

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 182

Country: Vanuatu

Part 1: Recent climate

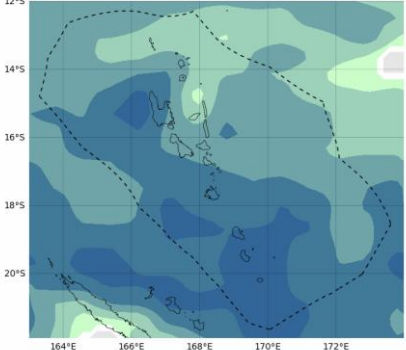
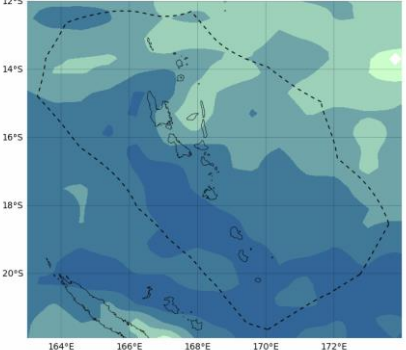
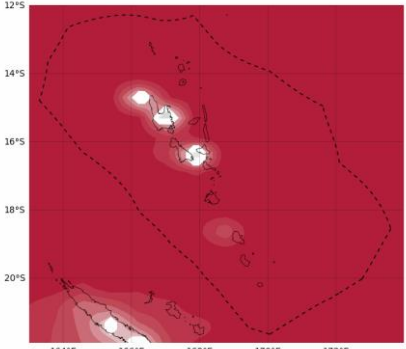
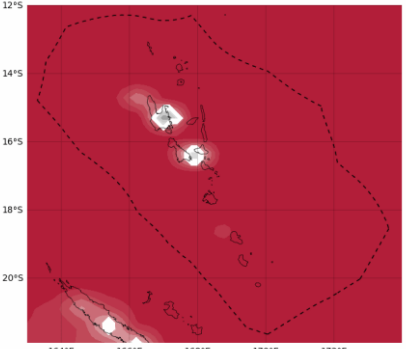


TABLE 1: Monthly Rainfall

Station (include data period)	Aug-2022	Sep-2022	Oct-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Northern Region							
Sola (1971-2022)	239.8	198.1	395.5	216.0	426.3	347.4	30/51
Pekoa (1971-2022)	259.4	126.3	556.8	89.6	176.7	131.7	50/52
Lamap (1961-2022)	87.5	131.0	428.0	66.3	172.9	100.5	60/61
Southern Region							
Bauerfield (1972-2022)	124.8	146.2	472.4	56.9	143.0	108.6	49/50
Port Vila (1953-2022)	73.5	75.0	354.5	57.5	130.5	88.5	69/70
Whitegrass (1972-2022)	28.5	39.7	68.6	21.9	62.9	34.7	36/51
Aneityum (1952-2022)	112.1	151.6	179.0	64.1	143.2	91.0	54/71

TABLE 2: Three-month Total Rainfall for August to October 2022

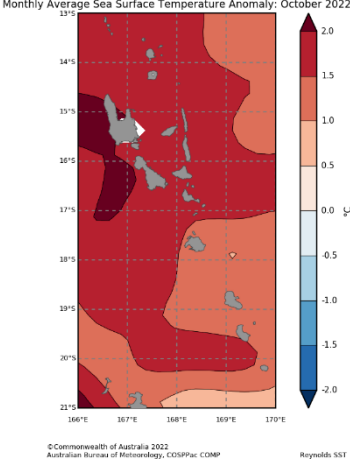
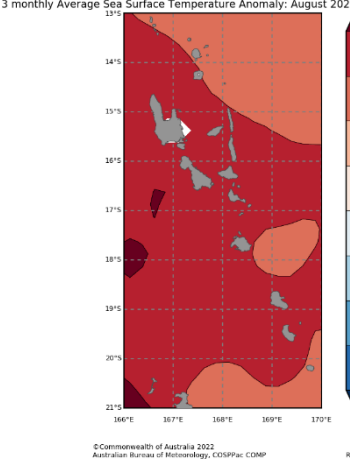
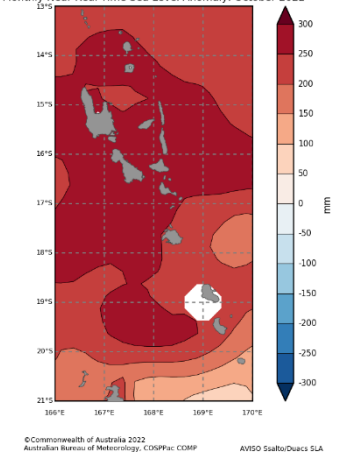
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Northern Region						
Sola (1971-2022)	833.4	Normal	633.9	955.0	819.0	28/49
Pekoa (1971-2022)	942.5	Above normal	256.8	431.9	342.9	51/51
Lamap (1961-2022)	646.5	Above normal	220.5	348.4	271.0	58/61
Southern Region						
Bauerfield (1972-2022)	743.4	Above normal	219.5	339.8	278.0	49/50
Port Vila (1953-2022)	503.0	Above normal	219.9	337.1	293.6	66/70
Whitegrass (1972-2022)	136.8	Normal	112.0	183.1	151.2	22/50
Aneityum (1952-2022)	442.7	Above normal	280.5	392.9	336.0	53/71

