwealth of Australia 2025. Australian Bureau of Meteorology, supported by COSPPac.</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p><b>Seasonal sea level anomaly (Image 8):</b></p> <p>Difference from average sea surface height forecast for June to August 2025</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 05/05/2025 Issued: 07/05/2025</p> <p>© Commonwealth of Australia 2025. Australian Bureau of Meteorology, supported by COSPPac.</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>
<p><b>National 4-week Coral Bleaching Outlook (Image 9):</b></p> <p>Palau 4 Weeks Coral Bleaching Outlook: 27 April 2025</p> <p>© Commonwealth of Australia 2025. Australian Bureau of Meteorology, COSPPac.</p> <p>NOAA Coral Reef Watch</p>	<p><b>Pacific 4-week Coral Bleaching Outlook (Image 9):</b></p> <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 27 April 2025</p> <p>© Commonwealth of Australia 2025. Australian Bureau of Meteorology, COSPPac.</p> <p>NOAA Coral Reef Watch</p>

## **Summary Statement**

### **Monthly and last three months: April 2025/February to April 2025 statement**

The rainfall for April was near-normal over Koror and majority of Palau. For the past three months, rainfall was above normal over Palau.

## **Part 1i. Monthly and Seasonal Outlooks for June and June to August 2025**

### **Monthly /Seasonal rainfall and temperature Outlook statements**

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

The rainfall for June to August is very likely to be above normal over Palau

Maximum and minimum temperatures during June and averaged over June to August are very likely to be above normal over Palau.

## **Part 2: Recent Ocean summary statement**

### **Monthly and last three months: April 2025/February to April 2025**

April sea surface temperatures (SSTs) around Palau were 0.5 to 1.0°C above normal.

Averaged over February to April, sea surface temperatures around the southwest islands were 1.0 to 1.5°C above normal.

April sea levels around Sonsorol were 250 to 300mm above normal.

A coral bleaching Warning status are currently in effect for southern main islands and northern Hatohobei as of May 3.

## **Part 2i. Monthly and Seasonal Outlooks for June and June to August 2025**

### **Ocean Variable statement**

June sea surface temperatures around the main islands and Sonsorol are predicted to be 0.8 to 1.2°C above normal.

Averaged over June to August, sea surface temperatures around Palau are predicted to be 0.8 to 1.2°C above normal.

June sea levels around majority of the main islands are predicted to be 100 to 200mm above normal.

Averaged over June to August, sea levels around the main islands are predicted to be 60 to 100mm above normal.

Coral Bleaching outlook indicates Warning and Watch status for Hatohobei and Sonsorol, respectively, for the next 4 weeks.

### **In brief for Teleconference**

- Rainfall was near-normal for April and above normal for February to April.
- The rainfall outlook generally indicates above normal most likely in June and June to August.
- SSTs were above normal for April and February to April. The outlook shows above normal SSTs for the next one and three months.
- Sea levels were above normal for April. Above normal sea levels are predicted for June and June to August.

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

Product	Date: April 2025	Stakeholder	Total Number of Partici- pants	Number of Male	Number of Female	Disability	Age group	Comments (If there are comments from your Stakeholders)
Climate data request	1	Environ- mental Assessment Preparer/Con sultant of Neco Group of Companies and WSO	2	1	1	n/a	32-60	<p>1. Can we request a 20, 25 or 50 year monthly average/minimum/maximum rainfall data for Palau?</p> <p>2. Do you have average monthly evaporation data for Palau?</p> <p>3. Can you also let us know the exact location of the weather monitoring station the data came from?</p> <p>Hi Kikuko,</p> <p>Thank you so much for the detailed information you have provided.</p> <p>I believe this will suffice for our reporting purposes.</p> <p>Have a great day!</p> <p>Regards, Eric</p>
EAR Watch Stake- holder Work- shop	2-3	NEMO, Koror State Rangers, PPUC, Ministry of Health and Human Services, Bureau of Agriculture, Palau Red Cross Society, Bureau of Fisheries, and Coral Reef Research Foundation	28	13	15	n/a	32-60	EAR Watch Report which is issued by WSO Palau on a monthly basis was edited during the workshop with stakeholder input then presented to them.
Related to Climate Extremes workshop in March 2025	3	NOAA PRH Climate Services, WSOs Palau, Yap, Chuuk, Pohnpei and Majuro	6	4	2	n/a	30-60	I wanted to reach out to you all to see how things went with the climate data workshop in Fiji a couple weeks ago. How did it go? Were there any big issues that were

