

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 175

Country: Tuvalu

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Jan-2022	Feb-2022	Mar-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2022)	457.3	93.9	13.5	175.8	315.9	246.8	2/82
Nui (1946-2022)	245.3	151.7	218.8	215.1	339.7	259.6	26/77
Funafuti (1933-2022)	616.4	220.8	388.3	254.1	361.2	312.5	68/90
Niulakita (1953-2022)	503.7	185.6	368.4	253.3	391.8	300.7	45/70

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

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Nanumea (1941-2022)	564.7	Below normal	689.4	1112.8	939.3	20/82
Nui (1946-2022)	615.8	Below normal	828.7	1093.5	974.2	15/77
Funafuti (1933-2022)	1225.5	Above normal	939.7	1167.5	1068.4	67/90
Niulakita (1953-2022)	1057.7	Normal	952.1	1171.9	1086.6	33/69

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

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

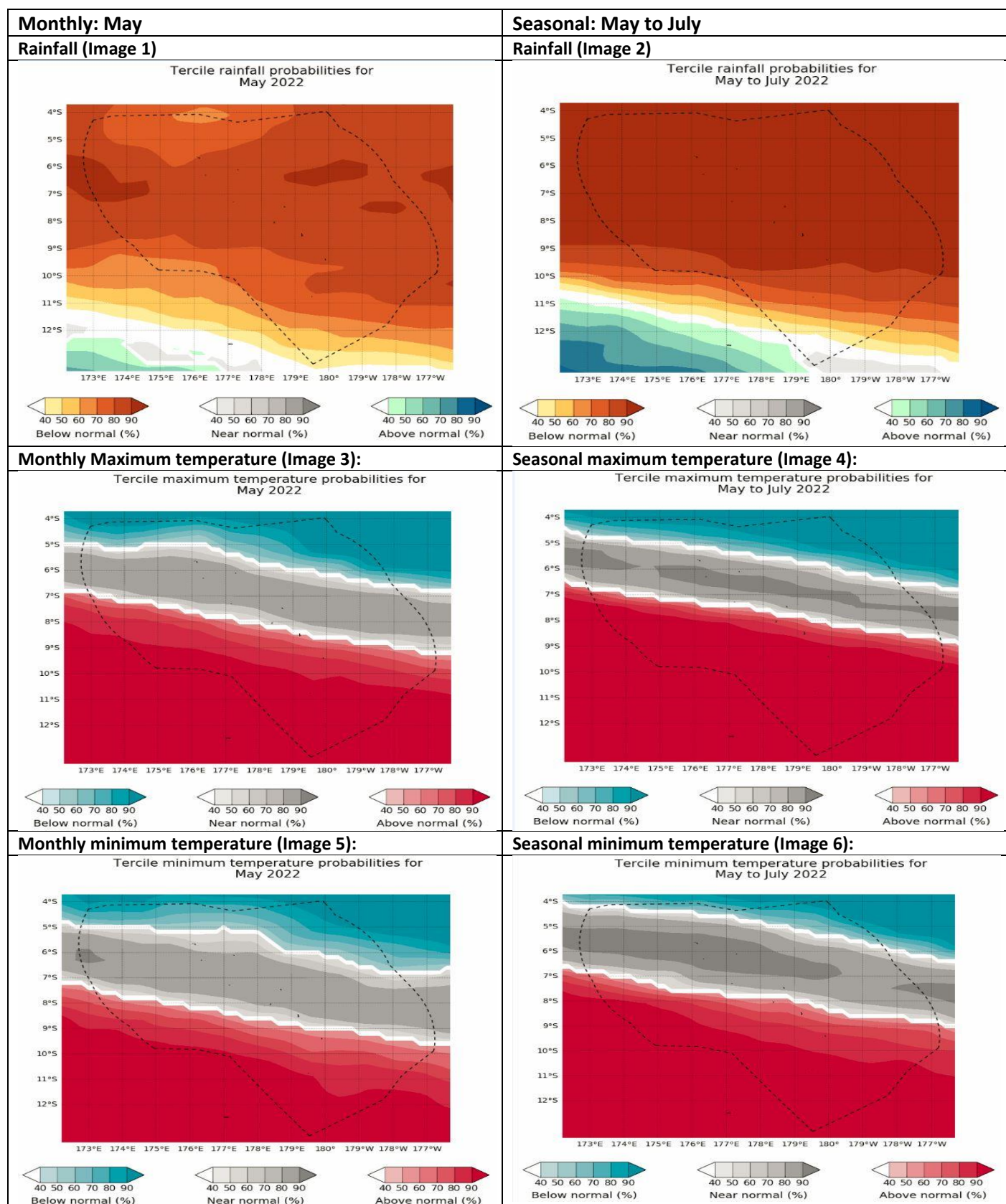
