

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 197

Country: Chuuk, FSM

Part 1: Recent climate

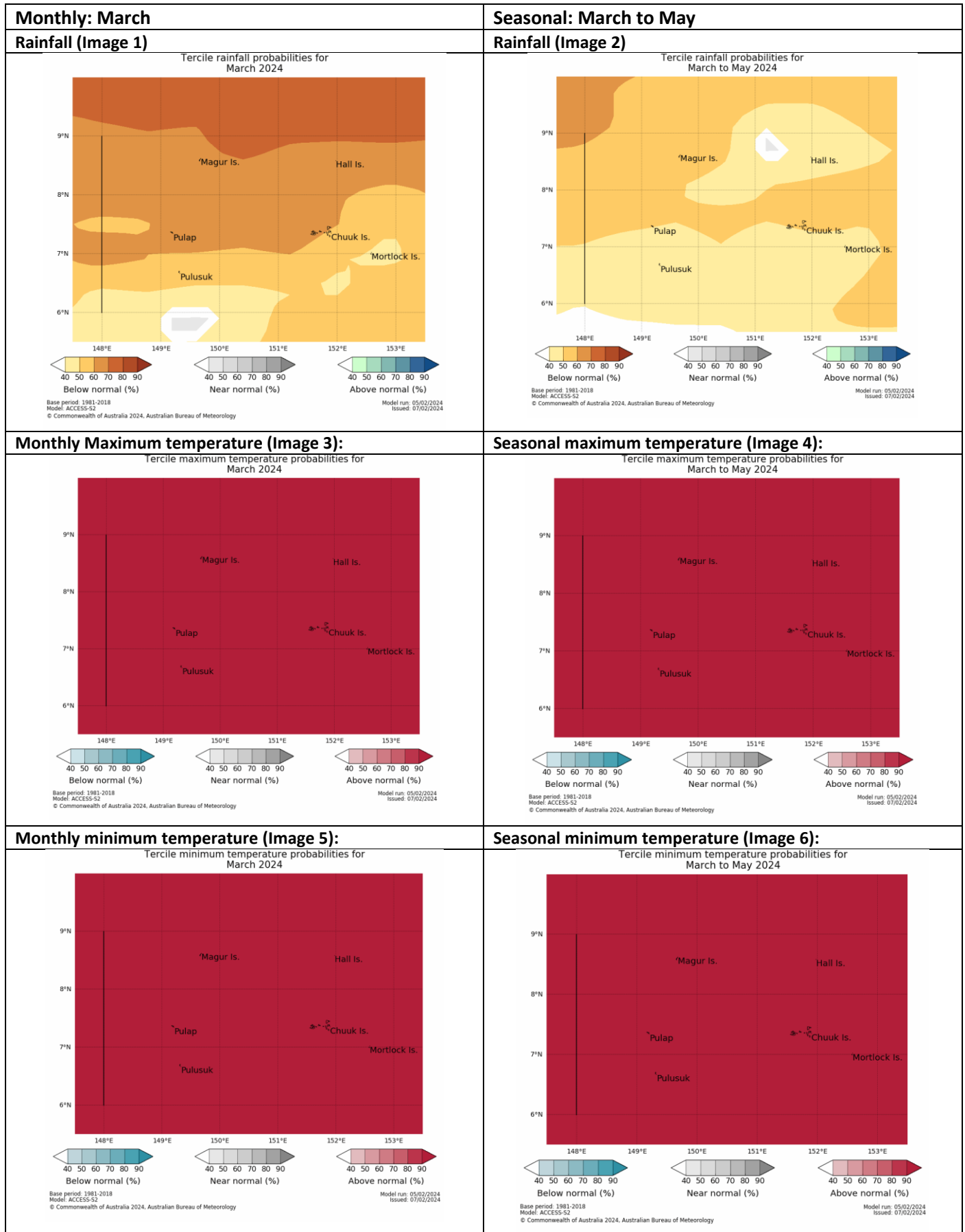
TABLE 1: Monthly Rainfall

| Station (include data period) | Nov-2023 | Dec-2023 | Jan-2024 | | | | Rank |
|-------------------------------|------------|------------|---------------|---------|---------|--------|-------|
| | | | Total (mm) | 33%tile | 67%tile | Median | |
| | Total (mm) | Total (mm) | Rainfall (mm) | | | | |
| Chuuk (1946-2024) | 379.2 | 285.0 | 255.3 | 193.8 | 274.9 | 237.2 | 45/76 |
| | | | | | | | |

