

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 176

Country: Tuvalu

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Feb-2022	Mar-2022	Apr-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Nanumea (1941-2022)	93.9	13.5	84.5	197.4	271.4	228.7	6/82
Nui (1946-2022)	151.7	218.8	125.7	152.9	269.1	200.1	17/77
Funafuti (1933-2022)	220.8	388.3	65.5	190.3	317.0	238.2	3/90
Niulakita (1953-2022)	185.6	368.4	166.9	167.9	260.2	218.4	23/70

TABLE 2: Three-month Total Rainfall for February to April 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Nanumea (1941-2022)	191.9	Below normal	642.3	997.0	810.2	2/82
Nui (1946-2022)	496.2	Below normal	705.2	981.7	824.8	12/77
Funafuti (1933-2022)	674.6	Below normal	838.8	1071.2	941.4	15/70
Niulakita (1953-2022)	720.9	Below normal	859.7	1038.9	957.0	14/77

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 June and June to August 2022

Monthly: June	Seasonal: June to August
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for June 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapely data extracted from Flemish Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimergion.org/ Model run: 02/05/2022 Issued: 05/05/2022</p>	<p>Tercile rainfall probabilities for June to August 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapely data extracted from Flemish Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimergion.org/ Model run: 02/05/2022 Issued: 05/05/2022</p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for June 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapely data extracted from Flemish Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimergion.org/ Model run: 02/05/2022 Issued: 05/05/2022</p>	<p>Tercile maximum temperature probabilities for June to August 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapely data extracted from Flemish Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimergion.org/ Model run: 02/05/2022 Issued: 05/05/2022</p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for June 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapely data extracted from Flemish Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimergion.org/ Model run: 02/05/2022 Issued: 05/05/2022</p>	<p>Tercile minimum temperature probabilities for June to August 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapely data extracted from Flemish Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimergion.org/ Model run: 02/05/2022 Issued: 05/05/2022</p>

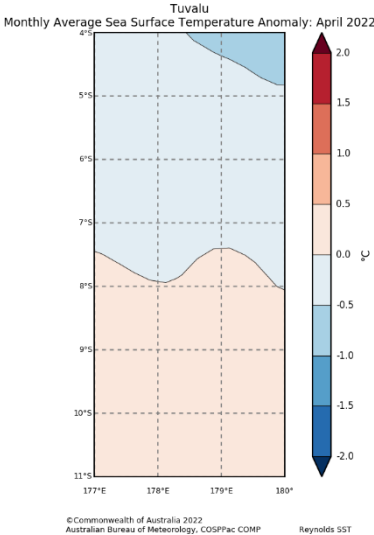
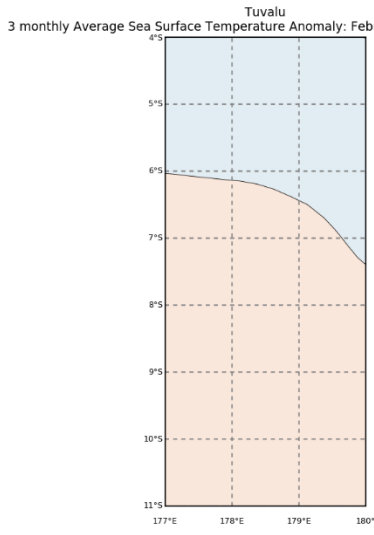
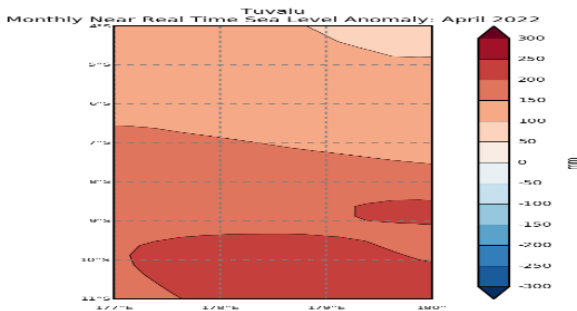
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Part 2: Recent Ocean summary statement

