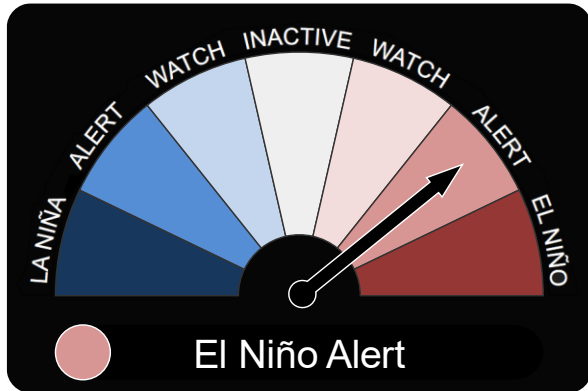


September Climate Bulletin for Fisheries

A monthly bulletin issued by the Vanuatu Meteorology & Geo-hazards Department that provides concise one-month outlook on climatic conditions over Vanuatu that the fisheries sector can use for better decision-making.

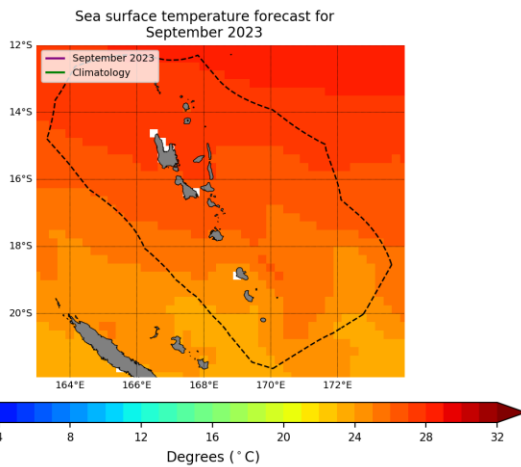
El Niño–Southern Oscillation (ENSO)



ENSO status is neutral with an El Niño ALERT in place. This means there is a high chance of an El Niño occurring this year. El Niño events typically increase the chance of below average rainfall in Vanuatu.

El Niño Saoten Osileisen hemi stap long NUTREL. Be aotluk istap long El Niño ALET. Hemia I minim se igat hae Janis blong wan El Niño I fom long yia ia. Long Vanuatu, El Niño hemi inkrisim Janis blong bilou nomol renfol.

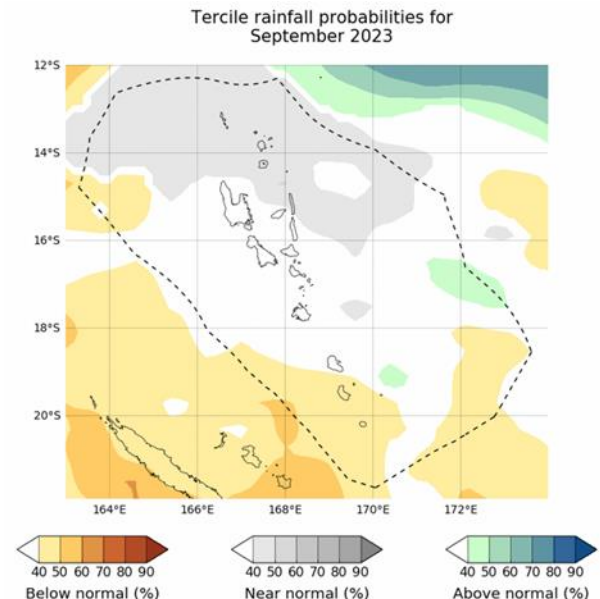
Sea Surface Temperature Forecast



Sea surface temperatures are expected to be around 25-26°C in the south, and up to 28°C in northern islands.

Tempreja blong solwora bae save kasem 25-26°C daon saot, mo 28°C antap long not.

