

Country: Vanuatu

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Oct-2023	Nov-2023	Dec-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Northern Region							
Sola (1971-2024)	182.0	267.8	235.6	239.1	446.6	353.9	17/50
Pekoa (1971-2024)	156.6	33.7	237.5	149.8	225.0	180.6	35/52
Lamap (1961-2024)				102.8	160.3	127.1	
Southern Region							
Bauerfield (1972-2024)	126.3	72.4	201.7	137.2	209.4	178.8	33/51
Port Vila (1953-2024)		47.5	146.5	115.0	223.9	173.9	30/71
Whitegrass (1972-2024)	39.6	7.3	29.9	50.0	100.7	80.0	9/53
Aneityum (1952-2024)	194.6	25.2	94.3	118.3	246.2	168.0	18/72

TABLE 2: Three-month Total Rainfall for October to December 2023

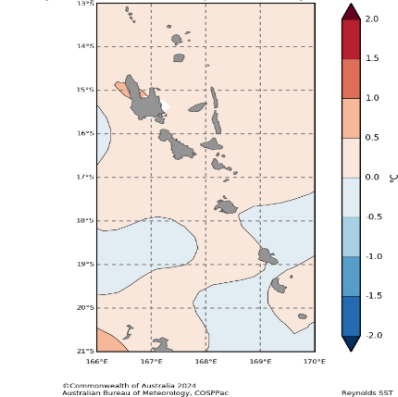
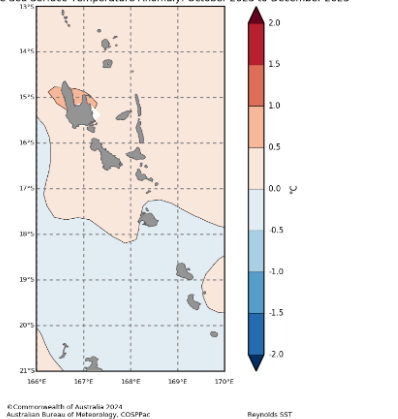
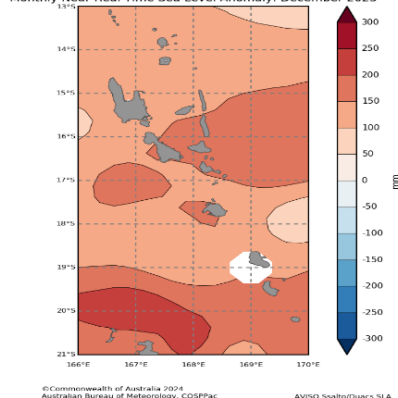
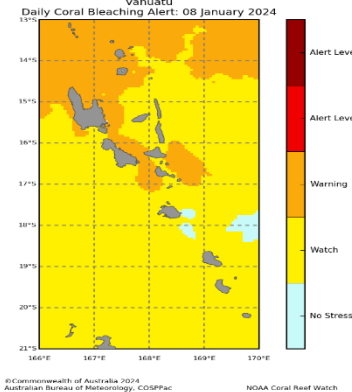
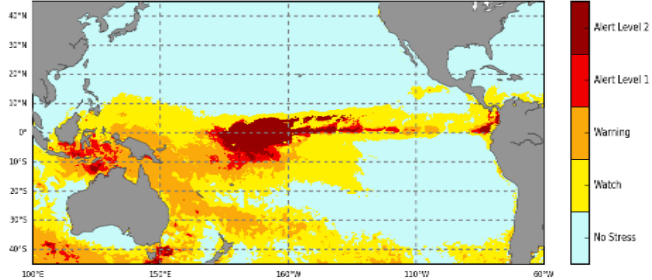
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Northern Region						
Sola (1971-2024)	685.4	Below normal	923.0	1370.6	1178.0	10/49
Pekoa (1971-2024)	427.8	Normal	424.4	632.3	528.3	19/52
Lamap (1961-2024)			336.6	459.1	375.2	
Southern Region						
Bauerfield (1972-2024)	400.4	Normal	343.0	594.5	458.4	24/51
Port Vila (1953-2024)			312.0	519.0	431.5	
Whitegrass (1972-2024)	76.8	Below normal	141.0	234.6	189.3	6/52
Aneityum (1952-2024)	314.1	Below normal	324.9	579.7	409.7	24/72