Monthly: April 2022

Monthly: April	Last three months: February to April 2022:
Sea Surface Temperature (Image 1):	Sea Surface Temperature (Image 4):
 <p>Tuvalu Monthly Average Sea Surface Temperature Anomaly: April 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP Reynolds SST</p>	 <p>Tuvalu 3 monthly Average Sea Surface Temperature Anomaly: February 2022 to April 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP Reynolds SST</p>
Sea level (Image 2):	
 <p>Tuvalu Monthly Near Real Time Sea Level Anomaly: April 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP/AVISO SeaWiFS/QuikSCAT SLA</p>	
Daily coral bleaching alert (Image 3):	

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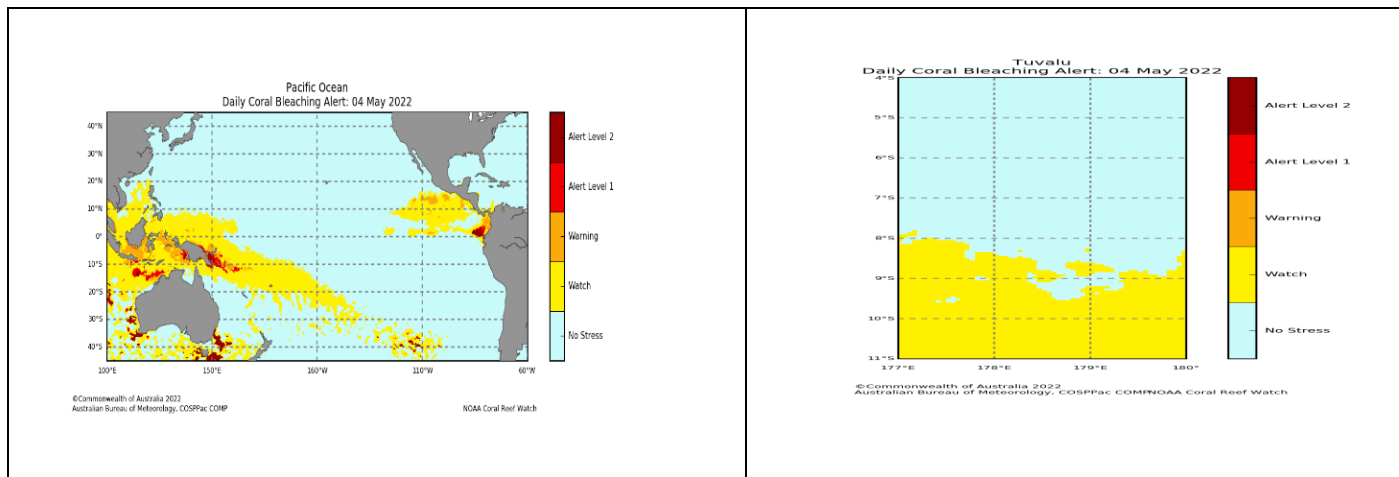
Low: $0 \leq X < 5$