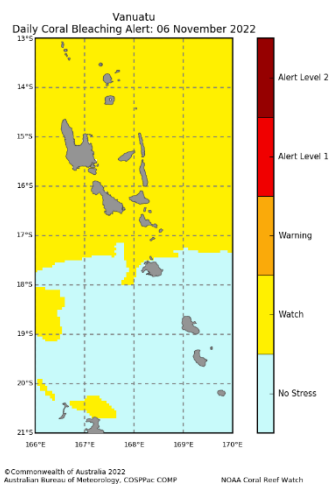
Part 1i. Monthly and Seasonal Outlooks for December 2022 and December 2022 to February 2023

Monthly: December	Seasonal: December to January
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for December 2022</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Diagnostic data extracted from Flanders Marine Institute (2019), Maritime Boundary Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimers.org/.</p>	<p>Tercile rainfall probabilities for December 2022 to February 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Diagnostic data extracted from Flanders Marine Institute (2019), Maritime Boundary Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimers.org/.</p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for December 2022</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Diagnostic data extracted from Flanders Marine Institute (2019), Maritime Boundary Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimers.org/.</p>	<p>Tercile maximum temperature probabilities for December 2022 to February 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Diagnostic data extracted from Flanders Marine Institute (2019), Maritime Boundary Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimers.org/.</p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for December 2022</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Diagnostic data extracted from Flanders Marine Institute (2019), Maritime Boundary Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimers.org/.</p>	<p>Tercile minimum temperature probabilities for December 2022 to February 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Diagnostic data extracted from Flanders Marine Institute (2019), Maritime Boundary Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimers.org/.</p>

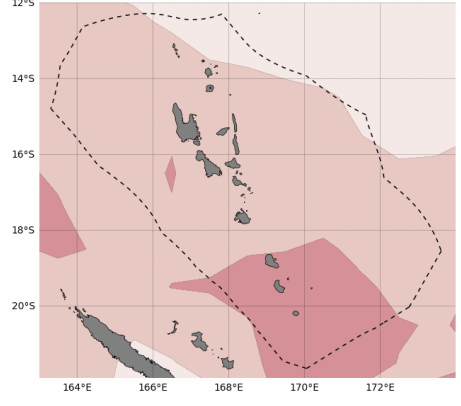
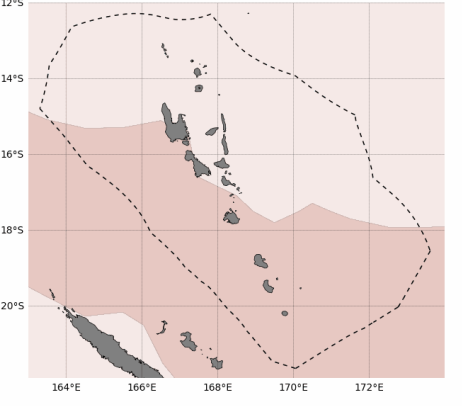
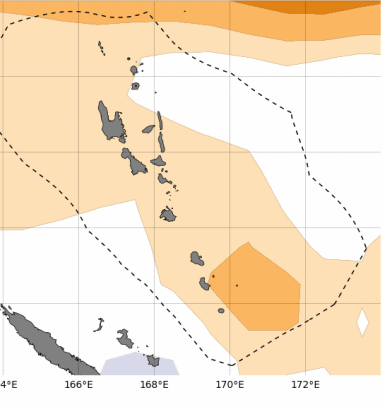
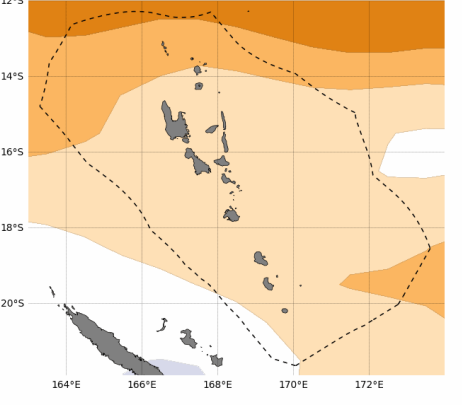
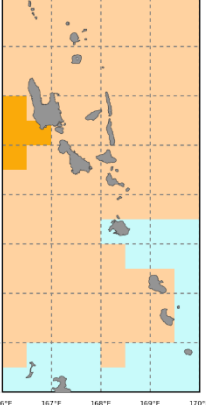
Part 2: Recent Ocean Observation