TABLE 2: Three-month Total Rainfall for November 2023 to January 2024

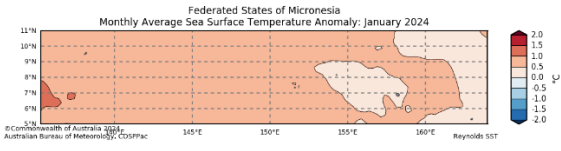
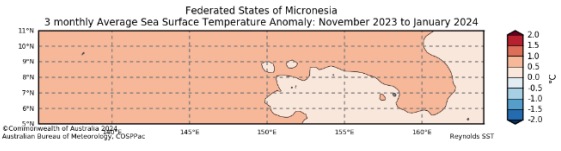
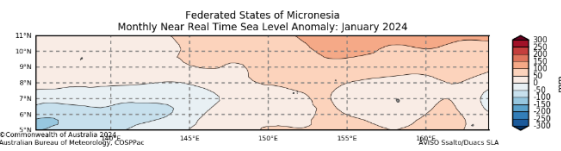
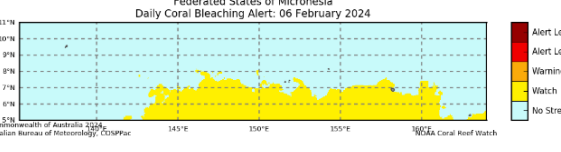
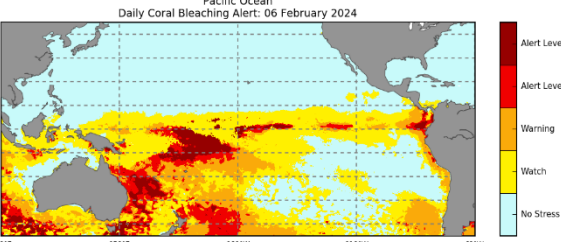
| Station | Three-month Total | | 33%tile | 67%tile | Median | Rank |
|-------------------|-------------------|--------|---------|---------|--------|-------|
| | Rainfall (mm) | | | | | |
| Chuuk (1946-2024) | 919.5 | Normal | 768.3 | 965.3 | 842.2. | 48/77 |
| | | | | | | |

