

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 170

Country: Niue

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Aug-2021	Sep-2021	Oct-2021				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Hanan Airport (1905-2021)	132.2	204.0	61.2	71.5	168.9	113.8	27/117

TABLE 2: Three-month Total Rainfall for August to October 2021

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Hanan Airport (1905-2021)	397.4	Normal	254.3	448.5	337.5	75/112

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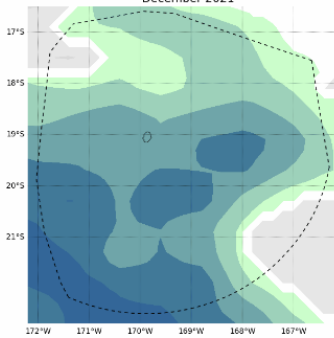
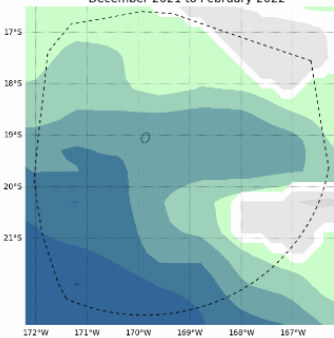
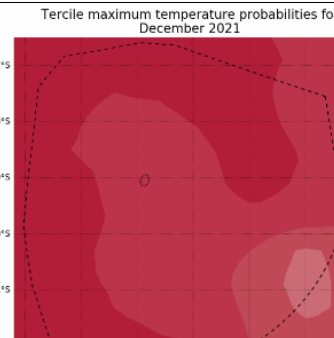
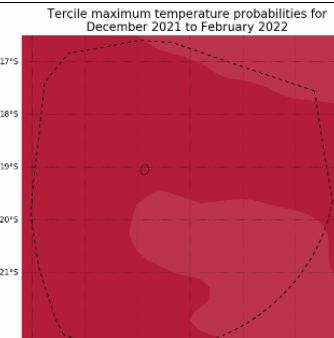
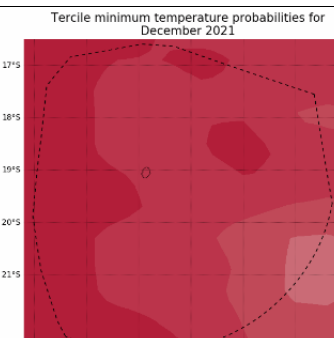
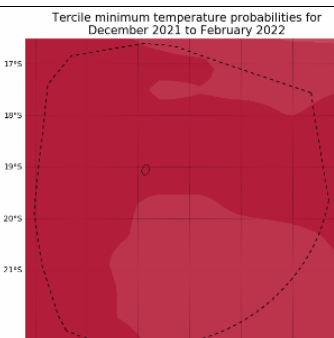
Moderate $5 \leq X < 10$

Good: $10 \leq X < 15$

High: $15 \leq X < 25$

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Part 1i. Monthly and Seasonal Outlooks for December 2021 and December 2022 to February 2022

Monthly	Seasonal
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for December 2021</p>  <p>Base period: 1981-2018 © Commonwealth of Australia 2021, Australian Bureau of Meteorology Important data are used from the Bureau of Meteorology (2021), National Weather Service (2021), and the Australian Bureau of Meteorology (2021). Model: ACCESS-G2 Model run: 01/11/2021 Issued: 04/11/2021</p>	<p>Tercile rainfall probabilities for December 2021 to February 2022</p>  <p>Base period: 1981-2018 © Commonwealth of Australia 2021, Australian Bureau of Meteorology Important data are used from the Bureau of Meteorology (2021), National Weather Service (2021), and the Australian Bureau of Meteorology (2021). Model: ACCESS-G2 Model run: 01/11/2021 Issued: 04/11/2021</p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4): Insert map
<p>Tercile maximum temperature probabilities for December 2021</p>  <p>Base period: 1981-2018 © Commonwealth of Australia 2021, Australian Bureau of Meteorology Important data are used from the Bureau of Meteorology (2021), National Weather Service (2021), and the Australian Bureau of Meteorology (2021). Model: ACCESS-G2 Model run: 01/11/2021 Issued: 04/11/2021</p>	<p>Tercile maximum temperature probabilities for December 2021 to February 2022</p>  <p>Base period: 1981-2018 © Commonwealth of Australia 2021, Australian Bureau of Meteorology Important data are used from the Bureau of Meteorology (2021), National Weather Service (2021), and the Australian Bureau of Meteorology (2021). Model: ACCESS-G2 Model run: 01/11/2021 Issued: 04/11/2021</p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for December 2021</p>  <p>Base period: 1981-2018 © Commonwealth of Australia 2021, Australian Bureau of Meteorology Important data are used from the Bureau of Meteorology (2021), National Weather Service (2021), and the Australian Bureau of Meteorology (2021). Model: ACCESS-G2 Model run: 01/11/2021 Issued: 04/11/2021</p>	<p>Tercile minimum temperature probabilities for December 2021 to February 2022</p>  <p>Base period: 1981-2018 © Commonwealth of Australia 2021, Australian Bureau of Meteorology Important data are used from the Bureau of Meteorology (2021), National Weather Service (2021), and the Australian Bureau of Meteorology (2021). Model: ACCESS-G2 Model run: 01/11/2021 Issued: 04/11/2021</p>

