

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 185

Country: Niue

Part 1: Recent climate

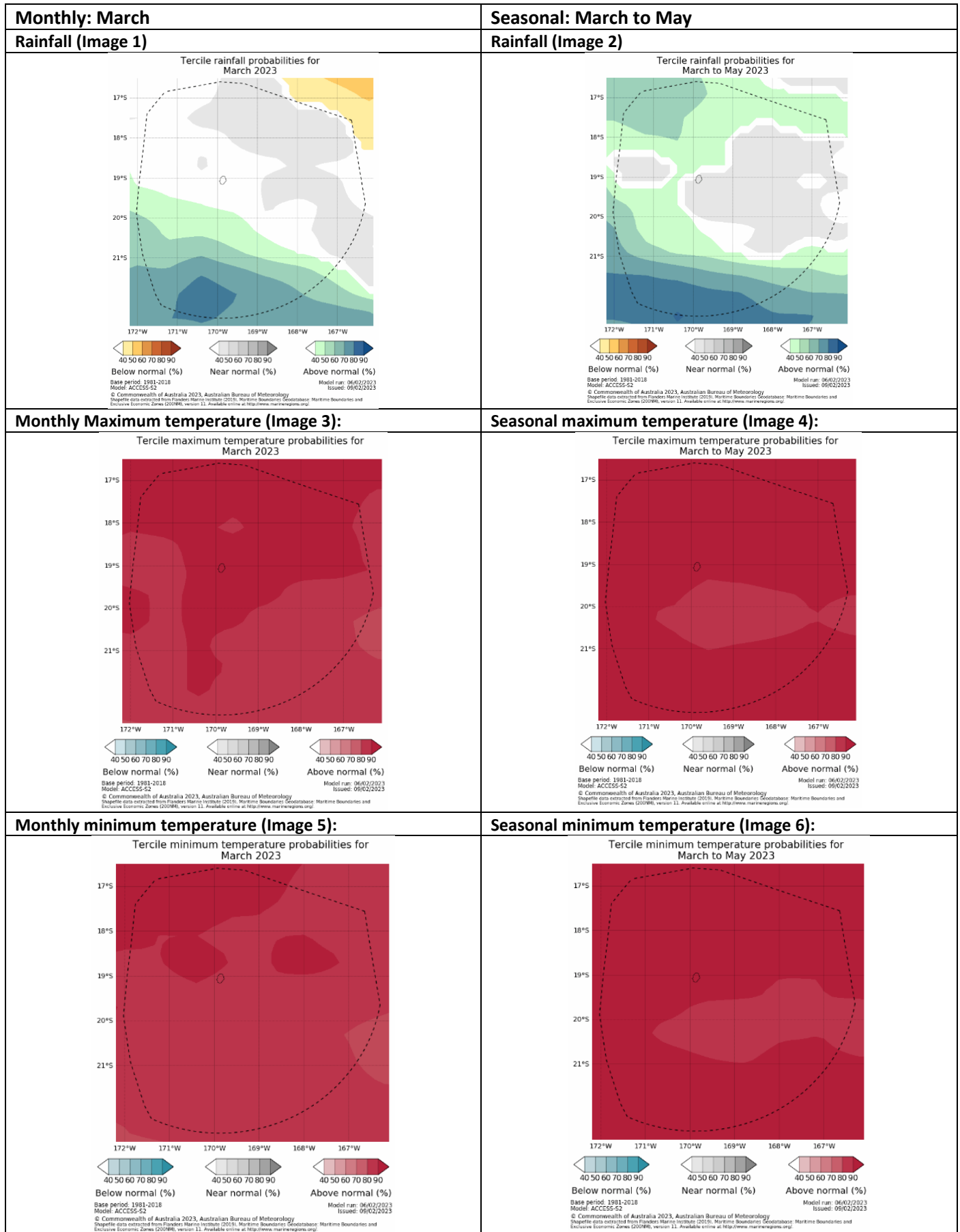
TABLE 1: Monthly Rainfall

Station (include data period)	Nov-2022	Dec-2022	Jan-2023				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Hanan Airport (1905-2023)	47.7	153.5	338.9	194.2	326.6	259.2	86/118

