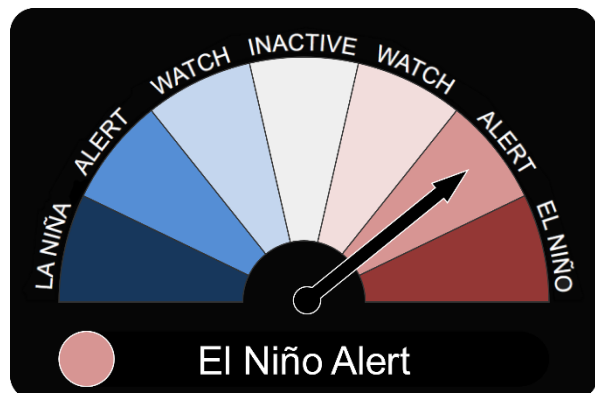


July Climate Bulletin for Fisheries

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.

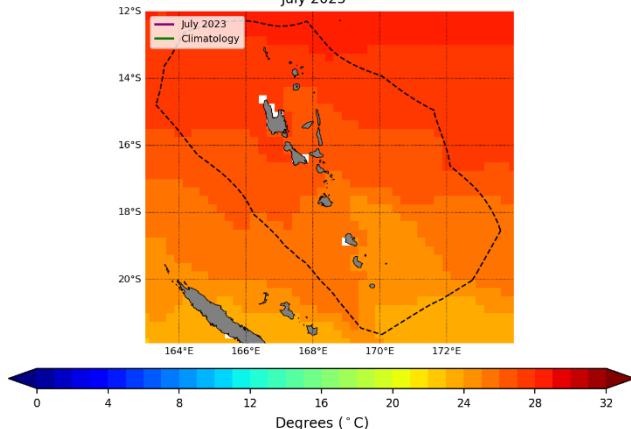
El Niño–Southern Oscillation (ENSO)



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 NUTROL. Be aotluk istap long El Niño ALERT. Hemia I minim se I kat bigfala Janis blo wan El Niño I fom lo yia ya. Lo taim blo El Niño Janis blo kasem ren hemi godown plante bitim avarej.

Sea surface temperature forecast for July 2023

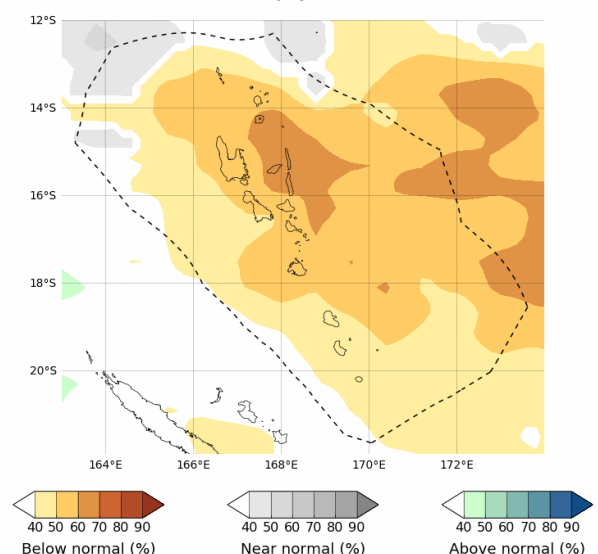


Sea Surface Temperature Forecast

Sea surface temperatures are expected to be above 25°C for most of the country, and up to 28°C in northern islands.

Tempreja blong solwora bambae I kasem 28°C lo olgeta noten aelans mo 25°C lo efri nara aelans blo Vanuatu.

Tercile rainfall probabilities for July 2023



Rainfall Outlook

Rainfall is likely to be below average for all islands this month, with higher confidence for Torba, Penama and Shefa provinces.

I kat hae Janis blo kasem ol bilou nomol renfol lo manis blo julae lo full kaontri. Wetem bilou nomol renfol ya, i kat hae lukluk se bae hapem mo nao lo TORBA, PENAMA mo SHEFA.

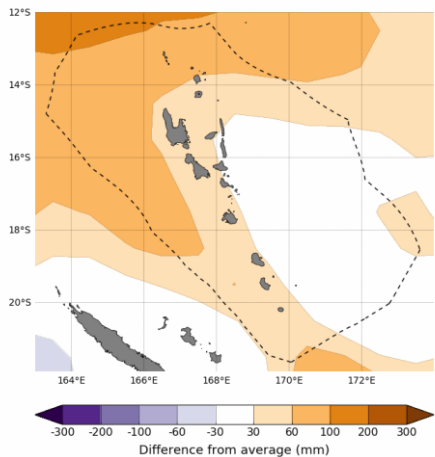
Base period: 1981-2018
Model: ACCESS-S2
© Commonwealth of Australia 2023, Australian Bureau of Meteorology
Spanglife data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <http://www.marinerregions.org/>

Model run: 26/06/2023
Issued: 29/06/2023

SUPPORTED BY:



Difference from average sea surface height forecast for July 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 (200NM), version 11. Available online at <http://www.maritimeregions.org/>)
 Model run: 26/06/2023
 Issued: 28/06/2023

