

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 173

Country: Tuvalu

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Nov-2021	Dec-2021	Jan-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2022)	57.8	69.8	457.3	240.7	378.7	326.8	63/82
Nui (1946-2022)	179.6	209.7	245.3	242.9	447.2	338.0	26/77
Funafuti (1933-2022)	190.6	588.2	616.4	302.9	445.2	383.2	82/90
Niulakita (1953-2022)	387.1	237.6	503.7	304.3	440.8	373.6	56/69

TABLE 2: Three-month Total Rainfall for November 2021 to January 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Nanumea (1941-2022)	584.9	Below normal	592.1	996.7	874.4	26/80
Nui (1946-2022)	634.6	Below normal	820.9	1092.0	941.7	15/76
Funafuti (1933-2022)	1395.2	Above normal	931.2	1136.1	1011.3	79/89
Niulakita (1953-2022)	1128.4	Normal	839.5	1142.2	1028.7	41/66

NB: The X LEPS % score has been categorised as follows:

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

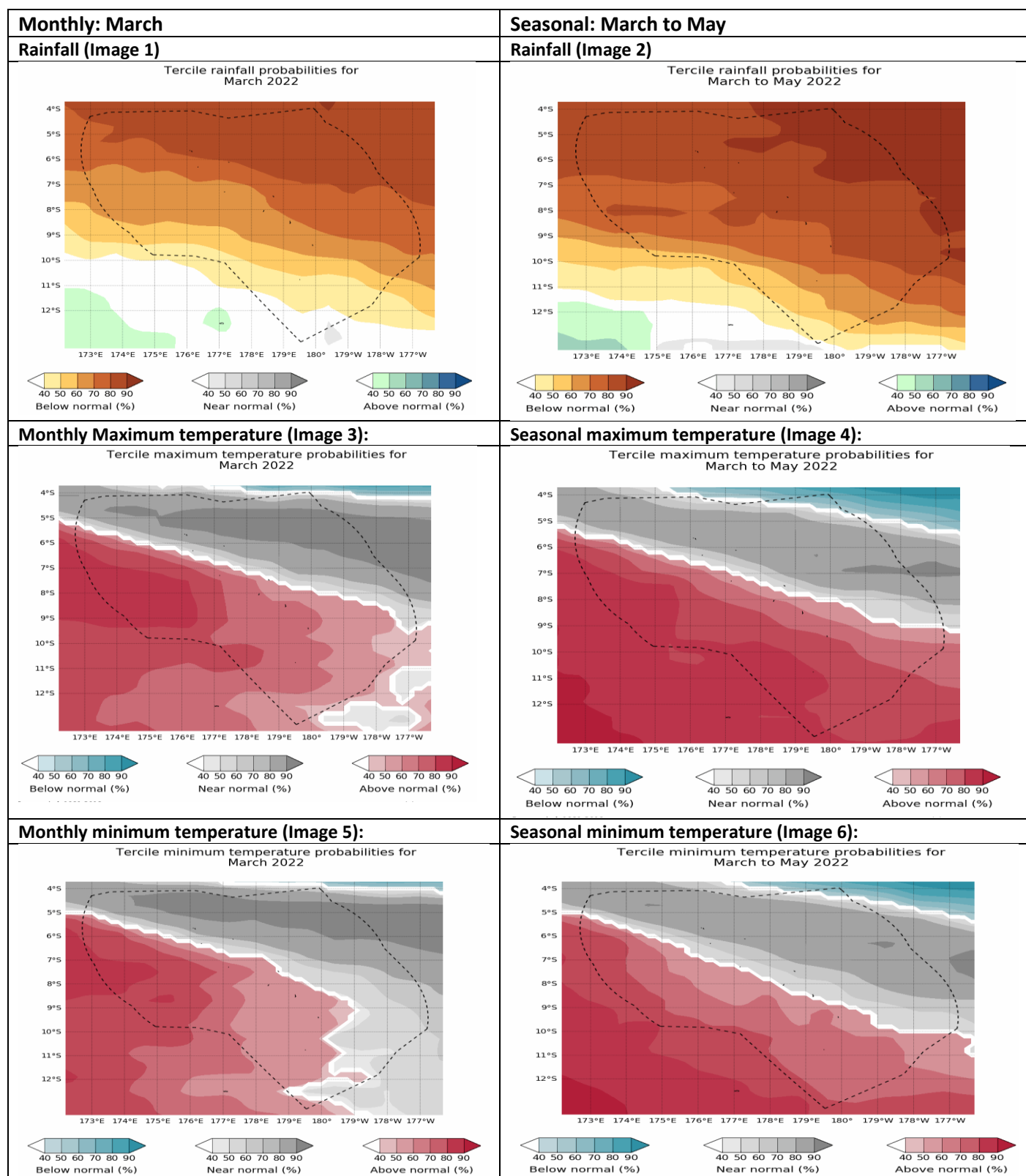
Moderate $5 \leq X < 10$

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 March and March to May 2022