Part 1i. Monthly and Seasonal Outlooks for March and March to May 2024

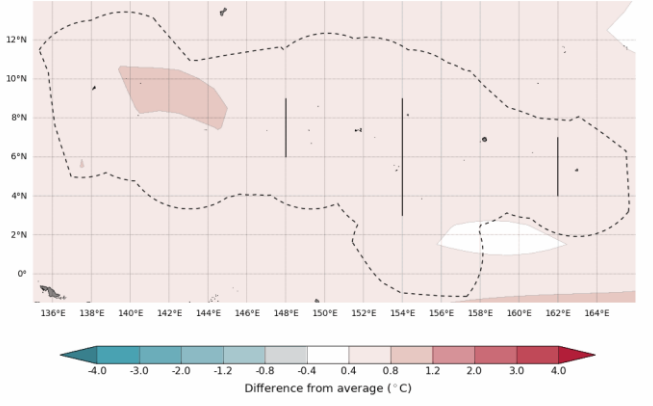
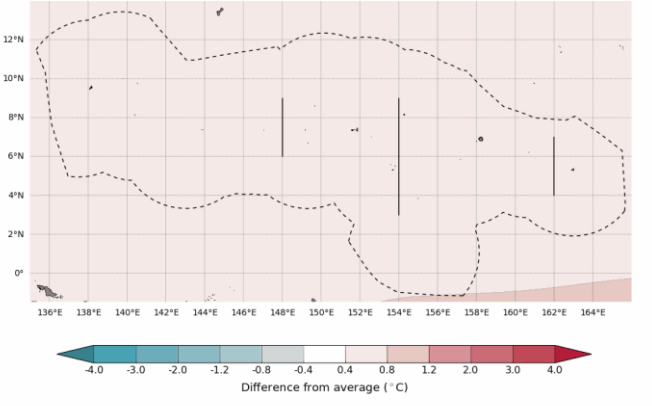
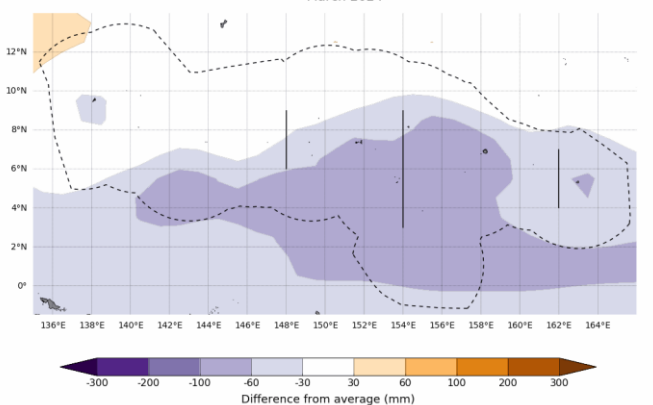
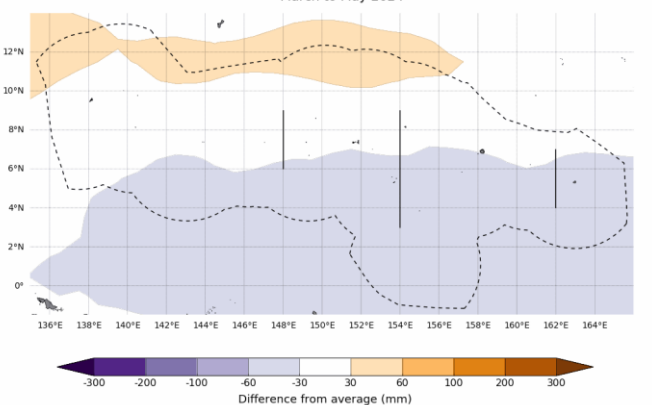
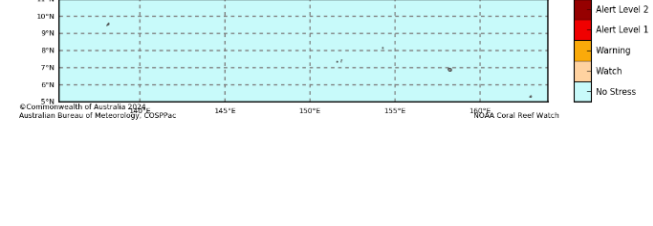
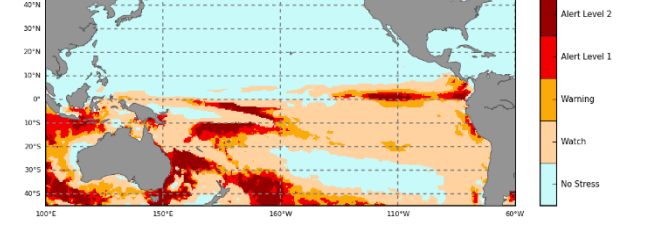


Part 2: Recent Ocean Observation

Monthly/Three months: January 2024 and November 2023 to January 2024

| Monthly: January 2024 | Last three months: November 2023 to January 2024: |
|--|--|
| <p>Sea Surface Temperature (Image 1):</p>  <p>Federated States of Micronesia Monthly Average Sea Surface Temperature Anomaly: January 2024</p> <p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> | <p>Sea Surface Temperature (Image 4):</p>  <p>Federated States of Micronesia 3 monthly Average Sea Surface Temperature Anomaly: November 2023 to January 2024</p> <p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> |
| <p>Sea level (Image 2):</p>  <p>Federated States of Micronesia Monthly Near Real Time Sea Level Anomaly: January 2024</p> <p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> | |
| <p>Daily coral bleaching alert (Image 3):</p>  <p>Federated States of Micronesia Daily Coral Bleaching Alert: 06 February 2024</p> <p>© Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> |  <p>Pacific Ocean Daily Coral Bleaching Alert: 06 February 2024</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 March and March to May 2024

