

# Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 183

Country: PNG

## Part 1: Recent climate

**TABLE 1: Monthly Rainfall**

Station (include data period)	Sep-2022	Oct-2022	Nov-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Momase Region							
Madang (1944-2022)				279.0	366.0	327.2	
Nadzab (1973-2022)	40.2	14.0	95.6	79.3	110.1	87.9	29/49
Wewak (1956-2022)	245.4	89.0	145.2	154.6	238.7	199.4	18/66
Vanimo (1918-2022)	81.6	237.0	151.0	163.3	242.5	203.4	20/66
Highlands Region							
Goroka (1948-2022)	33.6	23.8	190.2	132.0	183.3	156.0	41/57
New Guinea Islands Region							
Momote (1949-2022)	125.2	60.8	141.2	191.5	289.3	239.2	8/74
Kavieng (1916-2022)				197.5	270.7	232.2	
Southern Region							
Misima (1917-2022)				124.2	220.0	166.0	
Port Moresby (1875-2022)	91.8	23.8	65.5	22.5	85.8	46.2	77/125

**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:  $X \geq 35$

**TABLE 2: Three-month Total Rainfall for September to November 2022**

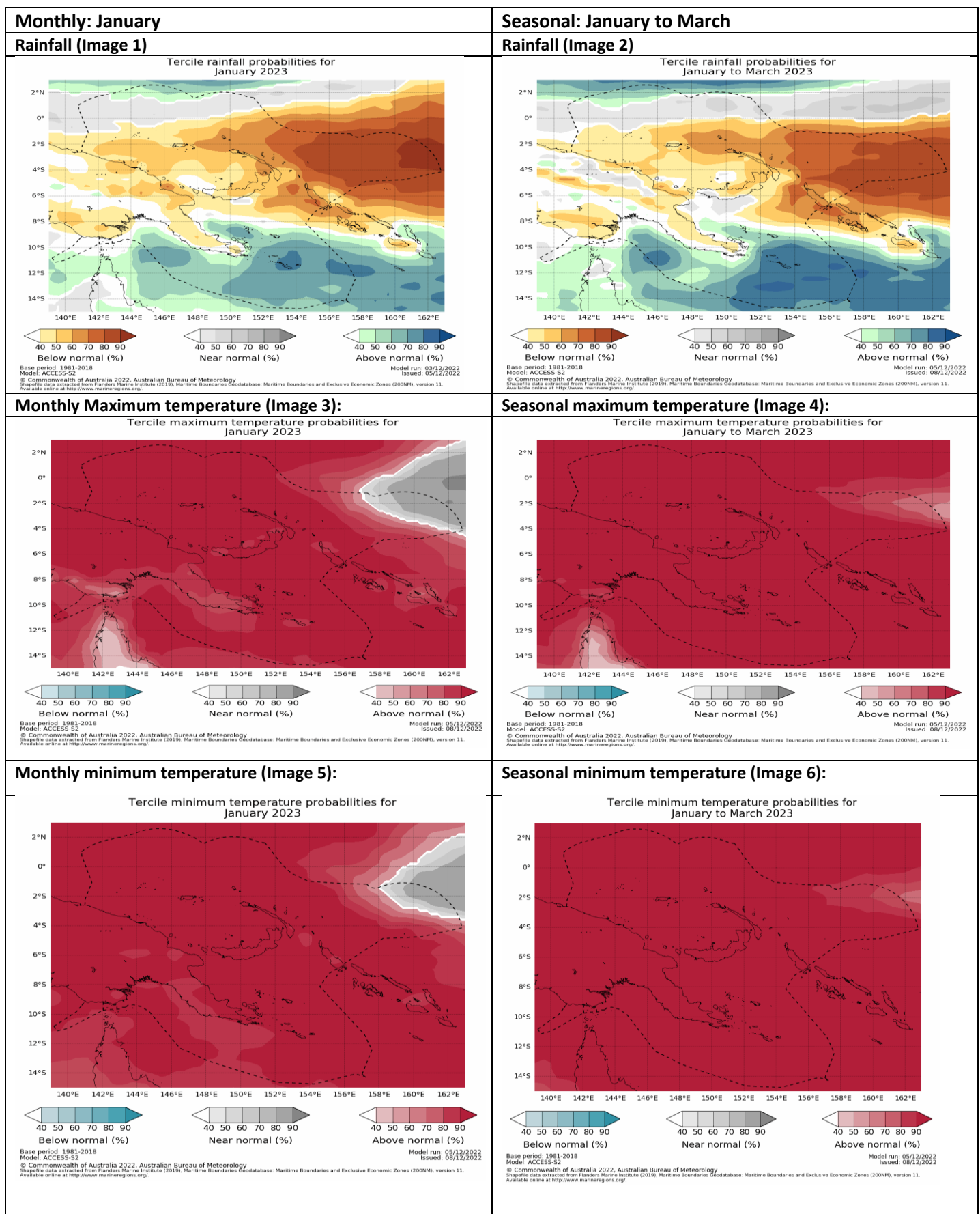
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Momase Region						
Madang (1944-2022)						
Nadzab (1973-2022)	149.8	Below normal	239.9	340.0	291.2	7/46
Wewak (1894-2022)	479.6	Below normal	530.0	677.2	593.9	13/64
Vanimo (1918-2022)	469.6	Below normal	502.8	644.7	554.4	13/62
Highlands Region						
Goroka (1948-2022)	247.6	Below normal	355.0	483.6	423.0	5/56
New Guinea Islands Region						
Momote (1949-2022)	327.2	Below normal	637.1	783.4	728.8	2/74
Kavieng (1917-2022)						
Southern Region						
Misima (1917-2022)						
Port Moresby (1875-2022)	181.1	Above normal	84.3	161.0	111.1	85/114