								<p>brought up for your sites or Micronesia sites as a whole? Is there anything I can assist with to get things in better shape?</p> <p>The real issue for us is archiving and updating the metadata. We can see a big change in the data set but there is no metadata to support that dramatic change. We need to start practicing and implementing logging and archiving any changes, big or small, to the metadata. When you mention these metadata issues, are you referring to the location of the station? Equipment changes over time? Please elaborate. I think I can help with some of these metadata issues and how they are documented on official platforms, making adjustments to the past and guidance for anything in the future.</p>
Koror QC and Homogenisation	4	BoM and WSO	2	1	1	n/a	32-60	<p>There are 2 rainfall outliers that would be good to verify against log books:</p> <p>16/1/1974: 348.5 mm, no recorded TC nearby.</p> <p>24/9/2011: 254.3 mm, no TC nearby and no high rainfall in JAXA.</p> <p>Please see supporting evidence of the rainfall totals in question. Images below were snipped from the xmacis site. Additional evidence attached is the Local Climatological Data Monthly Summary created by NOAA National Centers for Environmental Information (NCEI).</p>
CLiDE	4-7	BoM and WSO	3	2	1		32-60	WSO to BoM: It was brought to my attention

								that when an observer enters synoptic data and forgets to change the time they can go to the quality assurance tab and delete the obs and enter the correct time and repopulate the from. The observer came across this issue and tried to go into the QA tab to delete the incorrect obs but wasn't able to. Does the observer need to have admin rights? BoM: You should be able to in the keyentry form if it was data they entered. It may not be possible for data coming in from NOAA. The QA tab will only let you change the data values and flags.
Palau's Climate Extremes PPT	7	NOAA NWS PRH Climate services and WSOs Climate representatives from Chuuk, Pohnpei, Marshall Is.	5	4	1		32-60	NOAA Climate representative reached out to WSOs about workshop and if any assistance was in need. All responded to metadata needed to be updated. I shared my Climate Extremes PPT.
PPTs on Climate Drivers and Koror Climate, and recap on understanding probabilities and terciles	7	EAR Watch Stakeholders Engagement workshop participants	28	13	15	n/a	32-60	Thank you so much Kiku! (Response from Ministry of Health)
Weekly Fisheries Bulletin	1, 8, 15, 23, 30	16 State Gov Offices, Coral Reef Research Foundation, Ministry of Health, JICA, Ministry of Education, Ministry of Health, Pristine Paradise Palau (Visitors Authority), Palau	130	51	79	n/a	32-60	Social Media Insights: <b>4/1</b> -247 Views: 247 Reach: 173 Interactions: 2 Likes: 2  <b>4/8</b> – Views: 332 Reach: 225 Interactions: 4 Likes: 2 Shares: 2  <b>4/15</b> – Views: 255 Reach: 166 Interactions: 2 Likes: 2

		<p>Housing, Palau Executive Office, Palau House of Delegates, Local UNDP, Island Times, Japan Embassy, US Embassy, NEMO, Local and Regional UNEP CISPac5 PMU, Bureau of Marine Transportation, Palau Red Cross, Palau Public Utilities Corporation, PALARIS, CIP, Public Works, Division of Customs and Border Patrol, NOAA Pacific Region Headquarter, ECO Paradise Radio/TV, Palau Small Business Development Center, Bureau of Foreign Affairs- Ministry of State, Australia Embassy, Tia Belau Newspaper, Palau National Communications Corporation, WSO Palau, and social media</p>						<p><b>4/23 – NEW &amp; SIMPLE FORMAT OF FISHERIES BULLETIN:</b>  Views: 1727  Reach: 1,225  Interactions: 10  Likes: 4  Hearts: 4  Shares: 2</p> <p><b>4/30 –</b> Views: 790  Interactions: 4  Hearts: 4  Like: 1  Shares: 2</p>
EAR Watch	8	Emailed to 130 stakeholders listed in the Fisheries Bulletin and	134	53	81	n/a	32-60	<p>Social Media Insights:  Views: 850  Reach: 456  Interactions: 10  Likes: 3  Heart: 1  Shares: 4</p>

