

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

Country: Papua New Guinea

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)				
Momase Region							
Madang (1944-2022)		296.6	515.2	328.7	456.0	396.0	58/72
Nadzab (1973-2022)		101.2	100.6	88.0	137.0	103.8	19/47
Wewak (1956-2022)	169.6	63.6	106.6	163.0	235.5	187.9	8/65
Vanimo (1918-2022)	347.0	292.0	227.2	183.7	282.7	229.0	34/67
Highlands Region							
Goroka (1948-2022)				163.6	215.0	193.0	
New Guinea Islands Region							
Momote (1949-2022)	278.4	122.4	221.2	232.8	293.1	266.2	22/72
Kavieng (1916-2022)	612.6	265.8	299.4	268.3	327.3	290.9	51/93
Southern Region							
Misima (1917-2022)				207.9	328.0	263.0	
Port Moresby (1875-2022)	85.6	100.0	99.0	83.5	138.0	106.0	62/130

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 February to April 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Momase Region						
Madang (1944-2022)			945.2	1149.4	1046.4	
Nadzab (1973-2022)			397.6	495.9	454.6	
Wewak (1894-2022)	339.8	Below normal	436.1	522.6	480.4	6/64
Vanimo (1918-2022)	866.2	Normal	728.3	929.1	835.6	38/65
Highlands Region						
Goroka (1948-2022)			612.0	746.2	673.4	
New Guinea Islands Region						
Momote (1949-2022)	622.0	Below normal	754.8	915.2	799.6	9/71
Kavieng (1917-2022)	1177.8	Above normal	822.0	956.0	893.5	80/90
Southern Region						
Misima (1917-2022)			709.9	940.9	827.2	
Port Moresby (1875-2022)	284.6	Below normal	469.7	597.9	535.6	13/129

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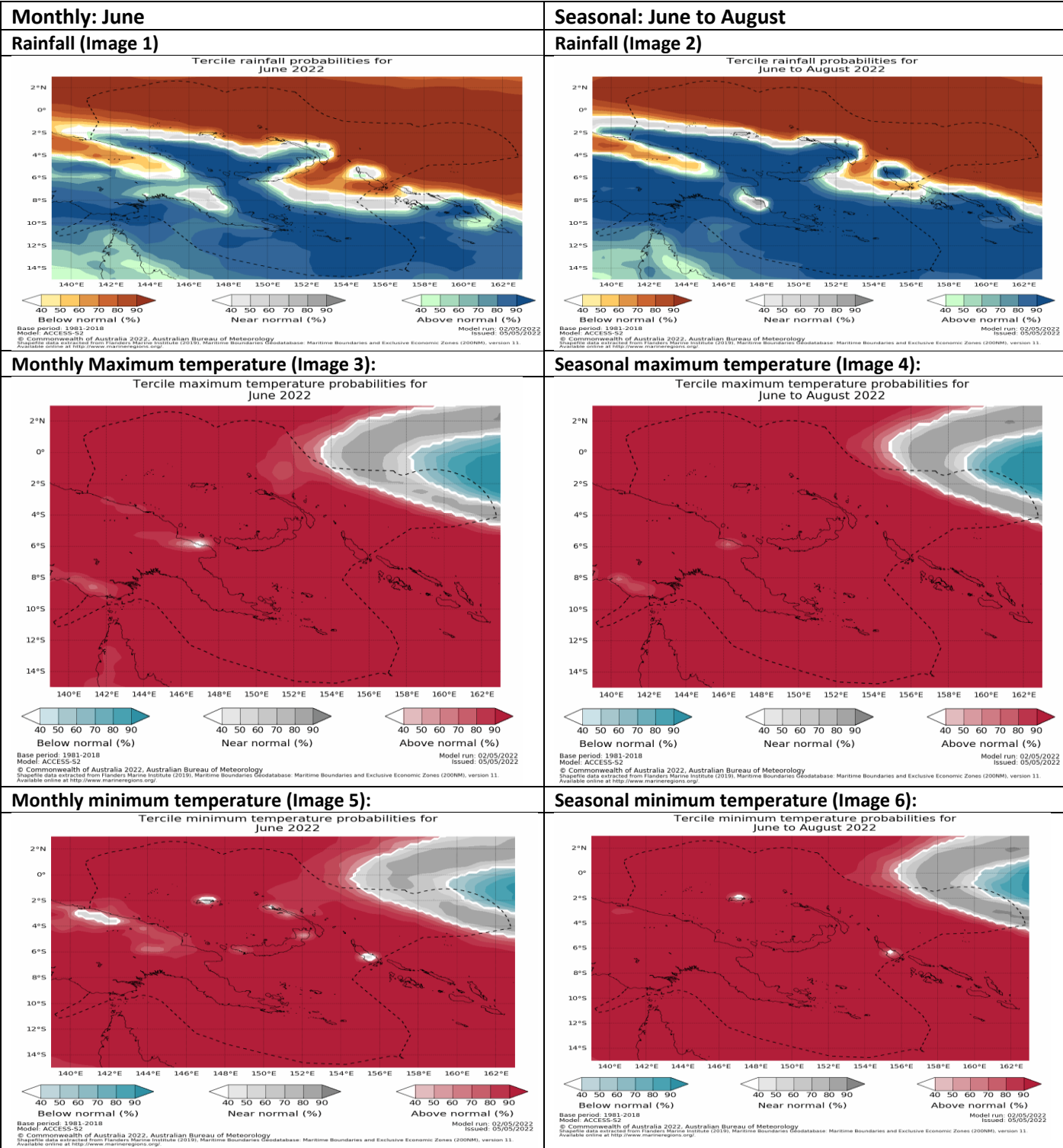
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Part 1i. Monthly and Seasonal Outlooks for June and June to August 2022



