

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 192

Country: Vanuatu

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Jun-2023	Jul-2023	Aug-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
	Northern Region						
Sola (1971-2023)	372.4	267.4	138.9	139.1	266.5	191.0	17/50
Pekoa (1971-2023)	167.4	219.1	196.0	60.9	107.5	80.4	46/52
Lamap (1961-2022)				51.1	93.0	68.5	
Southern Region							
Bauerfield (1972-2023)	65.1	125.6	162.0	47.9	97.9	66.6	46/51
Port Vila (1953-2023)	59.0	108.5	97.0	47.1	92.7	75.1	49/71
Whitegrass (1972-2023)	48.3	32.4	163.6	22.9	55.4	31.1	49/52
Aneityum (1952-2023)	22.7	32.4	269.7	72.2	136.8	102.9	70/72

TABLE 2: Three-month Total Rainfall for June to August 2023

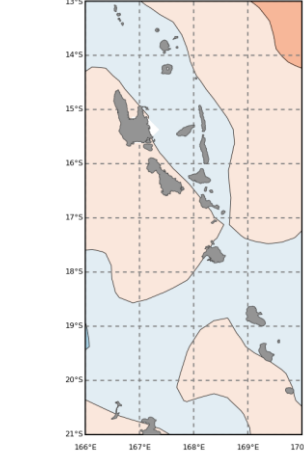
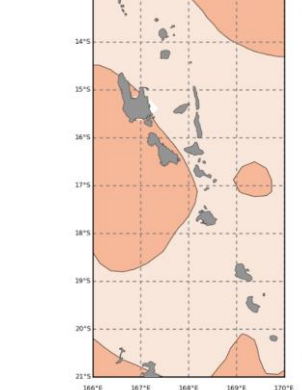
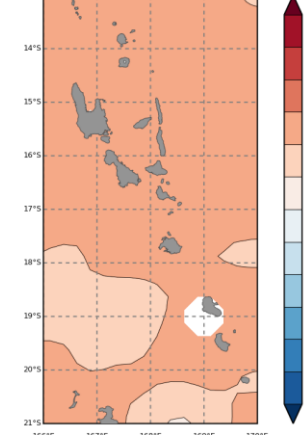
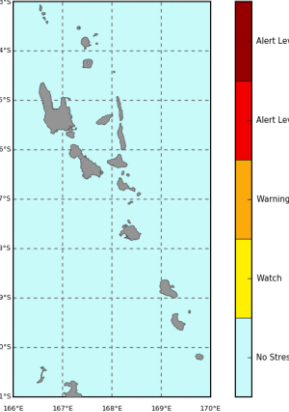
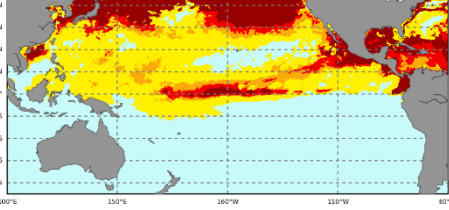
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Northern Region						
Sola (1971-2023)	778.7	Normal	589.8	1029.8	775.9	25/48
Pekoa (1971-2023)	582.5	Above normal	242.5	475.4	393.5	42/52
Lamap (1961-2022)			230.2	339.7	285.0	
Southern Region						
Bauerfield (1972-2023)	352.7	Normal	247.8	374.3	327.2	33/51
Port Vila (1953-2023)	264.5	Normal	237.3	407.7	310.0	30/70
Whitegrass (1972-2023)	244.3	Above normal	135.3	230.1	161.2	38/51
Aneityum (1952-2023)	324.8	Normal	306.7	440.5	384.5	28/72

