

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 190

Country: Niue

Part 1: Recent climate

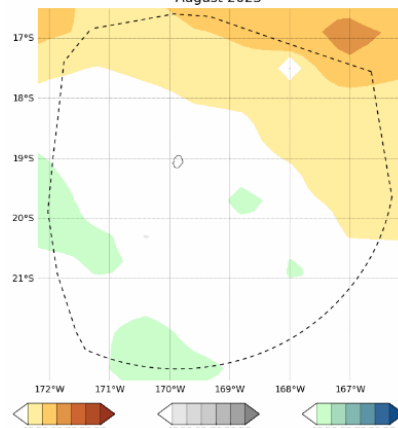
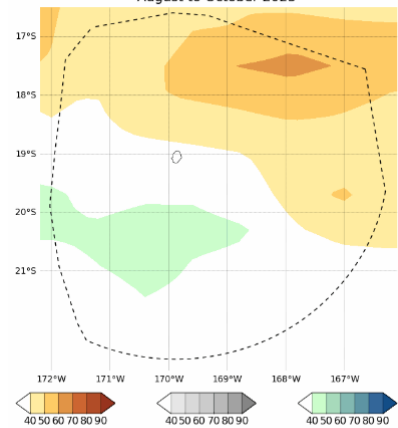
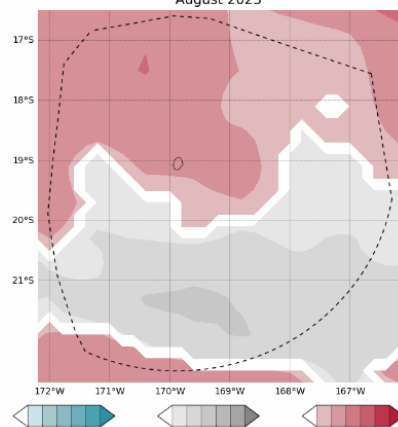
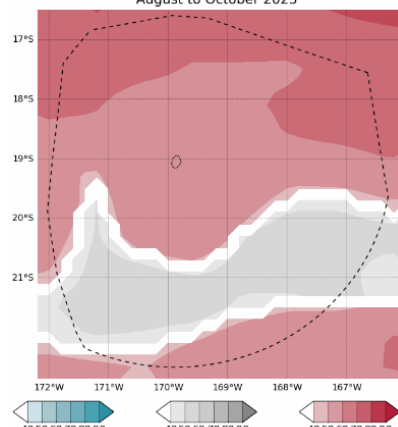
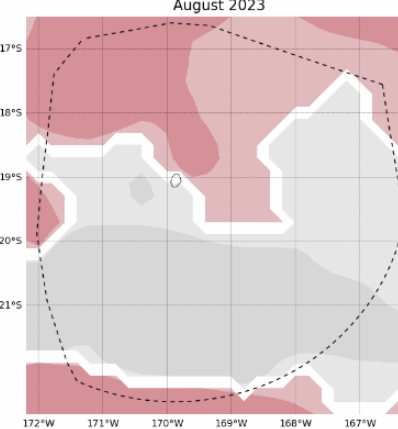
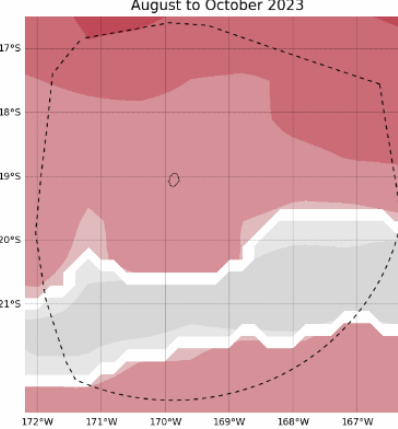
TABLE 1: Monthly Rainfall

Station (include data period)	Apr-2023	May-2023	Jun-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Hanan Airport (1905-2023)	315.6	150.3	278.7	60.1	107.9	85.0	115/118

TABLE 2: Three-month Total Rainfall for April to June 2023

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Hanan Airport (1905-2023)	744.6	Above normal	355.7	526.4	443.6	105/117