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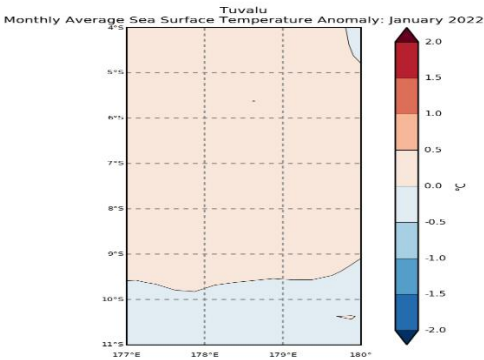
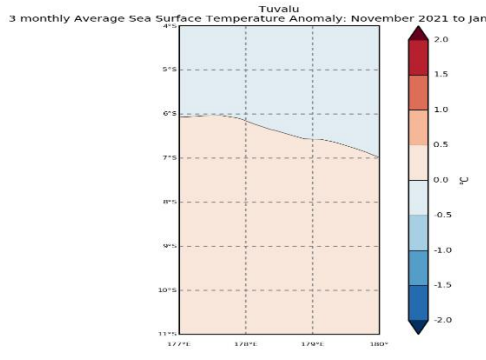
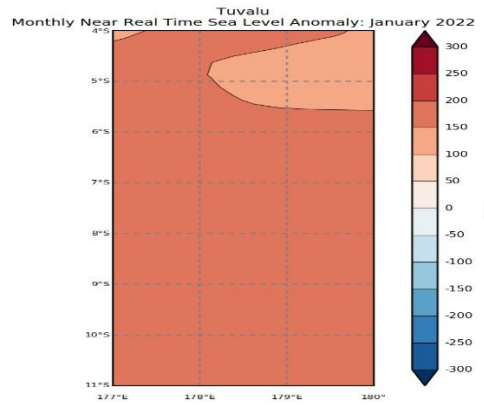
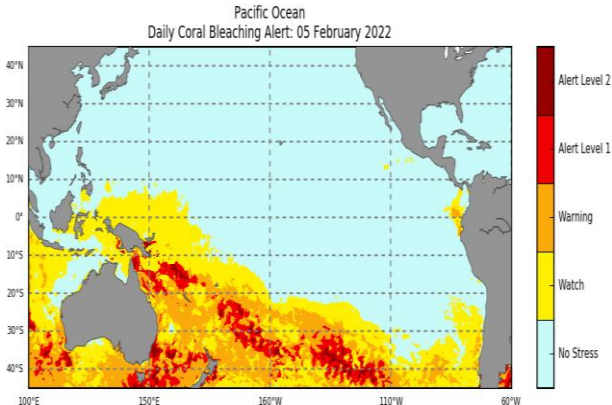
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Part 2: Recent Ocean summary statement

Monthly: January 2022

Monthly: January	Last three months: November 2021 to January 2022:
<p>Sea Surface Temperature (Image 1):</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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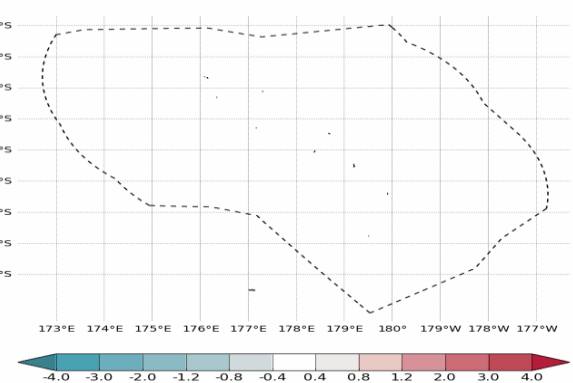
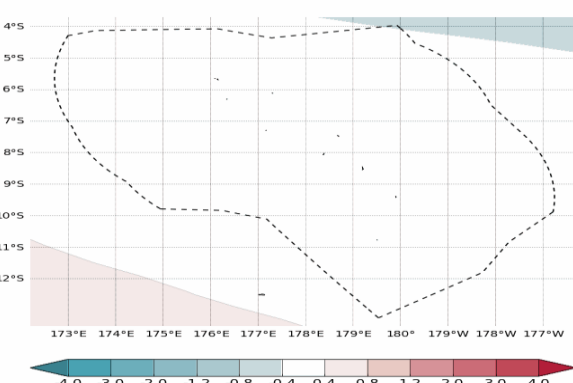
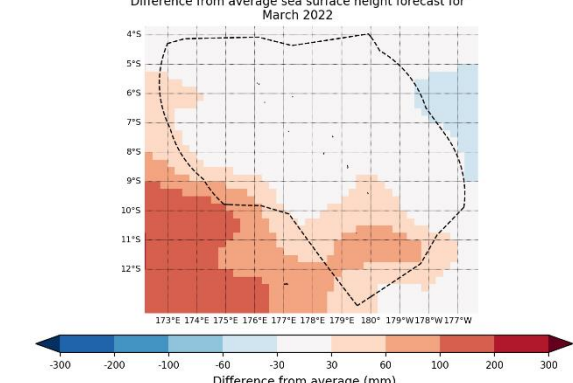
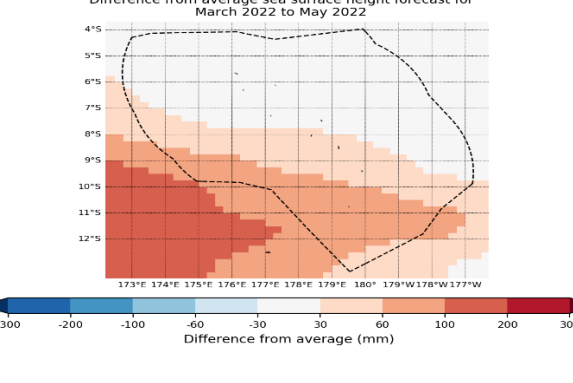
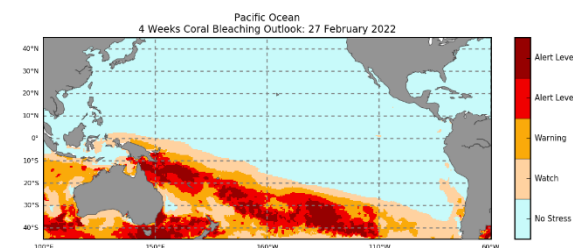
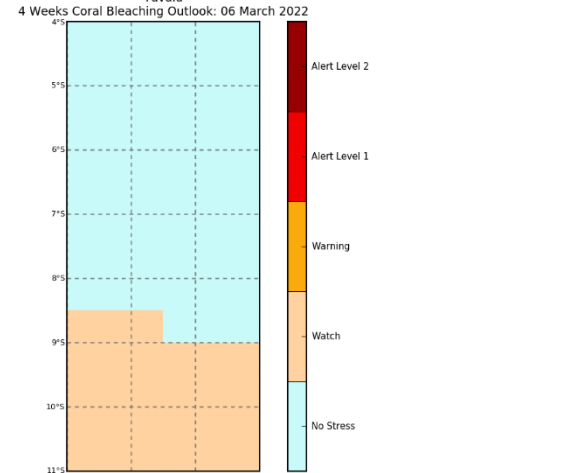
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Part 2i. Monthly and Seasonal Outlooks for March and March to May 2022

