

# Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 176

Country: Vanuatu

## Part 1: Recent climate

**TABLE 1: Monthly Rainfall**

Station (include data period)	Feb-2022	Mar-2022	Apr-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Northern Region							
Sola (1971-2022)	418.7	318.1	254.6	344.0	500.0	434.8	5/50
Pekoa (1971-2022)	253.3	288.4	217.4	185.4	293.6	237.9	24/52
Lamap (1961-2022)	369.0	330.5	248.5	162.2	235.3	197.6	42/61
Southern Region							
Bauerfield (1972-2022)	667.2	474.0	204.9	164.2	271.7	194.0	26/50
Port Vila (1953-2022)	715.5	435.5	206.5	137.3	250.5	181.1	40/70
Whitegrass (1972-2022)	541.8	267.0	109.2	55.7	137.8	89.4	29/51
Aneityum (1952-2022)	371.4	322.0	289.5	151.5	291.6	208.5	47/71

**TABLE 2: Three-month Total Rainfall for February to April 2022**

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Northern Region						
Sola (1971-2022)	991.4	Below normal	1064.0	1328.0	1162.3	12/50
Pekoa (1971-2022)	759.1	Normal	739.0	953.0	834.0	21/51
Lamap (1961-2022)	948.0	Above normal	629.0	754.0	696.0	53/61
Southern Region						
Bauerfield (1972-2022)	1346.1	Above normal	764.0	999.0	904.9	48/50
Port Vila (1953-2022)	1357.5	Above normal	768.0	919.0	845.7	70/70
Whitegrass (1972-2022)	918.0	Above normal	422.0	572.0	489.2	48/51
Aneityum (1952-2022)	982.9	Above normal	682.0	920.0	830.8	51/71

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

Very Low:  $X < 0.0$

Low:  $0 \leq X < 5$

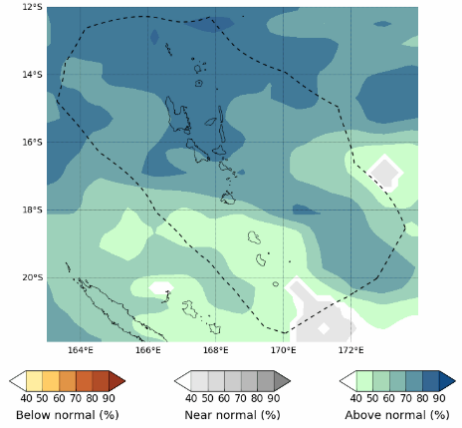
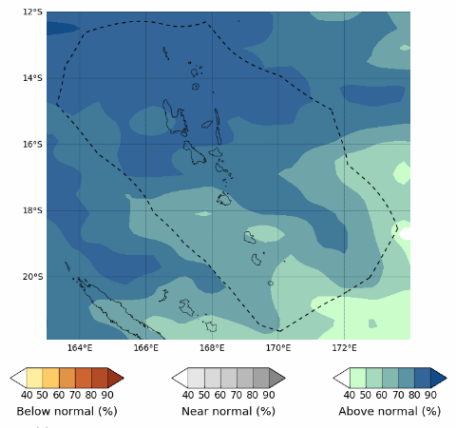
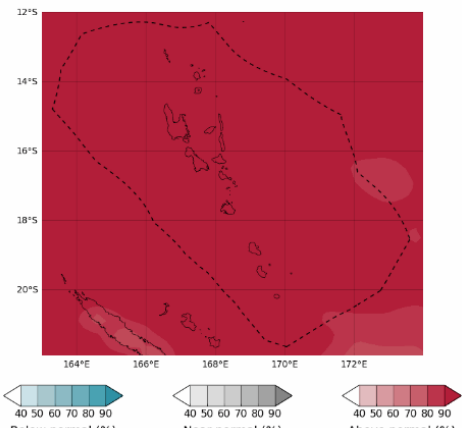
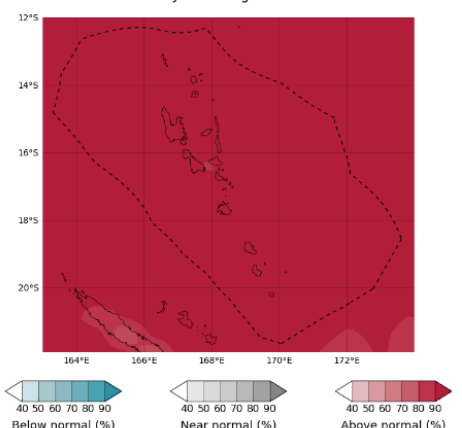
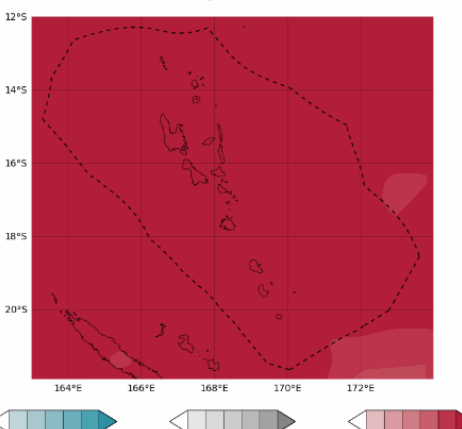
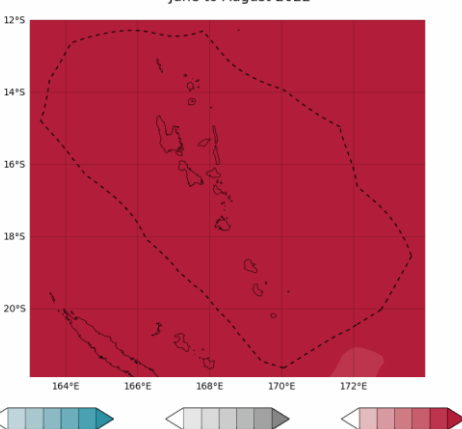
Moderate  $5 \leq X < 10$