Part 1i. Monthly and Seasonal Outlooks for February and February to April 2024

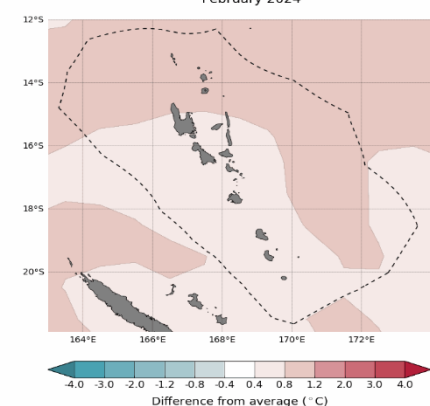
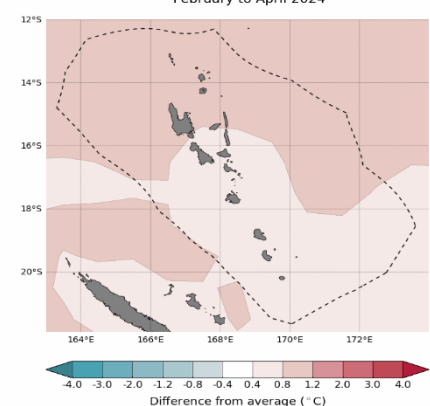
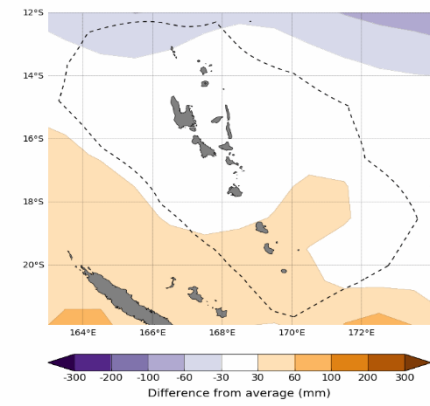
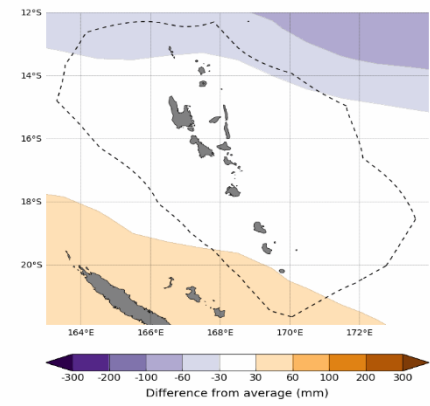
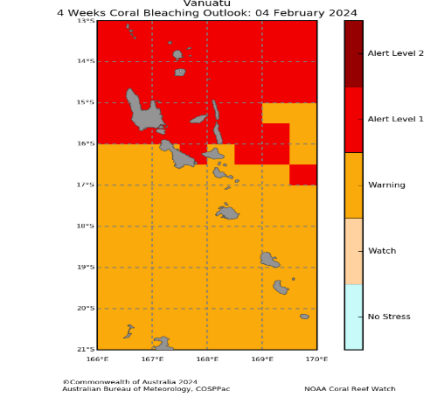
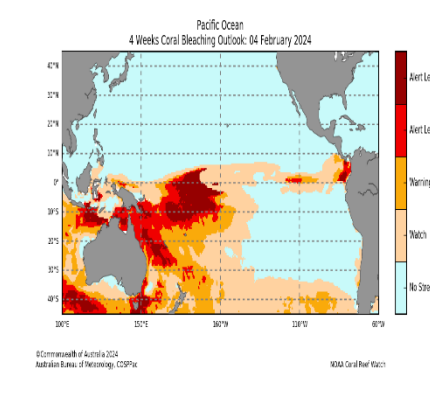
Monthly: February	Seasonal: February to April
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for February 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimeregions.org/">http://www.maritimeregions.org/</a></p> <p>Model run: 06/01/2024 Issued: 08/01/2024</p>	<p>Tercile rainfall probabilities for February to April 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimeregions.org/">http://www.maritimeregions.org/</a></p> <p>Model run: 06/01/2024 Issued: 08/01/2024</p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for February 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimeregions.org/">http://www.maritimeregions.org/</a></p> <p>Model run: 06/01/2024 Issued: 08/01/2024</p>	<p>Tercile maximum temperature probabilities for February to April 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimeregions.org/">http://www.maritimeregions.org/</a></p> <p>Model run: 06/01/2024 Issued: 08/01/2024</p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for February 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimeregions.org/">http://www.maritimeregions.org/</a></p> <p>Model run: 06/01/2024 Issued: 08/01/2024</p>	<p>Tercile minimum temperature probabilities for February to April 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimeregions.org/">http://www.maritimeregions.org/</a></p> <p>Model run: 06/01/2024 Issued: 08/01/2024</p>

