

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 180

Country: Vanuatu

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Jun-2022	Jul-2022	Aug-2022				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Northern Region							
Sola (1971-2022)	622.2	196.8	239.8	136.4	269.3	190.7	30/49
Pekoa (1971-2022)	292.9	117.4	259.4	60.6	104.6	79.6	49/51
Lamap (1961-2022)	218.5	172.5	87.5	50.2	95.2	67.6	39/61
Southern Region							
Bauerfield (1972-2022)	219.7	272.7	124.8	47.5	97.0	66.4	41/50
Port Vila (1953-2022)	286.5	266.0	73.5	45.7	92.9	76.8	35/70
Whitegrass (1972-2022)	119.0	84.0	28.5	22.2	56.1	31.5	24/51
Aneityum (1952-2022)	126.7	277.0	112.1	71.9	138.2	102.5	39/71

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

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Northern Region						
Sola (1971-2022)	1058.8	Above normal	587.3	1005.9	768.1	34/47
Pekoa (1971-2022)	669.7	Above normal	240.9	460.1	390.5	45/51
Lamap (1961-2022)	478.5	Above normal	225.0	335.8	279.4	52/61
Southern Region						
Bauerfield (1972-2022)	617.2	Above normal	241.0	372.7	326.1	48/50
Port Vila (1953-2022)	626.0	Above normal	236.1	402.9	306.4	66/69
Whitegrass (1972-2022)	231.5	Above normal	134.2	229.2	157.9	35/50
Aneityum (1952-2022)	515.8	Above normal	305.5	436.3	382.6	58/71

NB: The X LEPS % score has been categorised as follows:

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

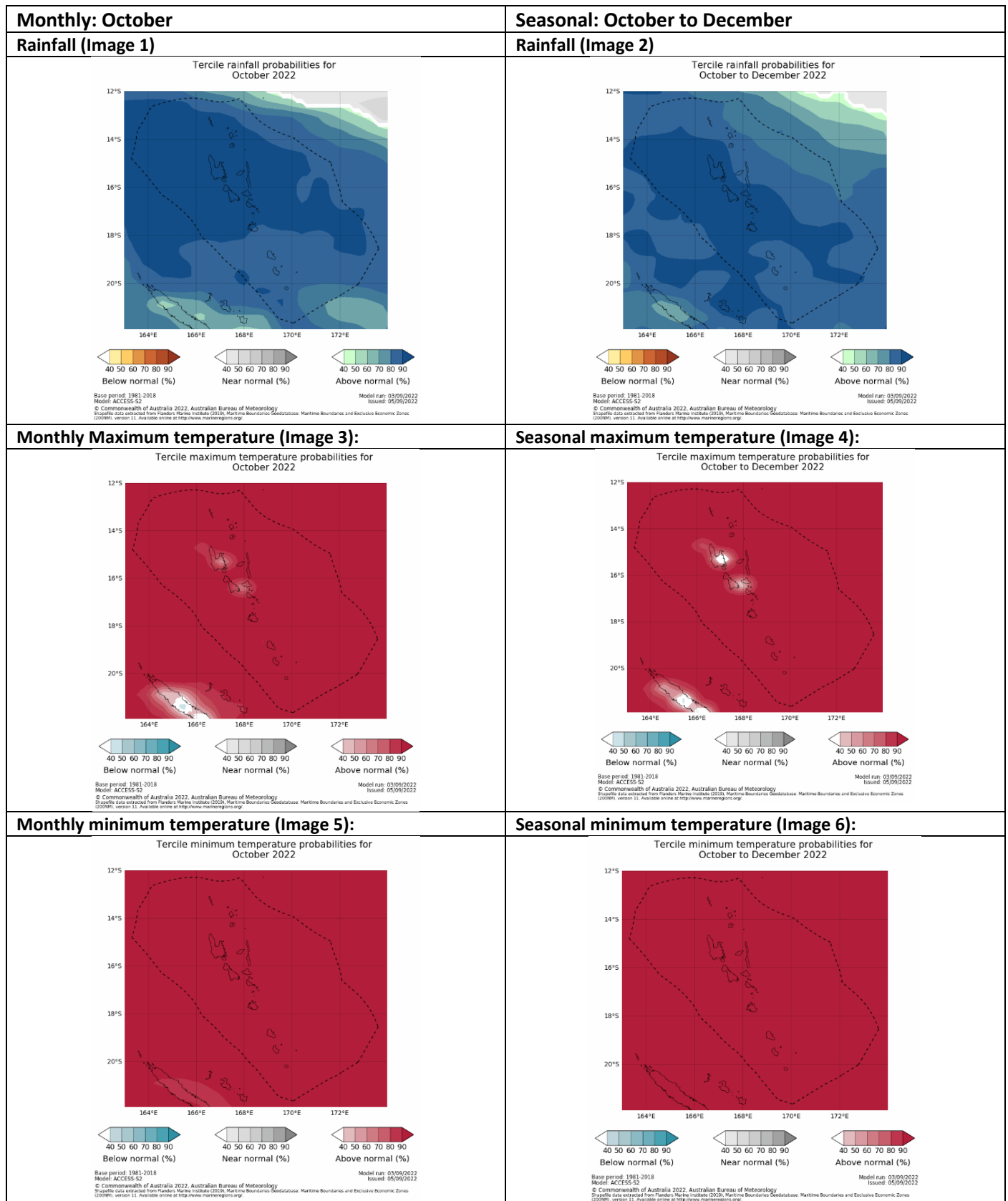
Moderate $5 \leq X < 10$

Good: $10 \leq X < 15$

High: $15 \leq X < 25$

Very High: $25 \leq X < 35$ Exceptional: $X \geq 35$

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



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Part 2: Recent Ocean Observation

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

Monthly: August	Last three months: June to August 2022:
<p>Sea Surface Temperature (Image 1):</p> <p>Vanuatu Monthly Average Sea Surface Temperature Anomaly: August 2022</p> <p>Reynolds SST</p>	<p>Sea Surface Temperature (Image 4):</p> <p>Vanuatu 3 monthly Average Sea Surface Temperature Anomaly: June 2022 to August 2022</p> <p>Reynolds SST</p>
<p>Sea level (Image 2):</p> <p>Vanuatu Monthly Near Real Time Sea Level Anomaly: August 2022</p> <p>AVISO SeaWiFS/QuikSCAT SLA</p>	
<p>Daily coral bleaching alert (Image 3):</p> <p>Pacific Ocean Daily Coral Bleaching Alert: 06 September 2022</p> <p>NOAA Coral Reef Watch</p>	<p>Vanuatu Daily Coral Bleaching Alert: 06 September 2022</p> <p>NOAA Coral Reef Watch</p>

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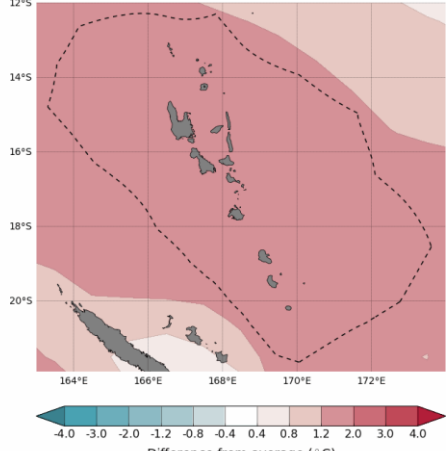
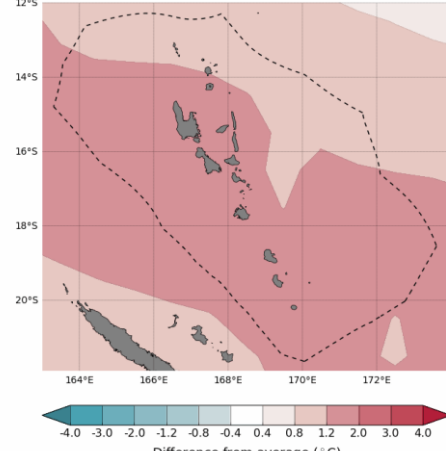
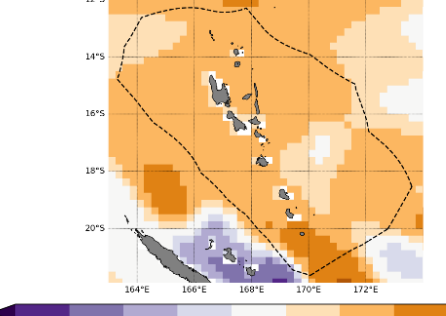
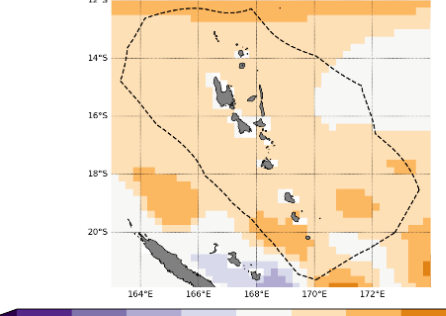
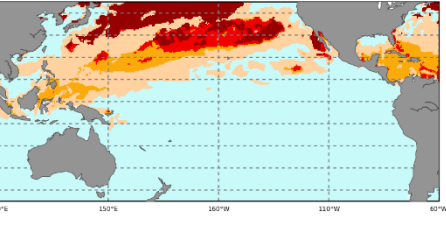
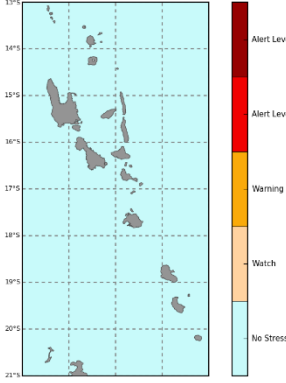
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Part 2i. Monthly and Seasonal Outlooks for October and October to December 2022