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 June and June to August 2022

Monthly: June	Seasonal: June to August
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for June 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 (2015), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004N), version 11. Available online at <a href="http://www.marineregions.org/">http://www.marineregions.org/</a></p> <p>Model run: 14/05/2022 Issued: 16/05/2022</p>	<p>Tercile rainfall probabilities for June to August 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 (2015), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004N), version 11. Available online at <a href="http://www.marineregions.org/">http://www.marineregions.org/</a></p> <p>Model run: 14/05/2022 Issued: 16/05/2022</p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for June 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 (2015), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004N), version 11. Available online at <a href="http://www.marineregions.org/">http://www.marineregions.org/</a></p> <p>Model run: 14/05/2022 Issued: 16/05/2022</p>	<p>Tercile maximum temperature probabilities for June to August 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 (2015), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004N), version 11. Available online at <a href="http://www.marineregions.org/">http://www.marineregions.org/</a></p> <p>Model run: 14/05/2022 Issued: 16/05/2022</p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for June 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 (2015), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004N), version 11. Available online at <a href="http://www.marineregions.org/">http://www.marineregions.org/</a></p> <p>Model run: 14/05/2022 Issued: 16/05/2022</p>	<p>Tercile minimum temperature probabilities for June to August 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 (2015), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2004N), version 11. Available online at <a href="http://www.marineregions.org/">http://www.marineregions.org/</a></p> <p>Model run: 14/05/2022 Issued: 16/05/2022</p>

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Very Low:  $X < 0.0$

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Moderate:  $5 \leq X < 10$

Good:  $10 \leq X < 15$

High:  $15 \leq X < 25$

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## Part 2: Recent Ocean summary statement