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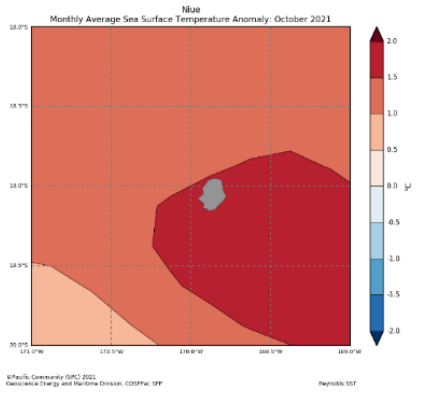
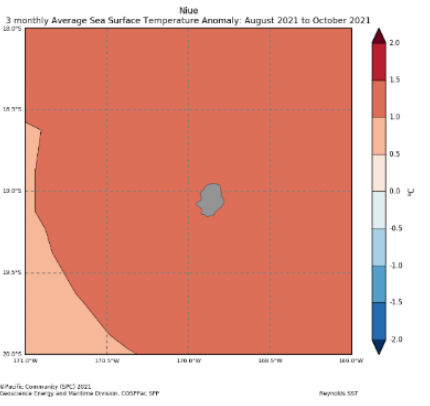
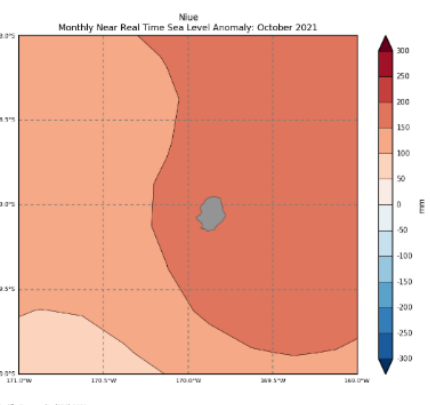
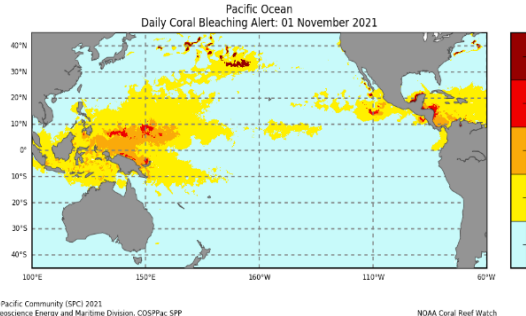
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Part 2: Recent Ocean summary statement

Monthly: October 2021

Monthly: October	Last three months: August to October 2021:
<p>Sea Surface Temperature (Image 1):</p>  <p>Monthly Average Sea Surface Temperature Anomaly: October 2021</p> <p>©Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p>	<p>Sea Surface Temperature (Image 4):</p>  <p>3 monthly Average Sea Surface Temperature Anomaly: August 2021 to October 2021</p> <p>©Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p>
<p>Sea level (Image 2):</p>  <p>Monthly Near Real Time Sea Level Anomaly: October 2021</p> <p>©Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p>	<p>Daily coral bleaching alert (Image 3):</p>  <p>Pacific Ocean Daily Coral Bleaching Alert: 01 November 2021</p> <p>©Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p> <p>NOMA Coral Reef Watch</p>