| Monthly: March | Seasonal: March to May |
|--|---|
| <p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for March 2024</p>  <p>Difference from average (°C)</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinegovernors.org/</p> <p>Model run: 05/02/2024 Issued: 07/02/2024</p> | <p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for March to May 2024</p>  <p>Difference from average (°C)</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinegovernors.org/</p> <p>Model run: 05/02/2024 Issued: 07/02/2024</p> |
| <p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for March 2024</p>  <p>Difference from average (mm)</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinegovernors.org/</p> <p>Model run: 05/02/2024 Issued: 07/02/2024</p> | <p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for March to May 2024</p>  <p>Difference from average (mm)</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinegovernors.org/</p> <p>Model run: 05/02/2024 Issued: 07/02/2024</p> |
| <p>4-week Coral Bleaching (Image 9):</p> <p>Federated States of Micronesia 4 Weeks Coral Bleaching Outlook: 03 March 2024</p>  <p>© Commonwealth of Australia 2024, Australian Bureau of Meteorology, COSPPac NOAA Coral Reef Watch</p> | <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 03 March 2024</p>  <p>© Commonwealth of Australia 2024, Australian Bureau of Meteorology, COSPPac NOAA Coral Reef Watch</p> |

Summary Statement

Monthly and last three months: January 2024/November 2023 to January 2024 statement

The rainfall for January and for the November to January season was normal over Chuuk.

Part 1i. Monthly and Seasonal Outlooks for March and March to May 2024

Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for March and March to May is likely or very likely to be below normal over nearly all of the Chuuk region.

Maximum and minimum temperatures during March and the March to May season are very likely to be above normal over the entire Chuuk region.

Part 2: Recent Ocean summary statement

Monthly and last three months: January 2024/November 2023 to January 2024

January ocean temperatures around the entire Chuuk region were 0.5 to 1.0°C above normal.

Averaged over November to January, ocean temperatures around Chuuk Lagoon and the Mortlock islands were near normal, while the rest of the Chuuk region were 0.5 to 1.0°C above normal.

January sea levels around Chuuk Lagoon, western parts of the Mortlock islands, Puluwat, Pulap, and Pulusuk were near normal while Namonuito Atoll, Hall islands, and Eastern parts of the Mortlock islands were 50mm to 100mm above normal.

Coral bleaching alert shows Watch status for southern Chuuk waters.

Part 2i. Monthly and Seasonal Outlooks for March and March to May 2024

Ocean Variable statement

In March and the March to May season outlook, ocean temperatures around the entire Chuuk region are predicted to be 0.4 to 0.8°C above normal.

March sea levels around Chuuk Lagoon and the Mortlock islands are predicted to be 60mm to 100mm below normal while the Hall islands and western islands (included Polowat, Pulap, and Pulusuk) are predicted to be 30mm to 60mm below normal. The outlook for Namonuito atoll for March is likely to be near normal.

Averaged over March to May, sea levels around the Mortlock islands are predicted to be 30mm to 60mm below normal. The outlook for the same season over the rest of Chuuk are likely to be near normal.

Coral bleaching outlook predicts no thermal stress for the next four weeks.

IN BRIEF for Teleconference

- Rainfall was normal for both one and three months.

- The rainfall outlook indicates below average in March and over March to May.
- Air temperatures are very likely to be above average over March and March to May.
- SSTs were above normal for January and November to January. The outlook shows above normal SSTs for the next one and three months.
- Sea-surface heights (SSH) were above normal for January. Below normal sea surface heights are predicted for March and March to May.

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

| Product | Date: January 2024 | Stakeholder | Total Number of Participants | Number of Male | Number of Female | Comments (If there are comments from you Stakeholders) |
|--------------------------------|--------------------------|-------------|------------------------------------|-------------------|---------------------|--|
| Climate Bulletin | | | 4 | 2 | 2 | |
| EAR Watch | | | 4 | 2 | 2 | |
| Monthly Climate Briefing | | | | | | |
| Ocean Outlook | | | 4 | 2 | 2 | |
| Climate data request | | | | | | |
| Total | | | 4 | 2 | 2 | |