Monthly/Three months: October 2022 and August to October 2022

Monthly: October	Last three months: August to October 2022:
Sea Surface Temperature (Image 1):	Sea Surface Temperature (Image 4):
<div>Vanuatu Monthly Average Sea Surface Temperature Anomaly: October 2022</div>  <div>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</div> <div>Reynolds SST</div>	<div>Vanuatu 3 monthly Average Sea Surface Temperature Anomaly: August 2022 to October 2022</div>  <div>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</div> <div>Reynolds SST</div>
Sea level (Image 2):	
<div>Vanuatu Monthly Near Real Time Sea Level Anomaly: October 2022</div>  <div>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</div> <div>AVISO Ssalto/Duacs SLA</div>	
Daily coral bleaching alert (Image 3):	



Part 2i. Monthly and Seasonal Outlooks for December 2022 and December 2022 to February 2023

Monthly: December	Seasonal: December to February
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for December 2022</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2009NMI, version 11. Available online at http://www.maritimeregions.org/)</p> <p>Model run: 05/11/2022 Issued: 07/11/2022</p>	<p>Difference from average sea surface temperature forecast for December 2022 to February 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2009NMI, version 11. Available online at http://www.maritimeregions.org/)</p> <p>Model run: 05/11/2022 Issued: 07/11/2022</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for December 2022</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2009NMI, version 11. Available online at http://www.maritimeregions.org/)</p> <p>Model run: 05/11/2022 Issued: 07/11/2022</p>	<p>Difference from average sea surface height forecast for December 2022 to February 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2009NMI, version 11. Available online at http://www.maritimeregions.org/)</p> <p>Model run: 12/11/2022 Issued: 14/11/2022</p>
4-week Coral Bleaching (Image 9):	
<p>Vanuatu 4 Weeks Coral Bleaching Outlook: 27 November 2022</p>  <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP NOAA Coral Reef Watch</p>	

Summary Statement

Monthly and last three months: October 2022/August to October 2022 statement

October rainfall was above normal at nearly all monitoring stations throughout Vanuatu. The only exception was Sola where rainfall was near-normal. It was extremely wet at some sites, notably Lamap, Bauerfield and Port Vila which reported their second wettest October on record, while at Pekoa it was the third wettest October on record.

Rainfall over the three months from August to October was above normal at most locations, the exceptions being Sola and Whitegrass where the three-month total was near-normal. Pekoa reported its highest August to October rainfall on record, Bauerfield its second highest, Lamap its fourth highest, and Port Villa its fifth highest.

Part 1i. Monthly and Seasonal Outlooks for December 2022 and December 2022 to February 2023

Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for December, and December to February is likely to be above normal over Torres, Ambae and Maewo Island, and very likely to be above normal for the rest of the country.

Maximum temperatures during December, and December to February are very likely to be above normal over much of the country, except for east Santo where temperatures are likely to be near normal.

Minimum temperatures during December, and December to February are very likely to be above normal over the whole country.

Part 2: Recent Ocean summary statement

Monthly and last three months: October/August to October 2022

October ocean temperatures around Torba, Sanma, Penama and Malampa were 1.5 to 2.0°C above normal. Over Shefa and Tafea, temperatures were 1.0 to 1.5 °C above normal.

Averaged over August to October, ocean temperatures around Vanuatu were 1.0 to 2°C above normal.

October sea levels around Vanuatu were 100mm to 300mm above normal.

Coral Bleaching alert was in WATCH over Torba, Sanma, Penama, and Malampa.

Part 2i. Monthly and Seasonal Outlooks for December 2022 and December 2022 to February 2023

Ocean Variable statement

December ocean temperatures around Vanuatu are predicted to be 0.8 to 1.2°C above normal over Torba, Sanma, Penama, Malampa and Shefa, while 1.2 to 2.0 °C is predicted for Tafea.

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

December sea levels around Vanuatu are predicted to be 30mm to 60mm above normal around much of the country.

Averaged over December to February, sea levels around Vanuatu are predicted to be 60 mm to 100mm above normal over Torres, and 30mm to 60mm over the rest of the country.

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

Product	Date: October 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin					
EAR Watch					
Monthly Climate Briefing					
Ocean Outlook					
Climate data request					
Total					