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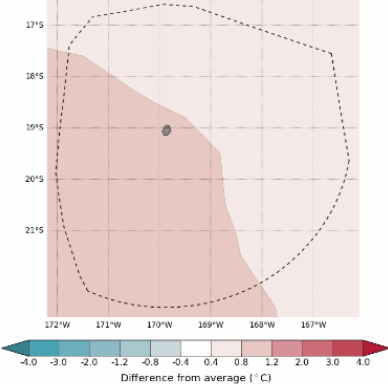
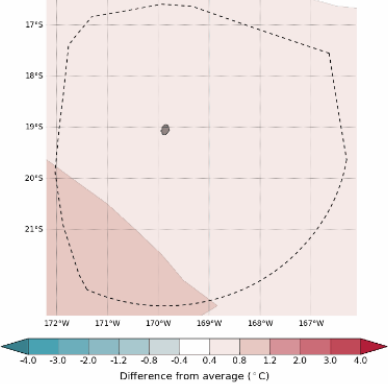
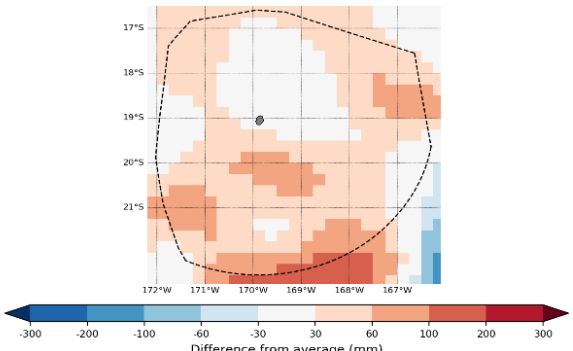
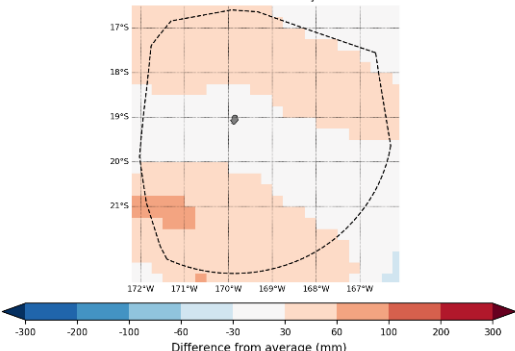
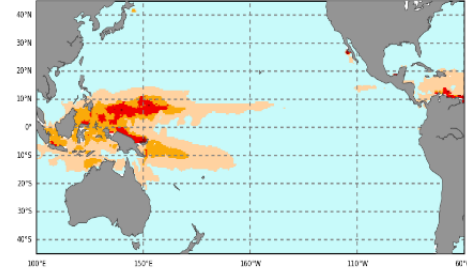
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Part 2i. Monthly and Seasonal Outlooks for December and December 2021 to February 2022

Monthly: December	Seasonal: December to February
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for December 2021</p>  <p>Model n.m. 82/11/2021 © Commonwealth of Australia 2021, Australian Bureau of Meteorology Reported data is provided by the Bureau of Meteorology (BOM) and the Bureau of Oceanography (BOO). Data is provided by the Bureau of Meteorology (BOM) and the Bureau of Oceanography (BOO). Data is provided by the Bureau of Meteorology (BOM) and the Bureau of Oceanography (BOO).</p>	<p>Difference from average sea surface temperature forecast for December 2021 to February 2022</p>  <p>Model n.m. 82/11/2021 © Commonwealth of Australia 2021, Australian Bureau of Meteorology Reported data is provided by the Bureau of Meteorology (BOM) and the Bureau of Oceanography (BOO). Data is provided by the Bureau of Meteorology (BOM) and the Bureau of Oceanography (BOO). Data is provided by the Bureau of Meteorology (BOM) and the Bureau of Oceanography (BOO).</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for December 2021</p>  <p>Model: ACCESS-S2 Base Period: 1981-2018 Model Run: 27/10/2021 Issued: Map not issued</p>	<p>Difference from average sea surface height forecast for December 2021 to February 2022</p>  <p>Model: ACCESS-S2 Base Period: 1981-2018 Model Run: 27/10/2021 Issued: Map not issued</p>
4-week Coral Bleaching (Image 9):	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 21 November 2021</p>  <p>© Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPac SPP NOAA Coral Reef Watch</p>	

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Summary Statement

Monthly and last three months: October 2021/August to October statement (Highly significant changes)

Hanan Airport's monthly and last three months: October 2021 rainfall was below normal while August to October rainfall was normal.

Part 1i. Monthly and Seasonal Outlooks for December and December 2021 to February 2022

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

The rainfall outlook for Niue for December and December 2021 to February 2022 is likely to be above normal. Maximum and Minimum monthly and seasonal temperatures is very likely to be above normal.

Part 2: Recent Ocean summary statement

Monthly and last three months: October/August to October 2021 (Highly significant changes)

The Sea surface temperature for the month of October shows warmer conditions experienced in Niue with maximum temperature anomaly of 2.0 degrees Celsius. Sea level for the month of October was higher than normal, with a maximum sea level anomaly of 200mm.

Part 2i. Monthly and Seasonal Outlooks for December and December 2021 to February 2022

Ocean Variable statement (Highly significant changes)

The outlook for Niue shows a significant temperature difference of up to 1.2 degrees Celsius warmer than average for December and over the months December to February.

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

Product	Date: October 2021	Stakeholder	Total Number of Participants	Number of males	Number of females
Climate Bulletin	22 Oct 2021	- Government Officials	20	5	15
Niue Climate Outlook		- Government all staff	15	9	6
		- Private Sector	20	15	5
		- General Public			
EAR Watch					
Monthly Climate Briefing	09 Oct 2021	- Stakeholders	15	5	10
	Radio Program	- Government all staff	40	20	20
		- Village council	12	6	6
Ocean Outlook					
Climate data request					
Total			122	60	62

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