

# Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 188

Country: Vanuatu

## Part 1: Recent climate

**TABLE 1: Monthly Rainfall**

Station (include data period)	Feb-2023	Mar-2023	Apr-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Northern Region							
Sola (1971-2023)	385.1	418.2	73.1	339.3	498.8	433.8	1/51
Pekoa (1971-2023)	269.5	242.6	294.2	185.9	285.5	232.9	36/53
Lamap (1961-2022)				162.2	242.0	198.2	
Southern Region							
Bauerfield (1972-2023)	416.9	444.1	82.9	165.2	265.9	199.5	8/51
Port Vila (1953-2023)	481.0	738.5	103.5	139.2	243.3	182.4	9/71
Whitegrass (1972-2023)	261.5	259.4	147.9	56.5	131.7	90.5	36/52
Aneityum (1952-2023)	266.6	201.3	190.0	153.2	290.9	212.9	32/72

**TABLE 2: Three-month Total Rainfall for February to April 2023**

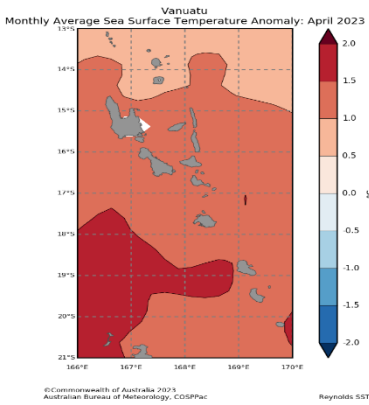
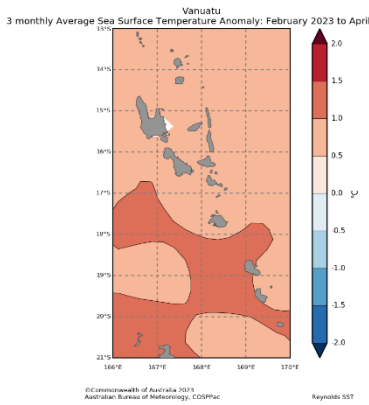
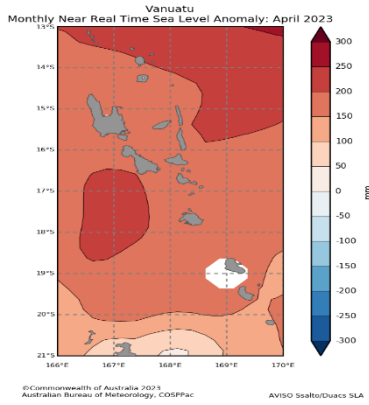
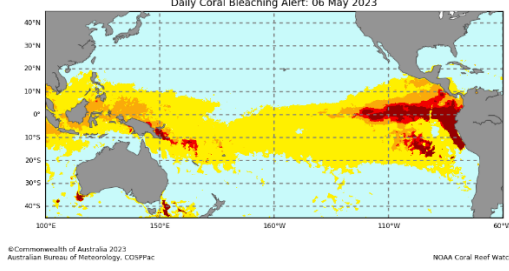
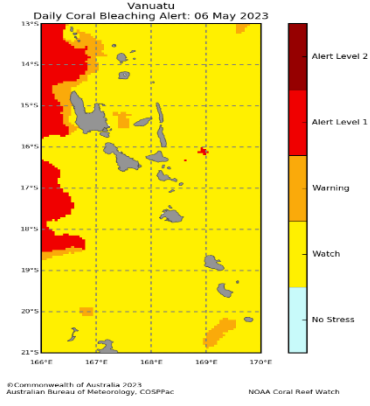
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Northern Region						
Sola (1971-2023)	876.4	Below normal	1053.0	1326.5	1151.2	9/51
Pekoa (1971-2023)	806.3	Normal	746.5	948.9	833.0	24/53
Lamap (1961-2023)			628.9	755.7	700.9	
Southern Region						
Bauerfield (1972-2023)	943.9	Normal	771.3	999.8	905.1	28/51
Port Vila (1953-2023)	1323.0	Above normal	769.1	920.5	850.2	70/71
Whitegrass (1972-2023)	668.8	Above normal	427.0	579.7	490.4	41/52
Aneityum (1952-2023)	657.9	Below normal	685.7	935.1	834.4	19/72

Part 1i. Monthly and Seasonal Outlooks for June and June to August 2023

Monthly: June	Seasonal: June to August
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for June 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Geospatial data extracted from Flanders Marine Institute (2019): Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004a), version 11. Available online at <a href="http://www.maritimesg.org/">http://www.maritimesg.org/</a></p>	<p>Tercile rainfall probabilities for June to August 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Geospatial data extracted from Flanders Marine Institute (2019): Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004a), version 11. Available online at <a href="http://www.maritimesg.org/">http://www.maritimesg.org/</a></p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for June 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Geospatial data extracted from Flanders Marine Institute (2019): Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004a), version 11. Available online at <a href="http://www.maritimesg.org/">http://www.maritimesg.org/</a></p>	<p>Tercile maximum temperature probabilities for June to August 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Geospatial data extracted from Flanders Marine Institute (2019): Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004a), version 11. Available online at <a href="http://www.maritimesg.org/">http://www.maritimesg.org/</a></p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for June 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Geospatial data extracted from Flanders Marine Institute (2019): Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004a), version 11. Available online at <a href="http://www.maritimesg.org/">http://www.maritimesg.org/</a></p>	<p>Tercile minimum temperature probabilities for June to August 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Geospatial data extracted from Flanders Marine Institute (2019): Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004a), version 11. Available online at <a href="http://www.maritimesg.org/">http://www.maritimesg.org/</a></p>