Moderate $5 \leq X < 10$

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 May and May to July 2022



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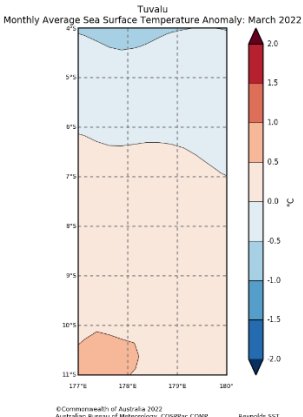
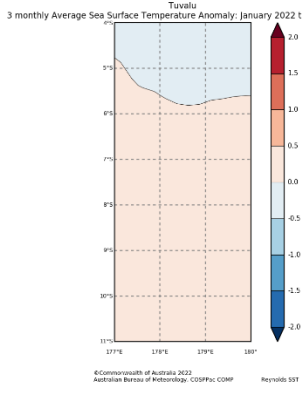
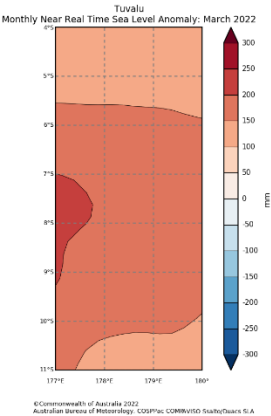
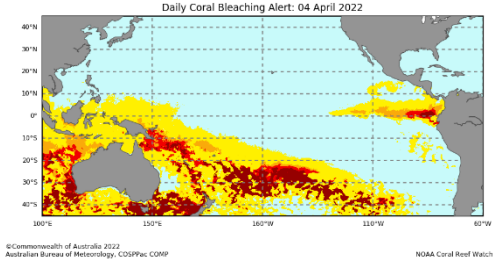
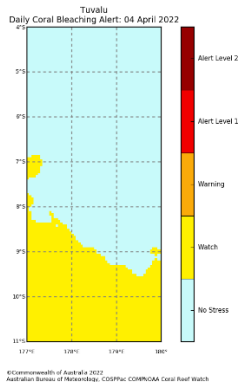
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Part 2: Recent Ocean summary statement

Monthly: March 2022

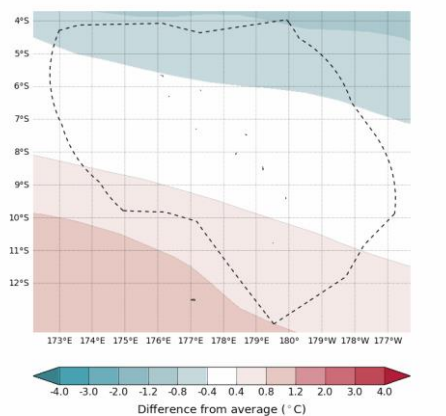
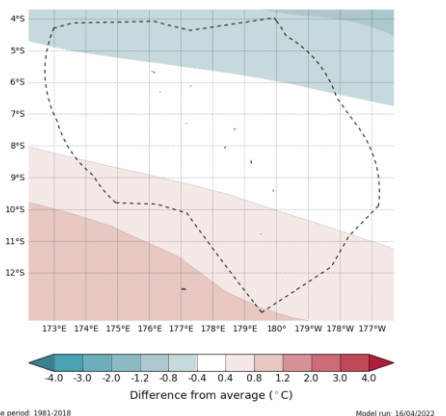
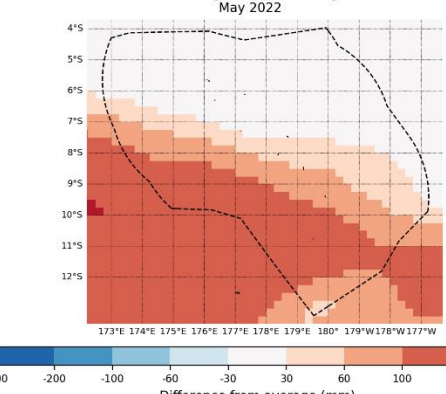
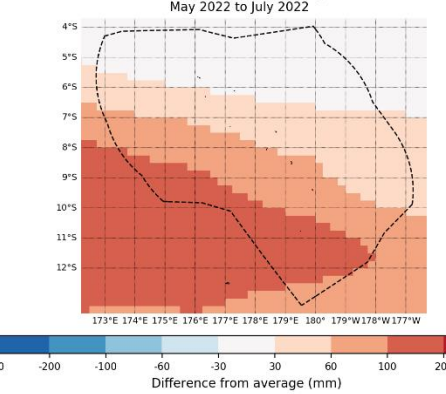
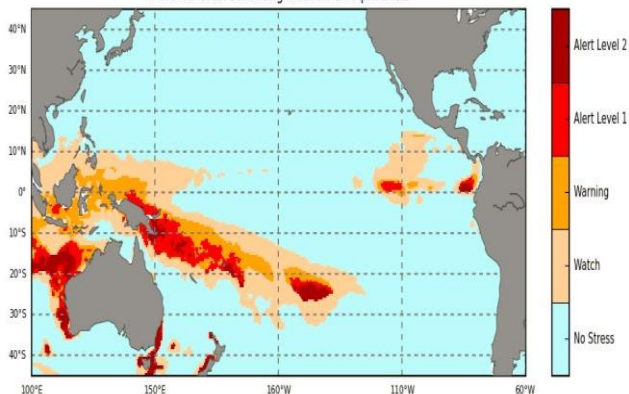
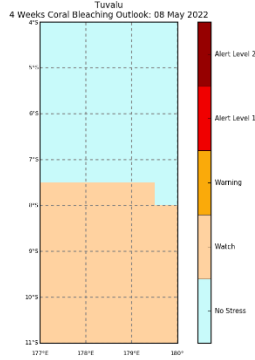
Monthly: March	Last three months: January to March 2022:
Sea Surface Temperature (Image 1): <div></div>	Sea Surface Temperature (Image 4): <div></div>
Sea level (Image 2): <div></div>	
Daily coral bleaching alert (Image 3): <div></div>	<div></div>