Part 1i. Monthly and Seasonal Outlooks for October and October to December 2023

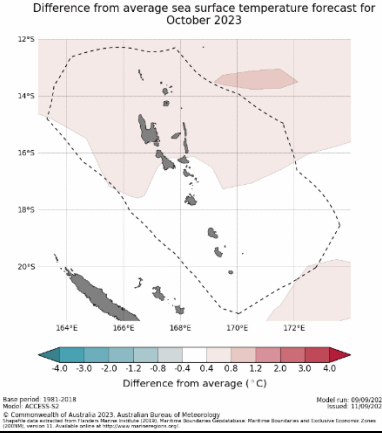
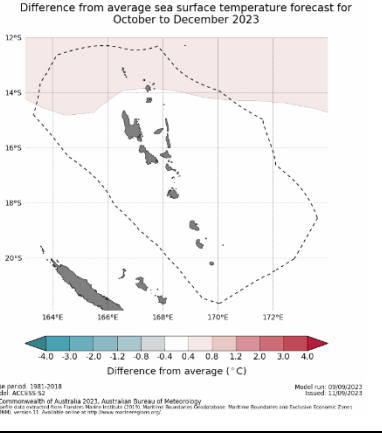
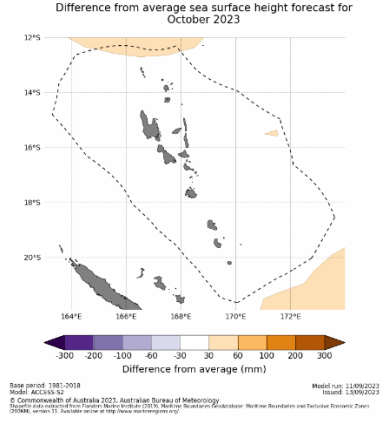
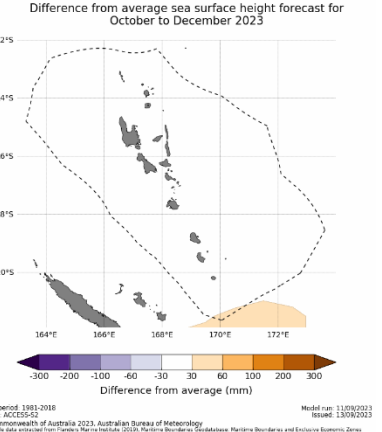
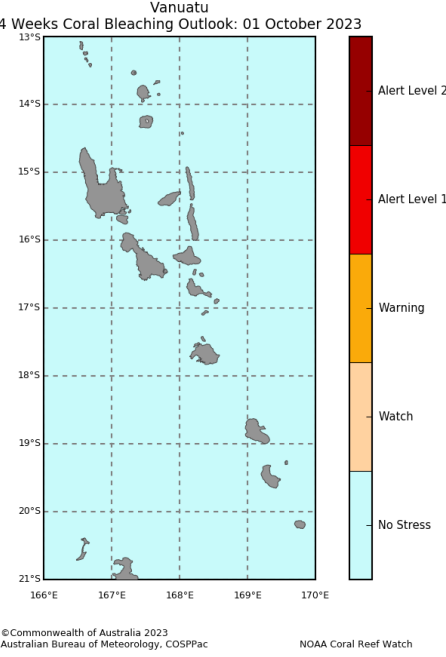
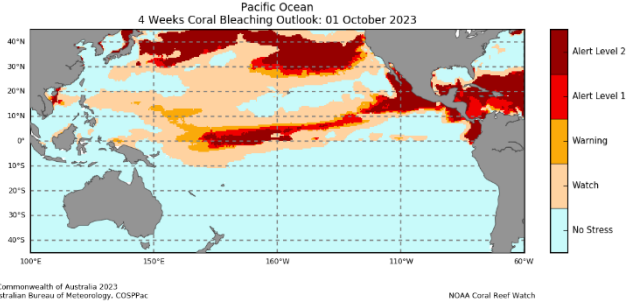
Monthly: October	Seasonal: October to December
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for October 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/</p> <p>Model run: 04/09/2023 Issued: 06/09/2023</p>	<p>Tercile rainfall probabilities for October to December 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, 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 http://www.maritimerregions.org/</p> <p>Model run: 04/09/2023 Issued: 06/09/2023</p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for October 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, 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 http://www.maritimerregions.org/</p> <p>Model run: 04/09/2023 Issued: 06/09/2023</p>	<p>Tercile maximum temperature probabilities for October to December 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, 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 http://www.maritimerregions.org/</p> <p>Model run: 04/09/2023 Issued: 06/09/2023</p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for October 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, 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 http://www.maritimerregions.org/</p> <p>Model run: 04/09/2023 Issued: 06/09/2023</p>	<p>Tercile minimum temperature probabilities for October to December 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, 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 http://www.maritimerregions.org/</p> <p>Model run: 04/09/2023 Issued: 06/09/2023</p>

