EARTH SYSTEMS SEMINARS

MARINE HEATWAVES IN THE CANARY EBUs OVER THE SATELLITE PERIOD

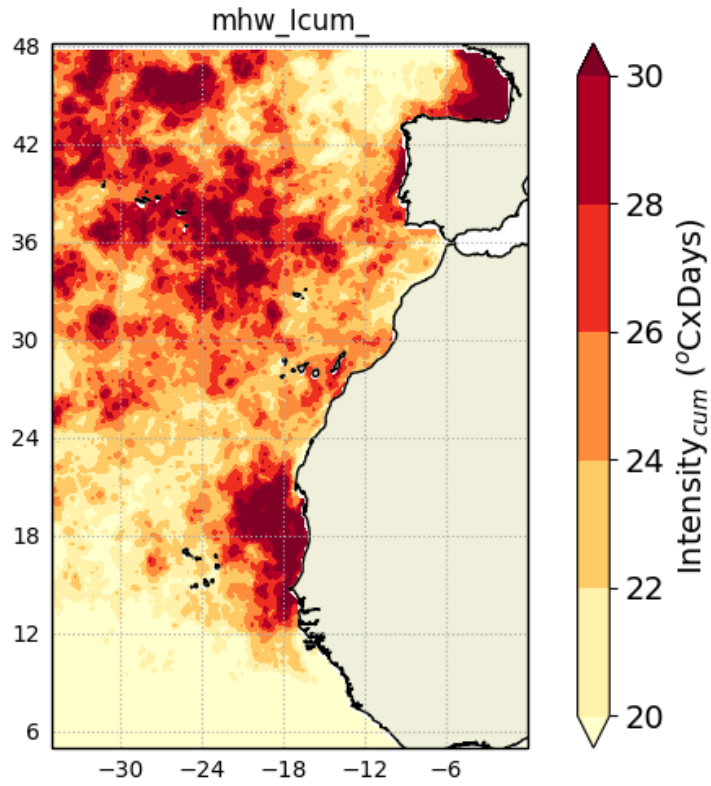
WHAT'S THIS ABOUT?

In the last decades, an increasing trend of the Sea Surface Temperature has been observed in most offshore and coastal regions all around the globe, with extreme temperature events (Marine Heatwaves, MHW) becoming more frequent, longer lasting and more extensive.

Located on the eastern North Atlantic coast, the Canary upwelling region constitutes one of the four major Eastern Boundary Upwelling (EBU) systems and is characterized by a discontinuity imposed by the Gibraltar Strait which connects the Atlantic Ocean and the Mediterranean Sea. Past observations indicate that the Canary upwelling region has been warming at both local and regional scales since the early 1980s, increasing on average the frequency of extremely hot days along the eastern Atlantic margin by 8.4 additional hot days per decade. In fact, from all the EBUs it has warmed the fastest.

In this study, SST data incorporating observations from satellites, ships, buoys and Argo floats, interpolated to a 1/4° regular global grid, is used to analyze extreme temperature events over the period 1982-2023.

The results show that the cumulative intensity of the MHW increased ~6 °Cday per decade, being 2023 the most harmful year of the analyzed period.



Sandra Plecha
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May 8
Wednesday: 13:00

PASS: SES2024IDL
https://videoconf-colibri.zoom.us/j/89018419156

Only Zoom!

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2020

Support of the Portuguese Foundation for Science and Technology through the project UIDB/50019/2020, Instituto Dom Luiz (IDL)