Rainfall Outlook



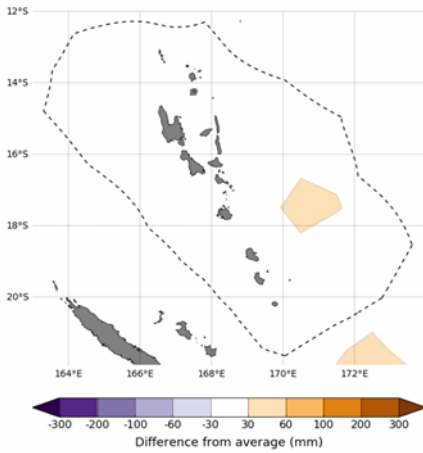
Rainfall is expected to be below normal in Tanna and southern-most islands, and near normal in Torba province.

Yumi ekspektem renfol blo bae hemi bilou nomol long Tanna mo ol saoten aelan. Renfol bae I save nomol long Torba provins.

SUPPORTED BY:



Difference from average sea surface height forecast for September 2023



Base period: 1981-2018
 Model: ACCESS-S2
 © Commonwealth of Australia 2023. Australian Bureau of Meteorology
 Shapefile data extracted from Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2008), version 11. Available online at <http://www.maritimeregion.org/>
 Model run: 21/08/2023
 Issued: 23/08/2023

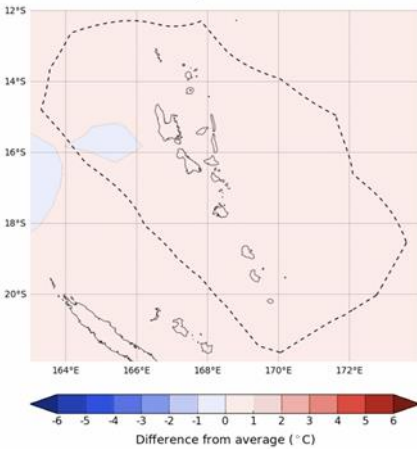
Sea Level Forecast

Sea level is forecasted to be normal next month.

Level blong solwota bae hemi nomol nekis manis.

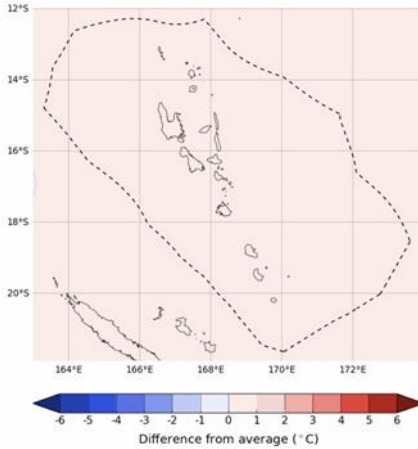
Maximum and Minimum Temperature Outlook

Difference from average mean maximum temperature forecast for September 2023



Base period: 1981-2018
 Model: ACCESS-S2
 © Commonwealth of Australia 2023. Australian Bureau of Meteorology
 Shapefile data extracted from Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2008), version 11. Available online at <http://www.maritimeregion.org/>
 Model run: 21/08/2023
 Issued: 23/08/2023

Difference from average mean minimum temperature forecast for September 2023



Base period: 1981-2018
 Model: ACCESS-S2
 © Commonwealth of Australia 2023. Australian Bureau of Meteorology
 Shapefile data extracted from Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2008), version 11. Available online at <http://www.maritimeregion.org/>
 Model run: 21/08/2023
 Issued: 23/08/2023

Slightly above average (0-1°C) day-time temperatures are expected over the country. Slightly above average (0-1°C) night-time temperatures are expected over the country.

Tempreja blong dei bae save wom lelebet bitim nomol ova long kaontri wetem wan difrens blong 0-1°C. Tempreja blong naet bae save wom lelebet bitim nomol ova long kaontri wetem wan difrens blong 0-1°C.