### Monthly: April 2022

Monthly: April	Last three months: January to March 2022:
Sea Surface Temperature (Image 1):	Sea Surface Temperature (Image 4):
<p>Vanuatu Monthly Average Sea Surface Temperature Anomaly: April 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP Reynolds SST</p>	<p>Vanuatu 3 monthly Average Sea Surface Temperature Anomaly: February 2022 to April 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP Reynolds SST</p>
Sea level (Image 2):	
<p>Vanuatu Monthly Near Real Time Sea Level Anomaly: April 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP AVISO SeaWiFS SLA</p>	
Daily coral bleaching alert (Image 3):	
<p>Pacific Ocean Daily Coral Bleaching Alert: 14 May 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP NOAA Coral Reef Watch</p>	<p>Vanuatu Daily Coral Bleaching Alert: 14 May 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP NOAA Coral Reef Watch</p>

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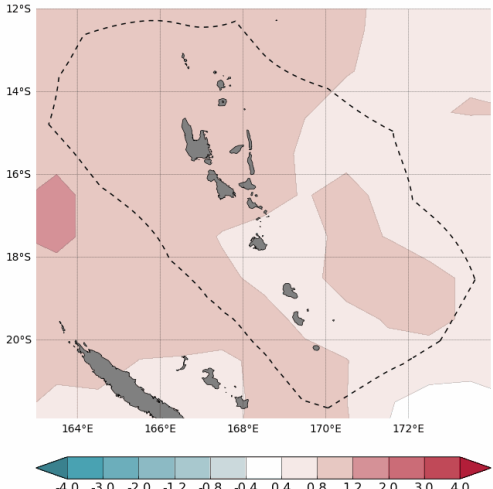
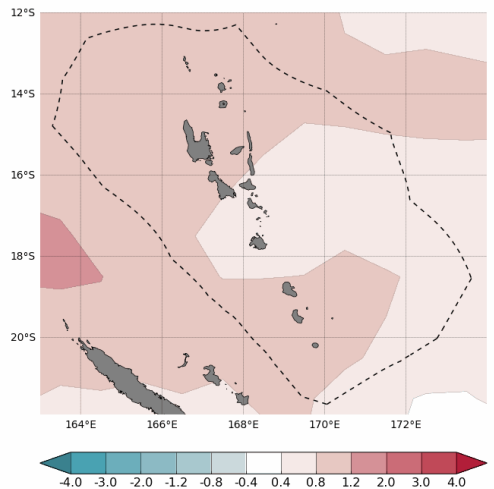
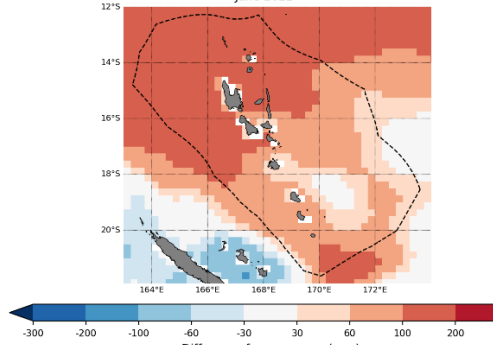
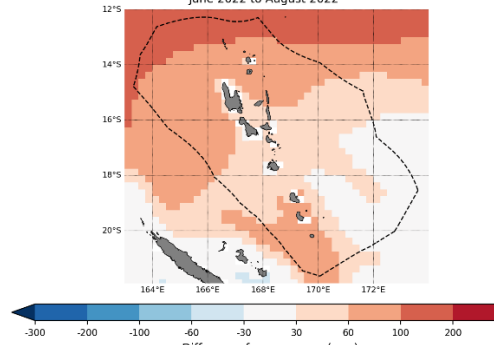
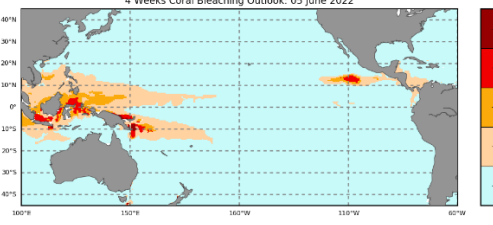
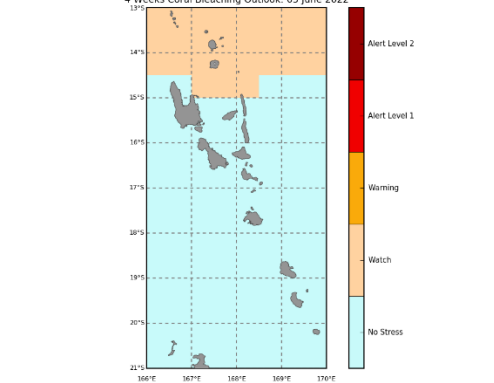
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## Part 2i. Monthly and Seasonal Outlooks for June and June to August 2022