Moderate $5 \leq X < 10$

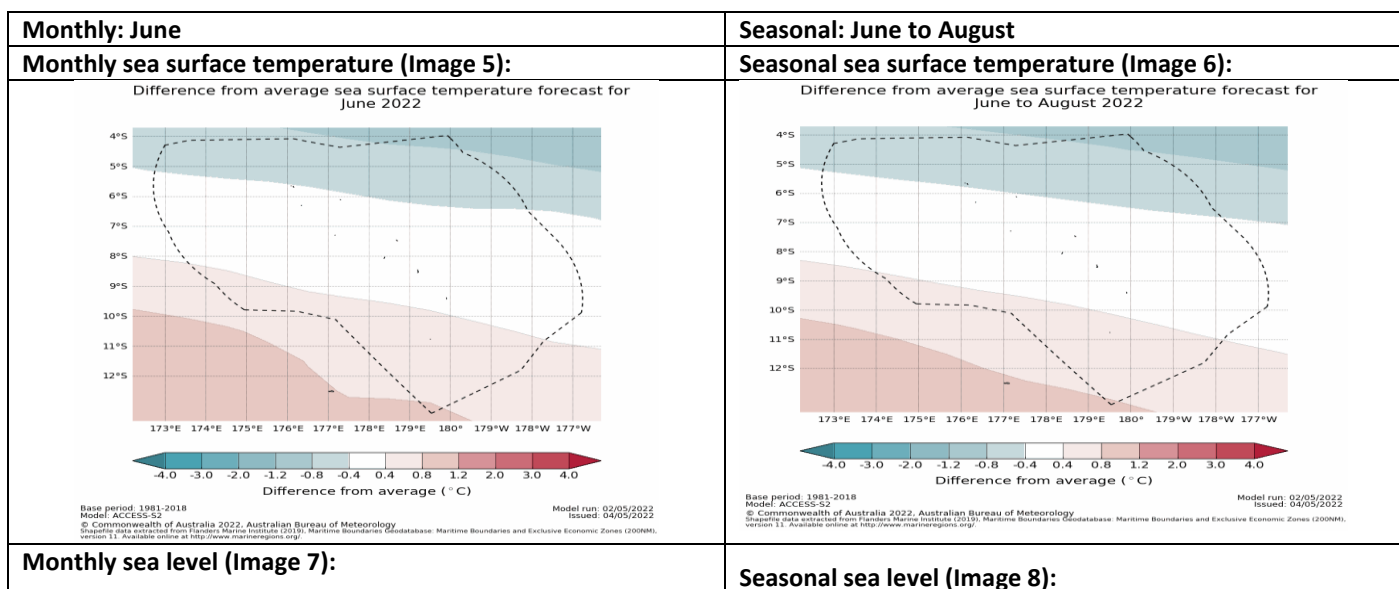
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Part 2i. Monthly and Seasonal Outlooks for June and June to August 2022