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## Part 1i. Monthly and Seasonal Outlooks for January and January to March 2023



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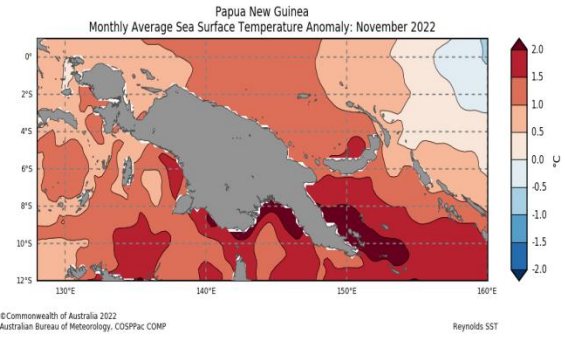
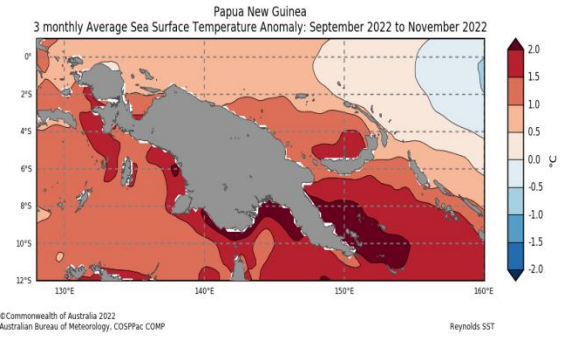
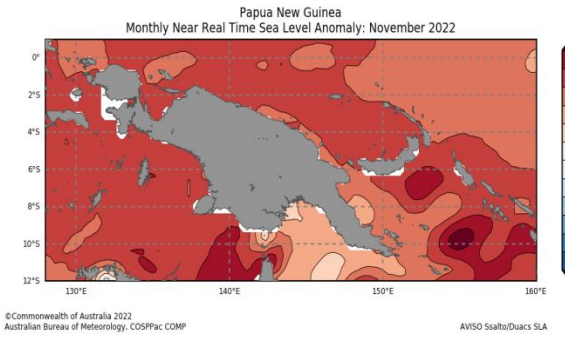
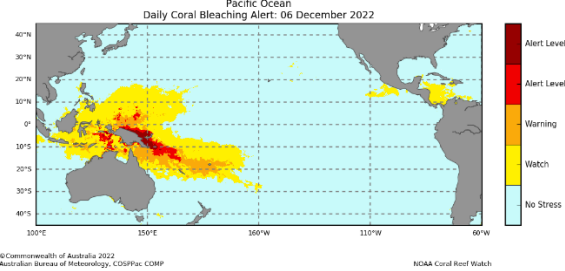
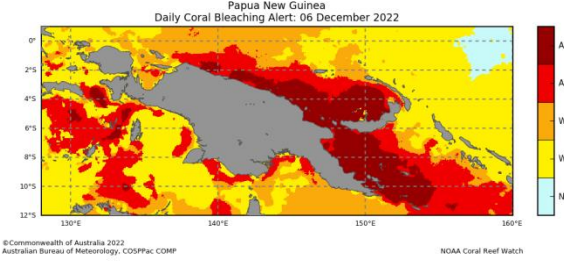
Good:  $10 \leq X < 15$