Monthly: October	Seasonal: October to December
<p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for October 2022</p>  <p>Difference from average (°C)</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 (200MM), version 11. Available online at http://www.marine.gov.au/</p> <p>Model run: 10/09/2022 Issued: 12/09/2022</p>	<p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for October to December 2022</p>  <p>Difference from average (°C)</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 (200MM), version 11. Available online at http://www.marine.gov.au/</p> <p>Model run: 10/09/2022 Issued: 12/09/2022</p>
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for October 2022</p>  <p>Difference from average (mm)</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/08/2022 Issued: 06/09/2022</p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for October to December 2022</p>  <p>Difference from average (mm)</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/08/2022 Issued: 06/09/2022</p>
<p>4-week Coral Bleaching (Image 9):</p> <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 02 October 2022</p>  <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>NOAA Coral Reef Watch</p>	<p>Vanuatu 4 Weeks Coral Bleaching Outlook: 02 October 2022</p>  <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>NOAA Coral Reef Watch</p>

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Summary Statement

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

Pekoa and Bauerfield recorded above normal rainfall in August, while other stations (Sola, Lamap, Port Vila, Whitegrass and Aneityum) recorded normal rainfall. Pekoa recorded its third wettest August on record.

All stations observed above normal rainfall during the June to August period. Bauerfield and Port Vila recorded their third and fourth wettest June to August on record, respectively.

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

Monthly /Seasonal rainfall and temperature Outlook statements

Rainfall across Vanuatu for October and October to December, is very likely to be above normal.

Maximum and minimum temperatures averaged over October and October to December are very likely to be above normal, except for maximum temperatures over Santo and southeast Malekula, where the outlook offers little guidance.

Part 2: Recent Ocean summary statement

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

Vanuatu experienced above normal SST in August, and the June to August period. Highest SSTs were 1.5 to over 2.0 degrees Celsius above average over most of the central and southern islands.

Sea level was significantly higher than average in August ranging from 100 to 300mm. Highest sea level was 250 – 300 mm, observed off the western side of Efate Island.

Coral bleaching status reveals no thermal stress for Vanuatu.

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

Ocean Variable statement

The outlook for October, and October to December period, shows above normal temperature difference of 1.2 to 2.0 degree Celsius.

The monthly and seasonal sea level outlook shows above normal sea level differences of 0.06 to 0.1 m.

Coral bleaching outlook reveals no thermal stress for Vanuatu.

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

Product	Date: August 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin 1) Vanuatu Climate Update 2) EAR Watch 3) Vanuatu Ocean Outlook	17 th August	VMGD-Van-KIRAP Staffs, Oxfam Vanuatu, Action Aid Vanuatu, University of the South Pacific (USP), Vanuatu Statistics Office, SPREP, Vanuatu National Disaster Management Office (NDMO), Media- Vanuatu, Vanuatu Red Cross Society, Matevulu College, Onesua Presbyterian College, Aore Adventist College, Tafea College, CSU, Vanuatu Care International, Save the Children Vanuatu, UNDP, Shefa Education, Live & Learn, UN-Women, Vanuatu Christian Council (VCC), GCF Private Consultants, Vanuatu Society of People Living with Disability, Unelco Vanuatu, World Health Organization, Vanuatu Meteorology & Geo-Hazards Department (Staffs), General Public (Website and VMGD Call-Center).	206	104	102
EAR Watch	17 th August	General Public			
Monthly Climate Briefing	8th – 30th August	Farmers, Fishermen, Department of Local Authorirties, Forestry : - Mataso Island - Makira Island - Emae Island - Tongariki Isand	482	196	286

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		- Buninga Island - Tongoa Island			
Ocean Outlook	12th August	Community members: TK focal point, Chief's, Elderly people (men & Women), Youth, Varsu Area Council (Area Administrator & Area Secretary), Schools.	115	68	47
Climate data request	01-31 August	Students and VMGD Officers	3	2	1
Total			806	370	436

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