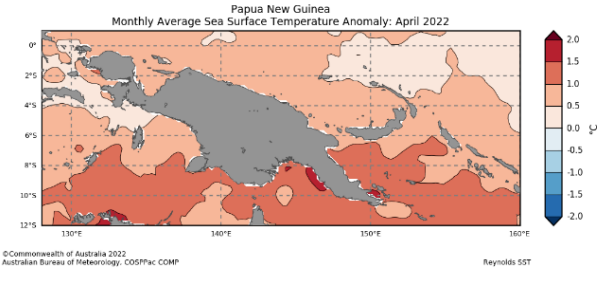
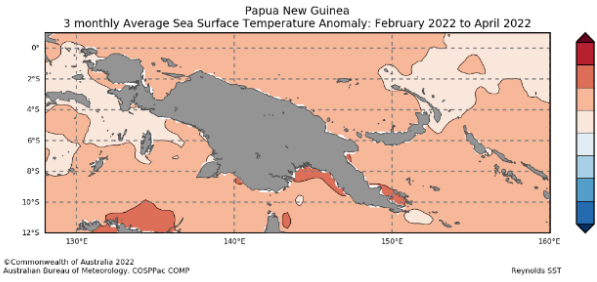
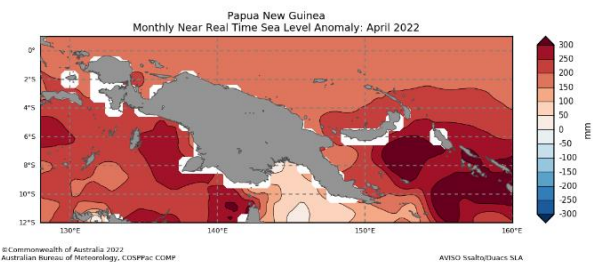
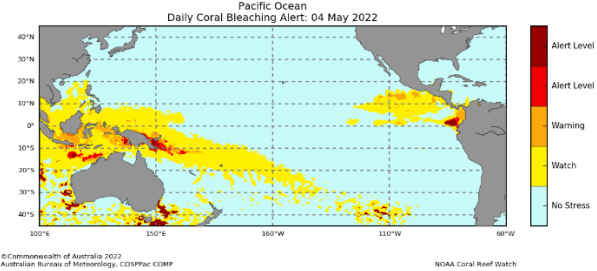
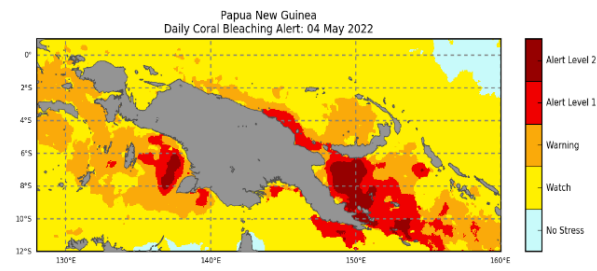
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Part 2: Recent Ocean summary statement

Monthly: April 2022

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

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

Monthly: June	Seasonal: June to August
<p>Monthly sea surface temperature (Image 5):</p> <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 Shapfile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimeportals.org/</p> <p>Model run: 14/05/2022 Issued: 16/05/2022</p>	<p>Seasonal sea surface temperature (Image 6):</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 Shapfile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimeportals.org/</p> <p>Model run: 14/05/2022 Issued: 16/05/2022</p>
<p>Monthly sea level (Image 7):</p> <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>Seasonal sea level (Image 8):</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>
<p>4-week Coral Bleaching (Image 9):</p> <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 29 May 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>NOAA Coral Reef Watch</p>	<p>Papua New Guinea 4 Weeks Coral Bleaching Outlook: 05 June 2022</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: April 2022/February to April 2022 statement (Highly significant changes)

Rainfall for April was below normal at Wewak and Momote, normal at Nazab, Vanimo, Kavieng and Port Moresby whilst Madang recorded above normal rainfall.

April rainfall data is not available for Goroka and Misima.

Rainfall for February to April was below normal at Wewak, Momote and Port Moresby, normal at Vanimo and above normal at Kavieng.

Wewak recorded its sixth driest February to April on record.

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

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

The outlook for June is very likely to be above normal across the country except for Vanimo, Wewak, Enga, Kavieng, Momote and parts of East New Britain and Madang are very likely to be below normal.

The outlook for PNG for June to August is very likely to be above normal except Vanimo, Wewak and southern part of Bougainville are likely to be below normal.

The maximum and minimum temperature outlook for PNG for June and June to August is very likely to be above normal across the country.

Part 2: Recent Ocean summary statement

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

In April, most of PNG experienced above average SSTs with significant patches of above normal SSTs at 1.0 to 1.5 degree Celsius except Momote and Kavieng experienced average SSTs.

February to April observations shows that PNG experienced above average SSTs of up to 1.0 degrees Celsius whilst New Ireland province experienced average SSTs.

The sea level anomaly for PNG in April was above normal, with significant sea level anomaly ranging from 100 to 300mm above average for Solomon Sea and waters surrounding West New Britain and New Ireland Provinces.

PNG has a 'warning of alert level 2' coral bleaching status around the Solomon Sea.

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

Ocean Variable statement *(Highly significant changes)*

The outlook for PNG sea surface temperatures reveals above normal temperature differences of 0.4 to 2.0°C, with the significant temperature differences located in the Solomon Sea for June and June to August forecast.

The outlook for sea level for PNG shows above normal sea level differences of 30mm to 200mm for June and June to August in PNG.

The outlook for coral bleaching for PNG remains at 'alert level 2' for the Solomon Sea and extends to the Bismarck Sea.

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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