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## Part 2: Recent Ocean Observation

### Monthly/Three months: November 2022 and September to November 2022

<b>Monthly: November</b>	<b>Last three months: September to November 2022:</b>
<p><b>Sea Surface Temperature (Image 1):</b></p> 	<p><b>Sea Surface Temperature (Image 4):</b></p> 
<p><b>Sea level (Image 2):</b></p> 	
<p><b>Daily coral bleaching alert (Image 3):</b></p> 	

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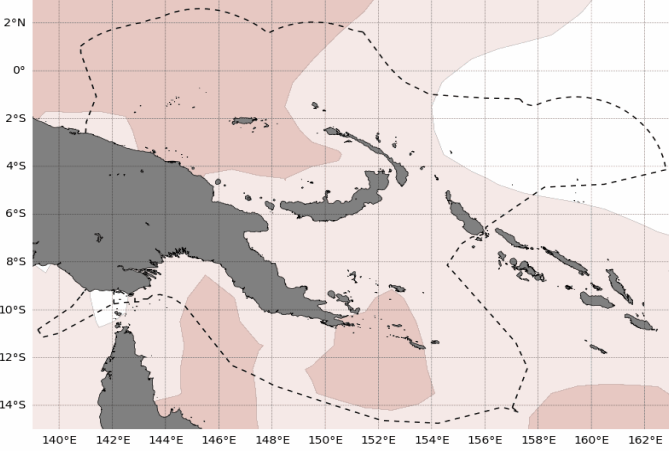
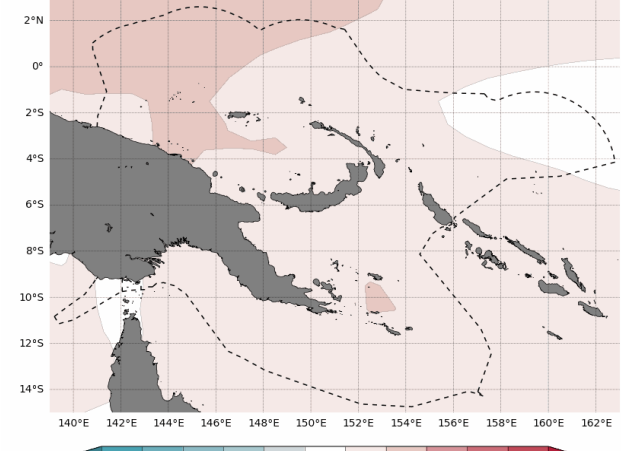
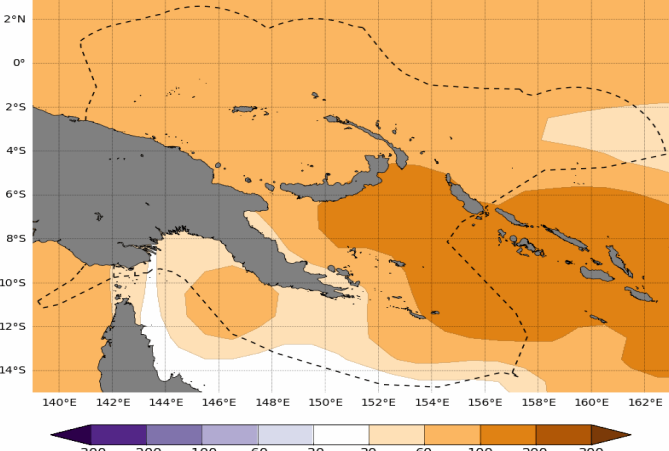
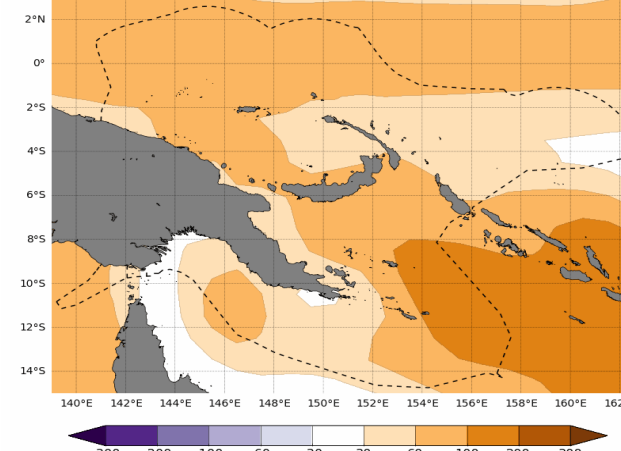
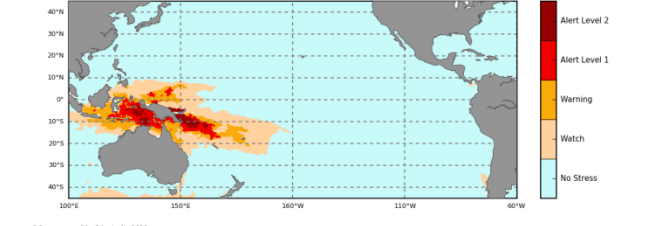
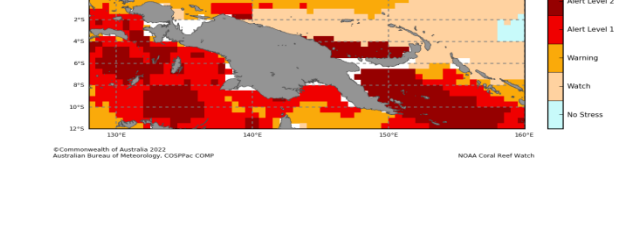
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## Part 2i. Monthly and Seasonal Outlooks for January and January to March 2023