TABLE 2: Three-month Total Rainfall for November 2022 to January 2023

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Hanan Airport (1905-2023)	540.1	Normal	507.2	708.5	610.0	50/117

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



Part 2: Recent Ocean Observation

Monthly/Three months: January 2023 and November 2022 to January 2023

Monthly: January	Last three months: November 2022 to January 2023:
<p>Sea Surface Temperature (Image 1):</p> <p>Monthly Average Sea Surface Temperature Anomaly: January 2023</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac Reynolds SST</p>	<p>Sea Surface Temperature (Image 4):</p> <p>3 monthly Average Sea Surface Temperature Anomaly: November 2022 to January 2023</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac Reynolds SST</p>
<p>Sea level (Image 2):</p> <p>Monthly Near Real Time Sea Level Anomaly: January 2023</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac AVISO SeaWiFS/Quicksat SLA</p>	
<p>Daily coral bleaching alert (Image 3):</p> <p>Pacific Ocean Daily Coral Bleaching Alert: 06 February 2023</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac NOAA Coral Reef Watch</p>	<p>Niue Daily Coral Bleaching Alert: 06 February 2023</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac NOAA Coral Reef Watch</p>

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

<p>Monthly: February</p>	<p>Seasonal: February to April</p>
<p>Monthly sea surface temperature (Image 5):</p>	<p>Seasonal sea surface temperature (Image 6):</p>
<p>Difference from average sea surface temperature forecast for March 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, 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 http://www.maritimeregions.org/</p> <p>Model run: 11/02/2023 Issued: 13/02/2023</p>	<p>Difference from average sea surface temperature forecast for March to May 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, 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 http://www.maritimeregions.org/</p> <p>Model run: 11/02/2023 Issued: 13/02/2023</p>
<p>Monthly sea level (Image 7):</p>	<p>Seasonal sea level (Image 8):</p>
<p>Difference from average sea surface height forecast for March 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, 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 http://www.maritimeregions.org/</p> <p>Model run: 11/02/2023 Issued: 13/02/2023</p>	<p>Difference from average sea surface height forecast for March to May 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, 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 http://www.maritimeregions.org/</p> <p>Model run: 11/02/2023 Issued: 13/02/2023</p>
<p>4-week Coral Bleaching (Image 9):</p>	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 05 March 2023</p> <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Niue 4 Weeks Coral Bleaching Outlook: 05 March 2023</p> <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

Summary Statement

Monthly and last three months: January 2023/November 2022 to January 2023 statement

Hanan Airport's January rainfall was above normal, and for the last three months it was near-normal.

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

Monthly /Seasonal rainfall and temperature Outlook statements

The outlook offers little guidance for Niue's March rainfall, but for March to May the rainfall is likely to be near normal.

Maximum and minimum temperatures during March and averaged over March to May are very likely to be above normal.

Part 2: Recent Ocean summary statement

Monthly and last three months: January 2023/November 2022 to January 2023

January ocean temperatures were above normal by 0.5 to 1°C.

Averaged over November to January, ocean temperatures were above normal by up to 1.0°C.

January sea levels around Niue were above normal by up to 150mm.

Coral bleaching is on "Watch" status for Niue.

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

Ocean Variable statement

The monthly sea surface temperature around the main island is predicted to be above normal, within 0.8 degrees of average in March and increasing to 1.2 degrees above normal in the south of the EEZ.

The seasonal sea surface temperature outlook, March to May, indicates above normal SST ranging from 0.8 to 1.2 degrees.

Monthly and seasonal sea levels are forecasted to be near normal around Niue, increasing to 60 to 200mm above normal in the far southeast of the EEZ.

Coral bleaching outlook for the next four weeks reveals 'Watch' status for Niue.

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

Product	Date: January 2023	Stakeholder	Total Number of Participants	Number of males	Number of females
Climate Bulletin					
EAR Watch					
Monthly Climate Briefing	25/01/2023	Niue Girls Brigade Officers and Young Leaders	25	4	21
Ocean Outlook					
Climate data request					
Total			25	4	21