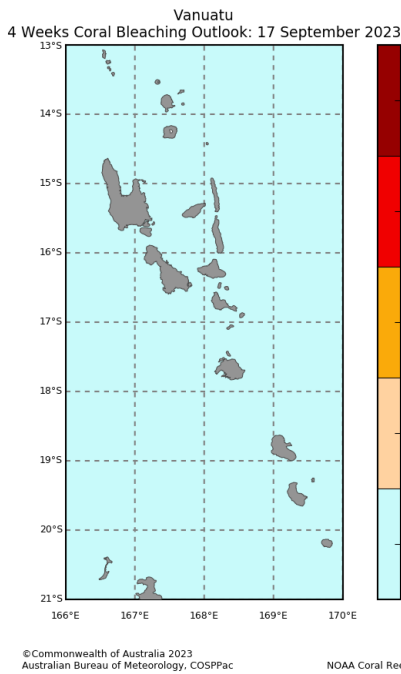
Tide Outlook for September

Port Vila Harbour					
Lowest Tide	Date	Time (VUT)	Highest Tide	Date	Time (VUT)
0.15m	1 Sep	12:30pm	1.58m	30 Sep	6:16am

Luganville Harbour					
Lowest Tide	Date	Time (VUT)	Highest Tide	Date	Time (VUT)
0.13m	1 Sep	11:42am	1.89m	1 Sep	5:11am

Moon Phases for September

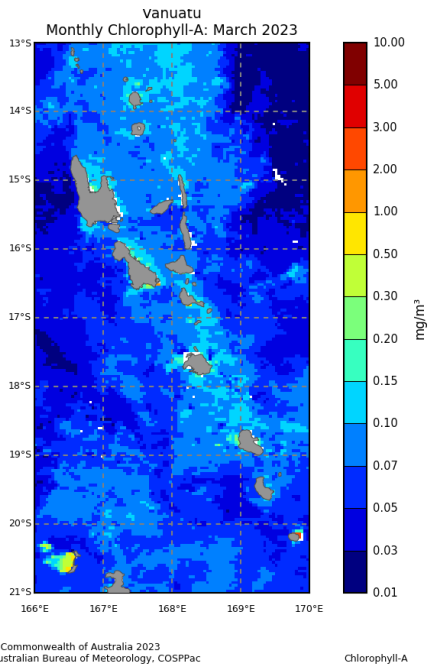
Fes Kwata	Ful Moon	Las Kwata	Niu Moon
23 September	29 September	7 September	15 September



Coral Bleaching Outlook

A No Stress outlook is forecasted for all islands this month.

Aotluk I soem se bae inogat stress long ol korel long manis ia.



Chlorophyll A status from March 2023

Chlorophyll concentrations from March ranged from 0.10 to 0.50mg/m³ off the coast of most islands. Highest chlorophyll level of over 2.0mg/m³ is found east of Aneityum.

Level blong klorofil hemi kasem 0.10 to 0.50mg/m³ long most aelan long Vanuatu. Haest chlorophyll level hemi 2.0mg/m³ mo istap long east blong Anaijom.

Bulletin Highlights for September 2023

ENSO:	El Niño ALERT	Max Temp:	↑
SST:	–	Min Temp:	↑
Rainfall:	–	Coral Bleaching:	↓
Sea Level:	–	Chlorophyll:	–

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Climate Smart Recommendations for Fisheries Sector

		Offshore fisheries	Lagoon fisheries
EL Nino Southern Oscillation (ENSO)	El Nino La Nina		
Sea Surface Temperatures	Further South	- Higher likelihood of warmer water tuna species skipjack and yellow fin. - Fish on warm side of SST fronts for natural biological hotspots.	
Sea Level	> 200 mm < - 200 mm		
Rainfall	Above normal Below normal		
Maximum and Minimum Temperature	Above average Below average		
Coral Bleaching Level	Warning Alert 1 Alert 2		<ul style="list-style-type: none"> - Reduce storm water and fertilizer runoff - Avoid using herbicides and pesticides - When anchoring boats, avoid anchoring near places with coral reefs - Encourage offshore fishing to alleviate stressors in the lagoon.
Chlorophyll	Above normal	Likely higher stocks for smaller pelagic fish	<ul style="list-style-type: none"> - Higher risks of lagoon fish disease, encourage offshore fishing - Limit nutrient runoff & monitor for algal blooms - Target high chlorophyll regions for crown of thorns starfish management activities
High and Low Tides	High Tide Low Tide		
Moon Phases	First Quarter Full moon Last Quarter New Moon		

For more info, contact us:

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