Part 1i. Monthly and Seasonal Outlooks for August and August to October 2023

Monthly: August	Seasonal: August to October
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for August 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (EZZs), version 11. Available online at http://www.marinegaps.org/</p>	<p>Tercile rainfall probabilities for August to October 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (EZZs), version 11. Available online at http://www.marinegaps.org/</p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for August 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (EZZs), version 11. Available online at http://www.marinegaps.org/</p>	<p>Tercile maximum temperature probabilities for August to October 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (EZZs), version 11. Available online at http://www.marinegaps.org/</p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for August 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (EZZs), version 11. Available online at http://www.marinegaps.org/</p>	<p>Tercile minimum temperature probabilities for August to October 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (EZZs), version 11. Available online at http://www.marinegaps.org/</p>

Part 2: Recent Ocean Observation

Monthly/Three months: April and April to June 2023

<div>Monthly: June</div> <div>Sea Surface Temperature (Image 1):</div> <div><p>Monthly Average Sea Surface Temperature Anomaly: June 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>	<div>Last three months: April to June 2023:</div> <div>Sea Surface Temperature (Image 4):</div> <div><p>3 monthly Average Sea Surface Temperature Anomaly: April 2023 to June 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>
<div>Sea level (Image 2):</div> <div><p>Monthly Near Real Time Sea Level Anomaly: June 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>AVISO SeaWiFS S-A</p></div>	
<div>Daily coral bleaching alert (Image 3):</div> <div><p>Pacific Ocean Daily Coral Bleaching Alert: 05 July 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>	<div><p>Niue Daily Coral Bleaching Alert: 05 July 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>

Part 2i. Monthly and Seasonal Outlooks for August and August to October 2023

Monthly: August	Seasonal: August to October
<p>Monthly sea surface temperature (Image 5):</p>	<p>Seasonal sea surface temperature (Image 6):</p>
<p>Monthly sea level (Image 7):</p>	<p>Seasonal sea level (Image 8):</p>
<p>4-week Coral Bleaching (Image 9):</p>	<p>Niue 4 Weeks Coral Bleaching Outlook: 30 July 2023</p>

Summary Statement

Monthly and last three months: June 2023/April to June 2023 statement

Hanan Airport's June rainfall and April to June rainfall was above normal. Hanan airport recorded its fourth wettest June on record.

Part 1i. Monthly and Seasonal Outlooks for August and August to October 2023

Monthly /Seasonal rainfall and temperature Outlook statements

The outlook for Niue for August and August to October offers little guidance for the main island as the chances of above normal, normal, and below normal are similar. However, below normal rainfall is likely over large parts of the northeast of the EEZ for both periods, while patches of Niue's southern EEZ are likely to have above normal rainfall in both periods.

Maximum and minimum temperatures during August and averaged over August to October are likely to be above normal.

Part 2: Recent Ocean summary statement

Monthly and last three months: June 2023/April to June 2023

June ocean temperatures around Niue were below normal by 0.5 to 2.0°C.

Averaged over April to June, ocean temperatures were near normal.

June sea levels around were 100mm to 150mm above normal.

Coral bleaching reveals no thermal stress for Niue

Part 2i. Monthly and Seasonal Outlooks for August and August to October 2023

Ocean Variable statement

The monthly, August, sea surface temperature around the main island is predicted to be above normal ranging from 0.4 to 0.8 degrees.

The seasonal sea surface temperature outlook, August to October, indicates above normal SST ranging from 0.4 to 0.8 degrees.

Monthly and seasonal sea levels are forecasted to be near normal around Niue.

Coral bleaching outlook for the next four weeks reveals no thermal stress for Niue.

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

Product	Date: June 2023	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
Climate Bulletin	29 June 2023	Private Sector, Government Officials, Government staff, Stakeholders	60	30	30	
EAR Watch						
Monthly Climate Briefing	13 June 2023	Niue High School Year 8 students	19	8	11	
	15 June 2023	Ekalesia Niue Executive Committee	13	10	3	
			20	1	19	
	28 June 2023	Avatele Girls Brigade Company	4	1	3	
	29 June 2023	Hakupu Women Council	14	2	12	
	30 June 2023	Avatele Women Group				
Ocean Outlook						
Climate data request						
Total			130	52	78	