Monthly: March	Seasonal: March to May
<p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for March 2022</p> 	<p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for March to May 2022</p> 
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for March 2022</p>  <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/01/2022 Issued: 02/02/2022</p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for March 2022 to May 2022</p> 
<p>4-week Coral Bleaching (Image 9):</p> <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 27 February 2022</p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>NOAA Coral Reef Watch</p>	<p>Tuvalu 4 Weeks Coral Bleaching Outlook: 06 March 2022</p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COM/NOAA Coral Reef Watch</p>

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Summary Statement

Monthly and last three months: January 2022/November 2021 to January 2022 statement (*Highly significant changes*)

Monthly: Above normal rainfall was observed at Nanumea, Funafuti and Niulakita, while Nui observed near normal rainfall. Funafuti recorded its ninth wettest January on record.

Seasonal: Below Normal rainfall observed at Nanumea and Nui, near normal rainfall observed in Niulakita while Funafuti observed Above Normal rainfall.

Part 1i. Monthly and Seasonal Outlooks for March and March to May 2022

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

The monthly rainfall outlook for Tuvalu for March is very likely to be below normal for Nanumea, Nui and Funafuti, while it is likely to be below normal for Niulakita. For the coming season March to May, the outlook for Nanumea, Nui, Funafuti and Niulakita is very likely to be below normal.

Part 2: Recent Ocean summary statement

Monthly and last three months: January/November 2021 to January 2022 (*Highly significant changes*)

The January 2022 sea level anomaly for Tuvalu showed significant sea level differences of 150mm to 200mm.

The coral bleaching alert shows no stress of coral bleaching for central atolls, with some parts of northern and southern waters of Tuvalu on a coral bleaching watch.

Part 2i. Monthly and Seasonal Outlooks for March and March to May 2022

Ocean Variable statement (*Highly significant changes*)

Monthly:

Sea level for March shows a normal condition which is -30 to 30mm for North and central group, with a higher than normal condition for the southern group with sea surface height differences of 30 to 100mm.

Season:

Sea level for March to May shows a normal condition for the Northern group, with a higher than normal sea surface height difference of 30 to 60mm for central and 60 to 10mm for the southern group.

Coral Bleaching in the southern atolls are more likely to be on coral bleaching watch, with a no stress for Central and Northern atolls.

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

Product	Date: January 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin		Met staffs Disaster Members All civil servants and kaupule members	6 9	5 6	1 3
EAR Watch		Met staffs Disaster Members All civil servants and kaupule members	6 9	5 6	1 3
Monthly Climate Briefing		Met staffs Disaster Members All civil servants and kaupule members	6 9	5 6	1 3
Ocean Outlook		Met staffs Disaster Members All civil servants and kaupule members	6 9	5 6	1 3
Climate data request		Met staffs Disaster Members All civil servants and kaupule members	6 9	5 6	1 3
Total			75	55	20

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