Part 2: Recent Ocean Observation

Monthly/Three months: December and October to December 2023

Monthly: December	Last three months: October to December 2023:
Sea Surface Temperature (Image 1): <div><p>Vanuatu Monthly Average Sea Surface Temperature Anomaly: December 2023</p><p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>	Sea Surface Temperature (Image 4): <div><p>Vanuatu 3 monthly Average Sea Surface Temperature Anomaly: October 2023 to December 2023</p><p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>
Sea level (Image 2): <div><p>Vanuatu Monthly Near Real Time Sea Level Anomaly: December 2023</p><p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p><p>AVISO SeaWiFS SLA</p></div>	
Daily coral bleaching alert (Image 3): <div><p>Vanuatu Daily Coral Bleaching Alert: 08 January 2024</p><p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>	<div><p>Pacific Ocean Daily Coral Bleaching Alert: 08 January 2024</p><p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>

Part 2i. Monthly and Seasonal Outlooks for February and February to April 2024

<p>Monthly: February</p> <p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for February 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-52 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Boggeffs data extracted from Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2020), version 11. Available online at <a href="http://www.maritimeport.org/">http://www.maritimeport.org/</a></p> <p>Model run: 06/01/2024 Issued: 08/01/2024</p>	<p>Seasonal: February to April</p> <p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for February to April 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-52 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Boggeffs data extracted from Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2020), version 11. Available online at <a href="http://www.maritimeport.org/">http://www.maritimeport.org/</a></p> <p>Model run: 06/01/2024 Issued: 08/01/2024</p>
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for February 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-52 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Boggeffs data extracted from Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2020), version 11. Available online at <a href="http://www.maritimeport.org/">http://www.maritimeport.org/</a></p> <p>Model run: 06/01/2024 Issued: 08/01/2024</p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for February to April 2024</p>  <p>Base period: 1981-2018 Model: ACCESS-52 © Commonwealth of Australia 2024, Australian Bureau of Meteorology Boggeffs data extracted from Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2020), version 11. Available online at <a href="http://www.maritimeport.org/">http://www.maritimeport.org/</a></p> <p>Model run: 06/01/2024 Issued: 08/01/2024</p>
<p>4-week Coral Bleaching (Image 9):</p> <p>Vanuatu</p> <p>4 Weeks Coral Bleaching Outlook: 04 February 2024</p>  <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Pacific Ocean</p> <p>4 Weeks Coral Bleaching Outlook: 04 February 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: December 2023/October to December 2023 statement**

The rainfall for December was below normal at Sola, Whitegrass and Aneityum, near-normal at Bauerfield and Port Vila, and above normal at Pekoa.

The three-month total rainfall for October to December was below normal at Sola, Whitegrass and Aneityum, and near-normal at Pekoa and Bauerfield.

## **Part 1i. Monthly and Seasonal Outlooks for February and February to April 2024**

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

The rainfall for February, and for the February to April period, is likely to be below normal for most of the country.

Maximum and minimum temperatures during February, and averaged for the February to April period, are very likely to be above normal over the whole country.

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

### **Monthly and last three months: December 2023/October to December 2023**

December and averaged over October to December ocean temperatures over Vanuatu were near normal except northern Espiritu Santo with 0.5 to 1.0°C above normal. December sea levels around Vanuatu were 50mm to 200mm above normal.

Coral bleaching alert at WATCH for southern Vanuatu, and WARNING for northern Vanuatu.

## **Part 2i. Monthly and Seasonal Outlooks for February and February to April 2024**

### **Ocean Variable statement**

Ocean temperatures for February, and averaged over February to April, are predicted to be 0.4 to 1.2°C above normal.

February sea levels around the southern islands are predicted to be 30mm to 60mm above normal. Elsewhere are likely to be within the near normal range.

Averaged over February to April, sea levels around most of the country are predicted to be within the near normal range.

Coral bleaching outlook predicts Alert level 1 for the northern islands, while WARNING is predicted for the central and southern islands.

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

Product	Date: December 2023	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
Climate Bulletin						
EAR Watch						
Monthly Climate Briefing						
Ocean Outlook						
Climate data request						
Total						