

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 179

Country: Niue

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	May-2022	Jun-2022	Jul-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Hanan Airport (1905-2022)	138.8	141.1	40.7	56.9	127.2	89.2	27/116

TABLE 2: Three-month Total Rainfall for May to July 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Hanan Airport (1905-2022)	320.6	Normal	254.8	415.7	312.6	65/115

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 September and September to November 2022

Monthly: September	Seasonal: September to November
<p>Rainfall (Image 1)</p> <p>Tercile rainfall probabilities for September 2022</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACCSS-52 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Datafile data extracted from Climate Change Science 2015: Marine Boundary Conditions and Exclusive Economic Zones (2009), version 1.1. Available online at http://www.marinegaps.org/</p>	<p>Rainfall (Image 2)</p> <p>Tercile rainfall probabilities for September to November 2022</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACCSS-52 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Datafile data extracted from Climate Change Science 2015: Marine Boundary Conditions and Exclusive Economic Zones (2009), version 1.1. Available online at http://www.marinegaps.org/</p>
<p>Monthly Maximum temperature (Image 3):</p> <p>Tercile maximum temperature probabilities for September 2022</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACCSS-52 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Datafile data extracted from Climate Change Science 2015: Marine Boundary Conditions and Exclusive Economic Zones (2009), version 1.1. Available online at http://www.marinegaps.org/</p>	<p>Seasonal maximum temperature (Image 4):</p> <p>Tercile maximum temperature probabilities for September to November 2022</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACCSS-52 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Datafile data extracted from Climate Change Science 2015: Marine Boundary Conditions and Exclusive Economic Zones (2009), version 1.1. Available online at http://www.marinegaps.org/</p>
<p>Monthly minimum temperature (Image 5):</p> <p>Tercile minimum temperature probabilities for September 2022</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACCSS-52 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Datafile data extracted from Climate Change Science 2015: Marine Boundary Conditions and Exclusive Economic Zones (2009), version 1.1. Available online at http://www.marinegaps.org/</p>	<p>Seasonal minimum temperature (Image 6):</p> <p>Tercile minimum temperature probabilities for September to November 2022</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACCSS-52 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Datafile data extracted from Climate Change Science 2015: Marine Boundary Conditions and Exclusive Economic Zones (2009), version 1.1. Available online at http://www.marinegaps.org/</p>

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Part 2: Recent Ocean Observation

Monthly: July 2022

Monthly: July	Last three months: May to July 2022:
Sea Surface Temperature (Image 1):	Sea Surface Temperature (Image 4):
Sea level (Image 2):	
Daily coral bleaching alert (Image 3):	

Part 2i. Monthly and Seasonal Outlooks for September and September to November 2022

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Summary Statement

Monthly and last three months: July 2022/May to July 2022 statement (Highly significant changes)

Hanan Airport's monthly rainfall for July was below normal, and for the last three months it was normal.

Part 1i. Monthly and Seasonal Outlooks for September and September to November 2022

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

The outlook for Niue for September shows near-normal is the most likely outcome. Rainfall for September to November 2022 is very likely to be above normal.

Monthly and seasonal maximum and minimum temperatures are very likely to be above normal.

Part 2: Recent Ocean summary statement

Monthly and last three months: July/May to July 2022 (Highly significant changes)

For July and the last three months, the sea surface temperature anomaly shows warmer conditions experienced in Niue with maximum temperature difference of 1.0 to 2.0 degrees Celsius. Above normal sea level anomaly was also observed in the month of June ranging from 150 to 250 mm. Coral bleaching is on 'No Stress' status for Niue.

Part 2i. Monthly and Seasonal Outlooks for September and September to November 2022

Ocean Variable statement (Highly significant changes)

The monthly and seasonal outlook for Niue shows an above normal SST difference of utmost 1.2 degrees Celsius, with significant SST in waters south of Niue of utmost 2.0 degrees Celsius warmer than average for September and over the months September to November.

The monthly and seasonal sea level anomaly forecast shows above normal conditions for Niue with differences ranging from 30 to 100mm. Significant sea level height differences of utmost 200mm forecasted for waters south of Niue.

Coral bleaching outlook has a "No stress" alert status for Niue.

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

Product	Date: July 2022	Stakeholder	Total Number of Participants	Number of males	Number of females
Climate Bulletin	25/07/2022	<ul style="list-style-type: none"> Private Sector Government Officials Government staff 	75	30	45
EAR Watch					
Monthly Climate Briefing					
Ocean Outlook					
Climate data request					
Total			60	30	45

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