Monthly: June	Seasonal: June to August
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for June 2022</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, 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.maritimerregions.org/">http://www.maritimerregions.org/</a></p> <p>Model run: 14/05/2022 Issued: 16/05/2022</p>	<p>Difference from average sea surface temperature forecast for June to August 2022</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, 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.maritimerregions.org/">http://www.maritimerregions.org/</a></p> <p>Model run: 14/05/2022 Issued: 16/05/2022</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for June 2022</p>  <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 15/04/2022 Issued: 21/04/2022</p>	<p>Difference from average sea surface height forecast for June 2022 to August 2022</p>  <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 15/04/2022 Issued: 21/04/2022</p>
4-week Coral Bleaching (Image 9):	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 05 June 2022</p>  <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac CORP</p> <p>NOAA Coral Reef Watch</p>	<p>Vanuatu 4 Weeks Coral Bleaching Outlook: 05 June 2022</p>  <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac CORP</p> <p>NOAA Coral Reef Watch</p>

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## Summary Statement

### Monthly and last three months: April 2022/February to April 2022 statement (Highly significant changes)

*In April, above normal rainfall was recorded at Lamap. Normal rainfall was recorded at Pekoa, Bauerfield, Port Vila, Whitegrass and Aneityum. Sola recorded below normal rainfall.*

*In the three months period from February to April, above normal rainfall was recorded at Lamap, Bauerfield, Port Vila, Whitegrass and Aneityum. Normal rainfall was recorded in Pekoa and below normal rainfall was recorded at Sola. Port Vila, Bauerfield and Whitegrass recorded their first, third and fourth wettest February to April on record respectively.*

## Part 1i. Monthly and Seasonal Outlooks for June and June to August 2022

### Monthly /Seasonal rainfall and temperature Outlook statements (Highly significant changes)

*Northern and central region of Vanuatu are very likely to have above normal rainfall for June while southern region is likely to receive above normal rainfall. The monthly and seasonal temperature outlook for Vanuatu is very likely to be above normal for the whole country.*

## Part 2: Recent Ocean summary statement

### Monthly and last three months: April/February to April 2022 (Highly significant changes)

*In April, above average SSTs of 0.5 to 1.0 degrees were experienced over most of the Vanuatu islands except Erromango with SST of 1.5 degrees. SSTs of the 0.5 degrees was experienced from February to April 2022 period in all Vanuatu islands except Torres group with SST of 0.0 degrees.*

*Sea level was also above average in April, with the highest SL anomaly of 100 mm – 200 mm experienced over the northern and central waters of Vanuatu.*

*Watch Alert level on coral bleaching activities was recorded in the northern and central region on 5<sup>th</sup> of May while Southern region was in no stress alert level.*

## Part 2i. Monthly and Seasonal Outlooks for June and June to August 2022

### Ocean Variable statement (Highly significant changes)

*The monthly SST outlook for the Vanuatu island groups shows a temperature difference of 0.8-1.2°C, with highest SSTs of 1.2 degrees forecasted for parts of the Torba, Sanma, Penama and Shefa provinces. The seasonal SST outlook shows similar temperature differences but with highest SSTs of 1.2 forecast over Torba, Sanma, Penama, Part of Malampa and Tafea province.*

*The monthly and seasonal sea level outlook shows significant higher SL anomaly of 60 – 200 mm over all island groups of Vanuatu.*

*The 4 weeks coral bleaching outlook shows a Watch Alert is issued for the Torba province and no stress issued elsewhere.*

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

Product	Date: April 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					

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