

Sail for Science – how sailors can help science to fill gaps in oceanographic data

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“Sail for Science” is a pioneering initiative that bridges the gap between oceanographers and the global sailing community, enabling citizen scientists to contribute valuable oceanographic CTD data. Using advanced yet accessible instruments like the RBRconcertoCTD, we collect high-resolution and high-accuracy data of seawater properties, including temperature, salinity, dissolved oxygen, Chlorophyll a, fDOM, transmittance across vast and often under-sampled regions of the Caribbean. In 2024, our project achieved several milestones, including the first-ever deployment of an Argo float from a sailboat in the Americas and critical CTD data collection during Hurricane Beryl. We also expanded our engagement with sailors through workshops and collaborations, demonstrating how ocean data collection can become an integral part of sailing. This presentation highlights the scientific impact of our work, the challenges and opportunities of engaging sailors into ocean research, and the potential for sustainable citizen science in the maritime community. By combining the adventurous spirit of sailing with the rigor of scientific inquiry, Sail for Science contributes to a deeper understanding our changing oceans.

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Figure 1: Deployment of the Argo float in the Caribbean Sea



Figure 2: Track of SV Oceanolog in the Caribbean with marked CTD casts

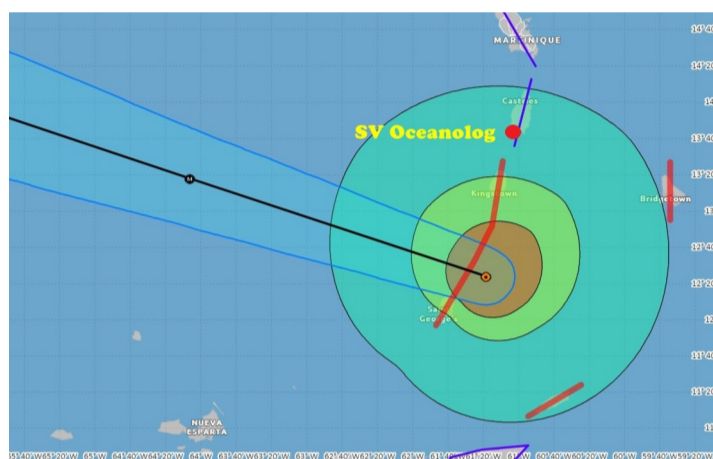
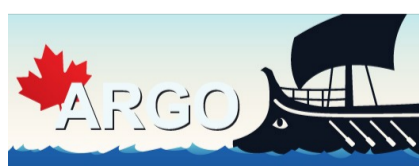
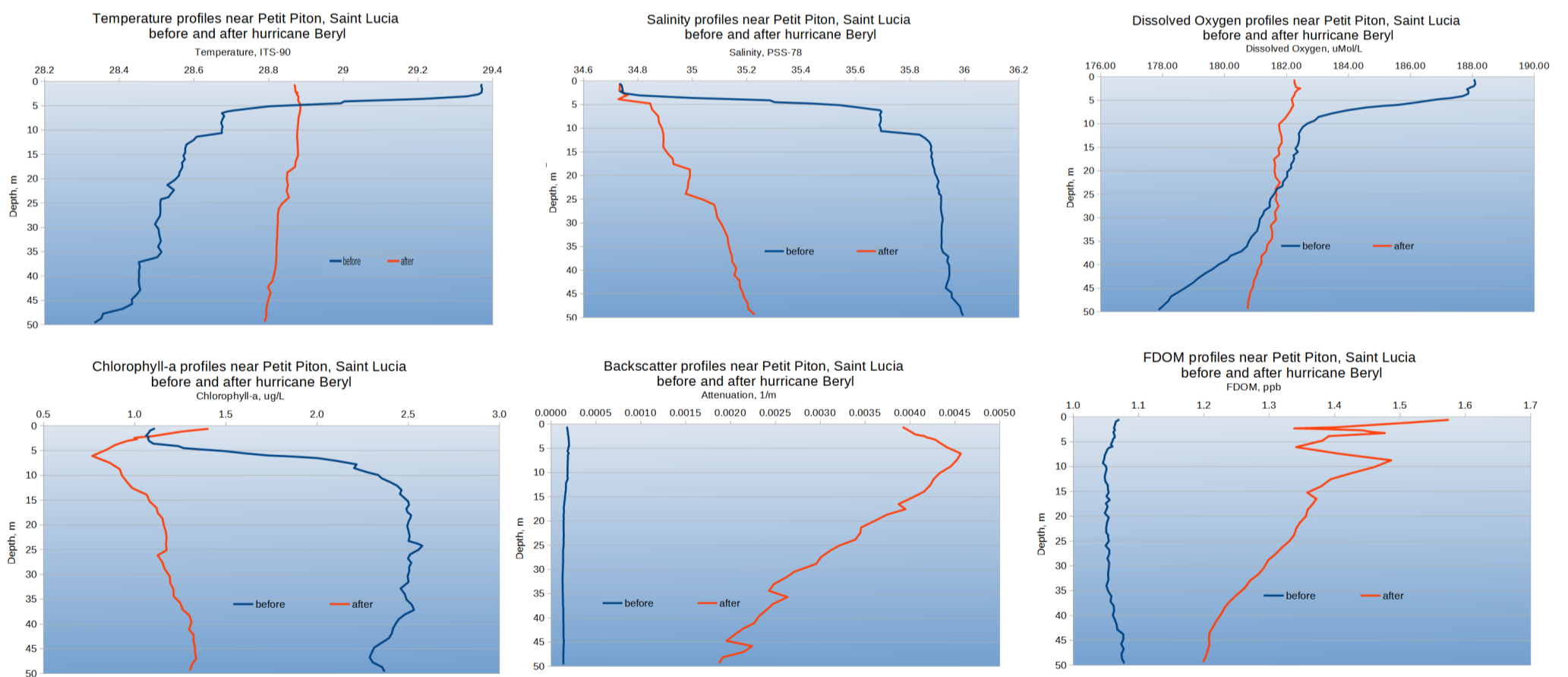


Figure 3: Track of the Hurricane Beryl with position of the SV Oceanolog



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Figure 5: Presentation of the Sail for Science project on the Bahamas



Figure 4: CTD cast from the SV Oceanolog