**Oxygen Stable Isotope Record (δ18O)**

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Intent:  
The creation of a seawater δ18O record for studying recent and modern planktic foraminiferal δ18O in the N. Atlantic to reconstruct past climate and create modern calibrations.

Sampling:  
At least two 5mL samples of water were collected at every station. Every station was sampled at 5m (surface, mixed layer) and at the chlorophyll maximum, which varies at each station. Opportunistic third and fourth samples were taken when Stephanie O’Daly’s underwater vision profiler photographs showed foraminifera at those depths at nearby stations. Samples were taken at the end of sampling by running vials under a weak stream from the bottle spigot until air bubbles were absent. The sample was then capped and inverted to check for air bubbles. Some samples were lost early in the cruise due to inexperience sampling from the bottles, resulting in air bubbles, causing the additional step of an inversion to be added. Samples were then parafilmed to prevent atmosphere and sample interaction. If, upon inspection, samples were deemed improperly parafilmed, additional parafilm was used to ensure a seal. Samples were labeled and stored in a temperature-controlled room. Depth, longitude, latitude, bottle number, date, sampler, and notes were recorded during sampling.

Processing:  
Samples will be processed on a Picarro isotopic water analyzer at the St. Petersburg Coastal and Marine Science Center. Methods and data will be published within the next three years.

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