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

Monthly: May	Seasonal: May to July
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for May 2022</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Map data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase, Maritime Boundaries and Exclusive Economic Zones (2009M), version 1.1. Available online at http://www.marboundaries.org</p> <p>Model run: 16/04/2022 Issue: 18/04/2022</p>	<p>Difference from average sea surface temperature forecast for May to July 2022</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Map data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase, Maritime Boundaries and Exclusive Economic Zones (2009M), version 1.1. Available online at http://www.marboundaries.org</p> <p>Model run: 16/04/2022 Issue: 18/04/2022</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for May 2022</p>  <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/03/22 Issue: 31/03/22</p>	<p>Difference from average sea surface height forecast for May 2022 to July 2022</p>  <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/03/22 Issue: 31/03/22</p>
4-week Coral Bleaching (Image 9):	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 24 April 2022</p> 	<p>Tuvalu 4 Weeks Coral Bleaching Outlook: 08 May 2022</p>  <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, CSIRO/NOAA Coral Reef Watch</p>

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Summary Statement

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

Monthly: Above Normal rainfall was observed at Funafuti, while Niulakita and Nui observed near Normal rainfall, Below Normal Rainfall observed at Nanumea Island. Nanumea recorded its second driest March on record.

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

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

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

Monthly rainfall outlook for Tuvalu for May is very likely to be below normal for Nanumea, Nui and Funafuti, While Niulakita is likely to be below normal rainfall. For the coming season May to July, the outlook for Tuvalu is very likely to be below normal rainfall.

Monthly and Seasonal Temperature for Nanumea and Nui are very likely to be near normal temperature, Funafuti offers a little guidance as the chance of below normal and above normal are similar, while Niulakita is very likely to be above normal temperature.

Part 2: Recent Ocean summary statement

Monthly and last three months: March/January to March 2022 (Highly significant changes)

For March 2022 and January to March 2022, Tuvalu Islands are experiencing normal SST conditions.

The sea level conditions was above normal for Tuvalu with sea level differences of 150-250mm for March 2022.

Coral bleaching alert status is 'No Stress and Watch' for southern Tuvalu.

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

Ocean Variable statement (Highly significant changes)

For the monthly and seasonal sea surface temperature forecast reveals normal conditions for Tuvalu.

The sea level anomaly forecast reveals normal conditions for northern Tuvalu, with central and southern group forecasted to experience 30-200mm sea level difference.

Coral bleaching outlook status is 'Watch' for southern atolls with '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: March 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin		MET Staff Disaster Members All Civil Servants All Kaupule Members	22 9	17 6	5 3
EAR Watch		MET Staff Disaster Members All Civil Servants All Kaupule Members	22 9	17 6	5 3
Monthly Climate Briefing		MET Staff	22	17	5
Ocean Outlook		MET Staff Disaster Members All Civil Servants All Kaupule Members	22 9	17 6	5 3
Climate data request					
Total			115	86	29

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