Part 2: Recent Ocean Observation

Monthly/Three months: August and June to August 2023

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

<p>Monthly: October</p> <p>Monthly sea surface temperature (Image 5):</p> 	<p>Seasonal: October to December</p> <p>Seasonal sea surface temperature (Image 6):</p> 
<p>Monthly sea level (Image 7):</p> 	<p>Seasonal sea level (Image 8):</p> 
<p>4-week Coral Bleaching (Image 9):</p> <p>Vanuatu</p> <p>4 Weeks Coral Bleaching Outlook: 01 October 2023</p> 	<p>Pacific Ocean</p> <p>4 Weeks Coral Bleaching Outlook: 01 October 2023</p> 

Summary Statement

Monthly and last three months: August 2023/June to August 2023 statement

Rainfall for August was above normal over most of the country, except at Sola which recorded below normal. Bauerfield recorded its sixth wettest August in 51 years, Whitegrass its fourth wettest in 52 years, and Aneityum its third wettest in 72 years.

For the June to August period, rainfall was above normal at Pekoa and Whitegrass, and near-normal at remaining sites.

Rainfall for Lamap was not available for both the August, and the June to August period.

Part 1i. Monthly and Seasonal Outlooks for October and October to December 2023

Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for October is likely to be below normal over Tafea province, and normal over Torba province. The outlook offers little guidance elsewhere.

Rainfall for the October to December period is very likely to be below normal over Sanma, Penama, Malampa, Shefa and Tafea provinces. Rainfall is likely to be below normal to normal over Torba province.

Maximum temperatures during October are likely or very likely to be above normal over Torba and Penama provinces, and likely to be near-normal across the rest of Vanuatu.

Maximum temperatures averaged over October to December are very likely to be above normal over Torba province, but across the rest of the country near-normal temperatures are likely.

Minimum temperatures during October are likely or very likely to be above normal, except over Tafea where near-normal temperatures are likely.

Minimum temperatures averaged over October to December are likely or very likely to be above normal over Torba, Sanma, Penama and Malampa, while near-normal temperatures are likely over Shefa and Tafea Provinces.

Part 2: Recent Ocean summary statement

Monthly and last three months: August 2023/June to August 2023

August ocean temperatures around Vanuatu were near normal. -

Averaged over June to August, ocean temperatures around Vanuatu were 0.0 to 1.0°C above normal.

August sea levels around Vanuatu were 100mm to 150mm above normal. Data for Erromango Island was not available.

Coral bleaching alert reveals no thermal stress for Vanuatu.

Part 2i. Monthly and Seasonal Outlooks for October and October to December 2023

Ocean Variable statement

October ocean temperatures around Torba, Sanma, Penama and parts of the Malampa province are predicted to be 0.4 to 0.8°C above normal.

Averaged over October to December, ocean temperatures around parts of Torba province are predicted to be 0.4 to 0.8°C above normal, while the rest of the country is predicted to experience near normal temperatures.

October sea levels and averaged October to December sea levels around Vanuatu are predicted to be near normal.

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

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

Product	Date: August 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						