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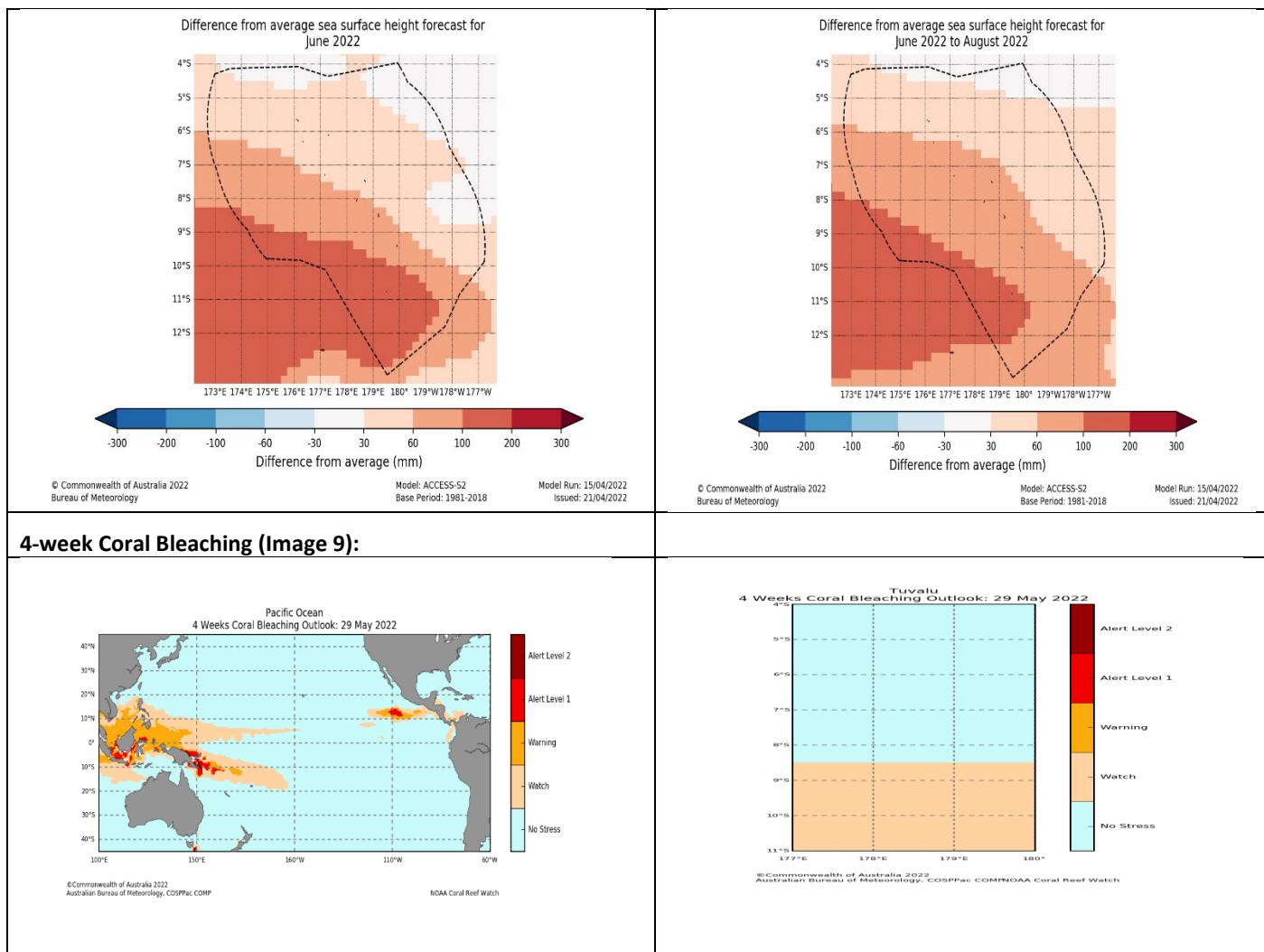
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Summary Statement

Monthly and last three months: April 2022/February to April 2022 statement (Highly significant changes)

April: All stations (Nanumea, Nui, Funafuti and Niulakita) recorded below normal rainfall. Funafuti and Nanumea recorded their third and sixth wettest April on record.

February-April: All stations recorded below normal rainfall. Nanumea recorded its second driest February to April on record.

Part 1i. Monthly and Seasonal Outlooks for June and June to August 2022

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

The monthly and seasonal rainfall outlook for Tuvalu for June and June to August is very likely to be below normal rainfall for all stations except further south where it is likely to be normal

The outlook for the monthly and seasonal temperature is likely to be below normal for Nanumea, Nui is near normal, while Niulakita and Funafuti are very likely to be above normal temperature.

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Part 2: Recent Ocean summary statement

Monthly and last three months: April/February to April 2022 (Highly significant changes)

For April 2022 and February to April 2022, Tuvalu Island are experiencing normal SST conditions. The sea level conditions was above normal for Tuvalu with sea level differences of 100 – 200mm for April 2022.

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

Part 2i. Monthly and Seasonal Outlooks for June and June to August 2022

Sea level for June Shows for the northern area is near normal conditions which is 30 – 60 while the central part is 60 – 100mm below normal conditions and for the southern group the sea surface height difference is 30 -200mm.

Ocean Variable statement (Highly significant changes)

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

The sea level anomaly forecast reveals near normal conditions for northern part of Tuvalu, with the central and southern group forecast to experience 30 – 200mm sea level difference.

Coral bleaching outlook status is ‘No Stress’ for Northern group while the southern group is ‘Watch’.

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

Product	Date: April 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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