		posted on social media						
Missing AWS data in NEON and CLiDE	9	NIWA and WSO	3	1	2	n/a	32-60	NIWA response: The missing data on Neon is a result of scheme changes when AC visited Palau around mid-March which makes old channels inactive. However, if they navigate to the "show inactive changes" button they should see the old channels
Data request	10	Palau Public Utilities and WSO	4	3	1	n/a1	32-60	<p>Thank you for reaching out regarding data dissemination preferences. We appreciate WSO's effort in initiating the EAR workshop and the opportunity for input. Both daily and monthly will be greatly appreciated.</p> <p>Perhaps WSO may want to consider reaching out to the governors' association through NEC (proxied by Airai State Governor) for the community participation in data collection while we work towards AWS equipment. Just a thought to consider.</p> <p>I hope with our collaboration/exchanges will help improve our line of communication in capturing/forecasting of what could potentially be in the early stages for the best outcome.</p> <p>Thank you again for the opportunity.</p>
USAPI Obs/Climate Chat	11	NOAA NWS Weather and Climate Offices in the NH and USAPIs						
Locally tailored	14	Emailed to 130	130	51	79	n/a	32-60	Social Media Insights: Views: 888

NOAA NWS CPC ENSO Updates, Tropical Pacific Islands Monthly and Seasonal Outlooks and US Drought Monitor Summary		stakeholders listed in the Fisheries Bulletin and posted on social media						Reach: 563 Interactions: 5 Likes: 2 Shares: 3
Monthly 24-Hour Rainfall and Average Temperatures for March	15	Emailed to 130 stakeholders listed in the Fisheries Bulletin and posted on social media	130	51	79			Social Media Insights: Views: 873 Reach: 642 Interactions: 9 Likes: 5 Shares: 3 Comment: Thank you for sharing.
Palau's Island Climate Update	16	Emailed to 130 stakeholders listed in the Fisheries Bulletin and posted on social media	134	52	82	n/a	32-60	Social Media Insights: Views: 719 Reach: 392 Interactions: 7 Likes: 3 Heart: 1 Shares: 3
Locally tailored Palau PICASO and APCC Bulletin	16	Emailed to 130 stakeholders listed in the Fisheries Bulletin and posted on social media WSO Palau, and social media	132	51	81	n/a	32-60	Social Media Insights: Views: 1396 Reach: 828 Interactions: 5 Likes: 4 Shares: 3
Rainfall and Air Temperature Bulletin	18	Emailed to 130 stakeholders listed in the Fisheries Bulletin and posted on social media	132	52	80	n/a	32-60	Social Media Insights: Views: 880 Reach: 393 Interactions: 5 Likes: 2 Shares: 3
Sharing videos : Droughts in the Pacific and The Pacific Adventures of the Climate Crab	21	WFO Guam technician, teacher in Special Education, and WSO	3	1	2	n/a	30-60	WFO Guam technician requested and received a CD of the Pacific Adventures of the Climate Crab to give to his wife who is a Special Education teacher. I provided video links to the same video and include a link for the other video.

Monthly Ocean Bulletin	22	Emailed to 130 stakeholders listed in the Fisheries Bulletin and posted on social media	130	51	79	n/a	32-60	Social Media Insights Views: 493 Reach: 316 2 Interactions: 2 Share: 1 Likes: 1
Video : Data Quality (leaning into the International Girls/Women in Information and communication technologies (ICT)	23 24	Emailed by SPC videographer and WSO Social media	4	1	3	n/a	25-60	No Social Media Insights, shared SPC video: Likes:1 Heart: 1 Shares: 1
Virtual NCOF-2	30	Coral Reef Research Foundation, Palau Public Utilities Corp, Climate Change Office representative, Agriculture, Ngeremlengu i State Office, Palau International Coral Reef Research Center (PICRC), two other stakeholders	11	4	7	n/a	25-60	
Palau Climate Bulletin	30	Emailed to 130 stakeholders listed in the Fisheries Bulletin and posted on social media	130	51	79	n/a	32-60	Social Media Insights: Views: 702 Reach: 361 Interactions: 6 Likes: 4 Shares: 4
<b>Total</b>			<b>241</b>	<b>103</b>	<b>138</b>	<b>n/a</b>	<b>32-60</b>	All Locally made bulletins are issued to the same stakeholders 130=51(M)+79(F)