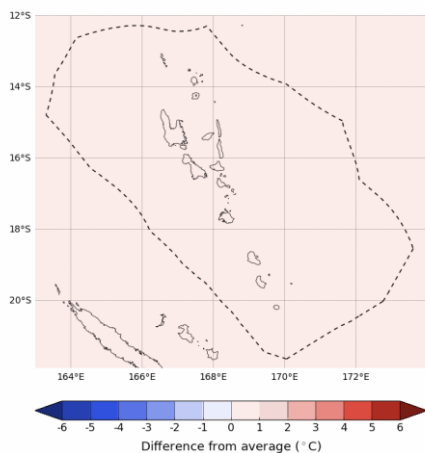
Sea Level Forecast

Sea level is likely to be higher than normal with 3-6cm higher sea levels throughout the majority of the country.

Level blong solwota bae save hae bitim nomol wetem ol difrens blong 3cm kasem 6cm ova long kaontri.

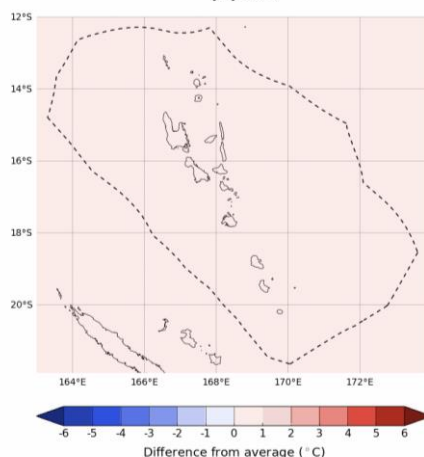
Maximum and Minimum Temperature Outlook

Difference from average mean maximum temperature forecast for July 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 (200NM), version 11. Available online at <http://www.maritimeregions.org/>)
 Model run: 26/06/2023
 Issued: 29/06/2023

Difference from average mean minimum temperature forecast for July 2023



Base period: 1981-2018
 Model: ACCESS-S2
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 (Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <http://www.maritimeregions.org/>)
 Model run: 26/06/2023
 Issued: 29/06/2023

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.

Tempereja blo dei ova lo kaontri bae oli wom lelebet bitim avarej wetem wan difrens blong 0-1°C. Tempereja blong nait hemi stap yet abav lo avarej ova lo ful country wetem wan difrens blong 0-1°C.

Tide Outlook for July

Port Vila Harbour

Lowest Tide	Date	Time (VUT)	Highest Tide	Date	Time (VUT)
0.04m	5 July	1:16pm	1.47m	4 July	5:28am

Luganville Harbour

Lowest Tide	Date	Time (VUT)	Highest Tide	Date	Time (VUT)
0.07m	4 July	11:43am	1.78m	4 July	4:46am

Moon Phases for July

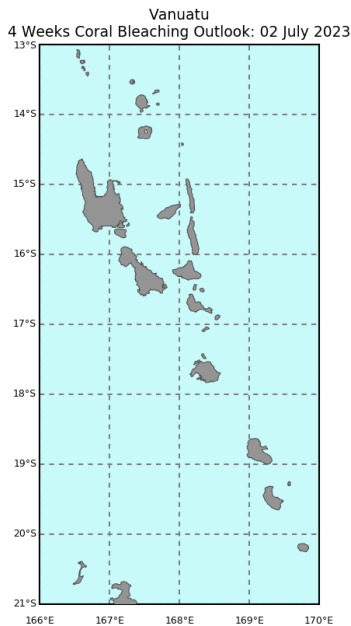
Fes Kwata	Ful Moon	Las Kwata	Niu Moon
26 July	3 July	10 July	18 July

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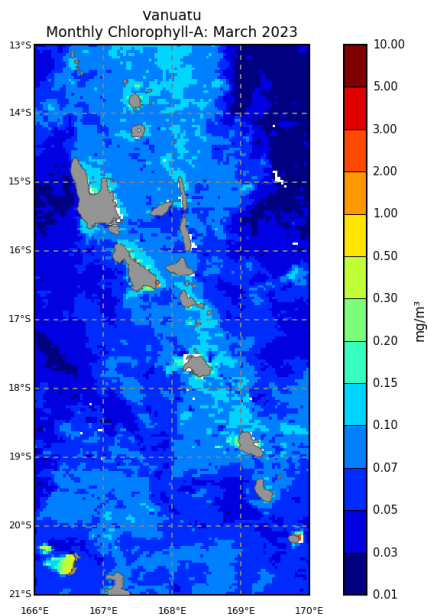
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NOAA Coral Reef Watch

Coral Bleaching Outlook

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

Aotluk I soem se inokat stress lo ol korel long manis ya.



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Chlorophyll-A

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 (kakai blo l fis) hemi save kasem 0.10-0.50 mg/m³ aotsaed lo ol solwora blo efri aelan. Plante klorofil we hemi bambae oli save faenem lo Is blo Aneityum

Bulletin Highlights for July 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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