Part 2: Recent Ocean Observation

Monthly/Three months: April and February to April 2023

Monthly: April	Last three months: February to April 2023:
Sea Surface Temperature (Image 1): <div><p>Monthly Average Sea Surface Temperature Anomaly: April 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>	Sea Surface Temperature (Image 4): <div><p>3 monthly Average Sea Surface Temperature Anomaly: February 2023 to April 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>
Sea level (Image 2): <div><p>Monthly Near Real Time Sea Level Anomaly: April 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>AVISO Ssalto/Duacs SLA</p></div>	
Daily coral bleaching alert (Image 3): <div><p>Pacific Ocean Daily Coral Bleaching Alert: 06 May 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>	<div><p>Vanuatu Daily Coral Bleaching Alert: 06 May 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>

Part 2i. Monthly and Seasonal Outlooks for June and June to August 2023

Monthly: June	Seasonal: June to August
<div>Monthly sea surface temperature (Image 5):</div> <div><p>Difference from average sea surface temperature forecast for June 2023</p><p>Base period: 1981-2018 Model: ACCESS-2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Seafile data extracted from Seafile Marine Institute (2019). Maritime Boundaries and Exclusive Economic Zones (2009), version 1.1. Available online at <a href="http://www.marinegovernors.org/">http://www.marinegovernors.org/</a></p><p>Model run: 06/05/2023 Issued: 06/05/2023</p></div>	<div>Seasonal sea surface temperature (Image 6):</div> <div><p>Difference from average sea surface temperature forecast for June to August 2023</p><p>Base period: 1981-2018 Model: ACCESS-2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Seafile data extracted from Seafile Marine Institute (2019). Maritime Boundaries and Exclusive Economic Zones (2009), version 1.1. Available online at <a href="http://www.marinegovernors.org/">http://www.marinegovernors.org/</a></p><p>Model run: 06/05/2023 Issued: 06/05/2023</p></div>
<div>Monthly sea level (Image 7):</div> <div><p>Difference from average sea surface height forecast for June 2023</p><p>Base period: 1981-2018 Model: ACCESS-2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Seafile data extracted from Seafile Marine Institute (2019). Maritime Boundaries and Exclusive Economic Zones (2009), version 1.1. Available online at <a href="http://www.marinegovernors.org/">http://www.marinegovernors.org/</a></p><p>Model run: 06/05/2023 Issued: 06/05/2023</p></div>	<div>Seasonal sea level (Image 8):</div> <div><p>Difference from average sea surface height forecast for June to August 2023</p><p>Base period: 1981-2018 Model: ACCESS-2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Seafile data extracted from Seafile Marine Institute (2019). Maritime Boundaries and Exclusive Economic Zones (2009), version 1.1. Available online at <a href="http://www.marinegovernors.org/">http://www.marinegovernors.org/</a></p><p>Model run: 06/05/2023 Issued: 06/05/2023</p></div>
<div>4-week Coral Bleaching (Image 9):</div> <div><p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 28 May 2023</p><p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>	<div><p>Vanuatu 4 Weeks Coral Bleaching Outlook: 28 May 2023</p><p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>

## **Summary Statement**

### **Monthly and last three months: April 2023/February to April 2023 statement**

The rainfall for April was below normal at Sola, Bauerfield and Port Vila, normal at Aneityum, and above normal at Pekoa and Whitegrass. Sola recorded its driest April in 51 years. Data for Lamap was not available.

The three-month rainfall for February to April 2023 was below normal at Sola and Aneityum, normal at Pekoa and Bauerfield, and above normal at Port Vila and Whitegrass. Port Vila posted its second wettest February to April period on record. Data for Lamap was not available.

## **Part 1i. Monthly and Seasonal Outlooks for June and June to August 2023**

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

The rainfall for June is likely or very likely to be above normal over Malampa, Shefa and Tafea provinces. The outlook offers little guidance over Torba, Sanma and Penama provinces.

The rainfall for June to August is likely to be above normal over Sanma, Malampa, Shefa and Tafea provinces, and near-normal over Torba province and Aneityum. The outlook offers little guidance over Torres, Penama province, Futuna and Aniwa.

Maximum and minimum temperatures during June, and averaged over June to August are very likely to be above normal over the whole country.

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

### **Monthly and last three months: April 2023/February to April 2023**

April ocean temperatures around Vanuatu were 0.5 to 1.5°C above normal.

Averaged over February to April, ocean temperatures around Vanuatu were 0.5 to 1.5°C above normal.

April sea levels around Vanuatu were 50mm to 250mm above normal.

Daily coral bleaching for Vanuatu as of 6<sup>th</sup> May is Warning for Loh and Toga (Torres Islands) while the rest of the country remains at Watch.

## **Part 2i. Monthly and Seasonal Outlooks for June and June to August 2023**

### **Ocean Variable statement**

June ocean temperatures around Vanuatu are predicted to be 0.8 to 2.0°C above normal.

Averaged over June to August, ocean temperatures around Vanuatu are predicted to be 0.4 to 1.2°C above normal.

June sea levels around Vanuatu are predicted to be 60mm to 200mm above normal.

Averaged over June to August, sea levels around Vanuatu are predicted to be 30mm to 100mm above normal.

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

Product	Date: April 2023	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from your Stakeholders)
Climate Bulletin						
EAR Watch						
Ocean Outlook						
Climate data request	12th	Vanuatu National University and VRN Volunteers	47 VRN	14	33	
<b>Monthly climate &amp; oceans update</b>						
Facebook Livestream	26th		297	102	195	
Zoom meeting	26th		9	2	7	
Facebook summary post	26th		1,358	658	700	
Email version	26th		241	50	191	
<b>Total</b>			<b>1,952</b>	<b>826</b>	<b>1126</b>	