Monthly: January	Seasonal: January to March
<b>Monthly sea surface temperature (Image 5):</b> Difference from average sea surface temperature forecast for January 2023  Difference from average (°C) <small>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></small> <small>Model run: 05/12/2022 Issued: 07/12/2022</small>	<b>Seasonal sea surface temperature (Image 6):</b> Difference from average sea surface temperature forecast for January to March 2023  Difference from average (°C) <small>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></small> <small>Model run: 05/12/2022 Issued: 07/12/2022</small>
<b>Monthly sea level (Image 7):</b> Difference from average sea surface height forecast for January 2023  Difference from average (mm) <small>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></small> <small>Model run: 05/12/2022 Issued: 07/12/2022</small>	<b>Seasonal sea level (Image 8):</b> Difference from average sea surface height forecast for January to March 2023  Difference from average (mm) <small>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></small> <small>Model run: 05/12/2022 Issued: 07/12/2022</small>
<b>4-week Coral Bleaching (Image 9):</b> Pacific Ocean 4 Weeks Coral Bleaching Outlook: 01 January 2023  <small>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</small> <small>NOAA Coral Reef Watch</small>	Papua New Guinea 4 Weeks Coral Bleaching Outlook: 01 January 2023  <small>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</small> <small>NOAA Coral Reef Watch</small>

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## Summary Statement

### Monthly and last three months: November 2022/September to November 2022 statement

In the month of November, normal rainfall was recorded at Nadzab and Port Moresby whilst Goroka recorded above normal rainfall. Remaining monitoring stations recorded below normal rainfall.

September to November rainfall was below normal, except Port Moresby which recorded above normal rainfall.

Momote recorded its second driest September to November on record.

## Part 1i. Monthly and Seasonal Outlooks for January and January to March 2023

### Monthly /Seasonal rainfall and temperature Outlook statements

Rainfall for January and January to March is very likely to be below normal over the New Guinea Islands region, while other regions are likely to receive below normal rainfall in January. In MOMASE, Highlands and Southern region, the outlook offers little guidance for January to March rainfall.

Maximum and minimum temperatures for January and averaged over January to March are very likely to be above normal across the country.

## Part 2: Recent Ocean summary statement

### Monthly and last three months: November/September to November 2022

November ocean temperatures around PNG were 0.5 to 2.0°C above normal.

Averaged over September to November, ocean temperatures around PNG were 0.5 to 2.0°C above normal.

November sea levels around PNG were 150mm to 250mm above normal.

## Part 2i. Monthly and Seasonal Outlooks for January and January to March 2023

### Ocean Variable statement

January ocean temperatures around PNG are predicted to be 0.4 to 1.2°C above normal.

Averaged over January to March, ocean temperatures around PNG are predicted to be mostly 0.4 to 0.8°C above normal.

January sea levels around PNG are predicted to be 30mm to 200mm above normal.

Averaged over January March, sea levels around PNG are predicted to be 30 to 200mm above normal.

PNG has a coral bleaching alert level 1 in the water of Western Manus, New Ireland and Gulf whilst an alert level 2 is in place for waters around Milne Bay, Oro, Morobe, Madang, East Sepik, East New Britain and West Sepik,

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

Product	Date: November 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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