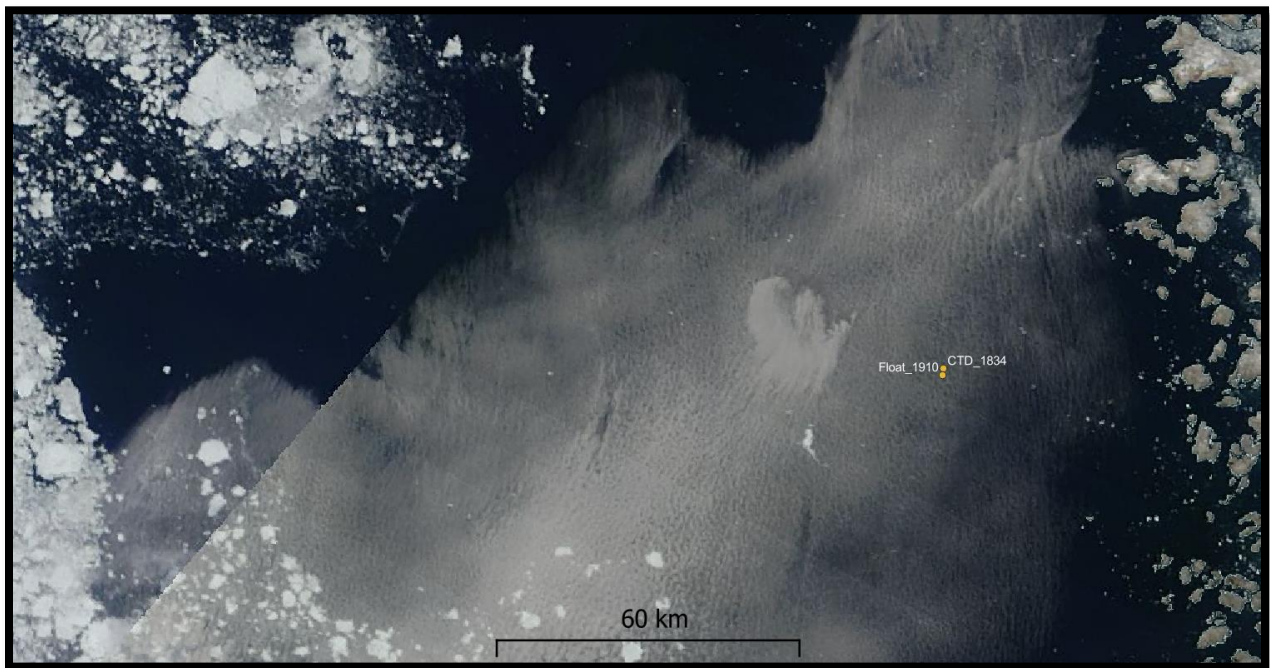
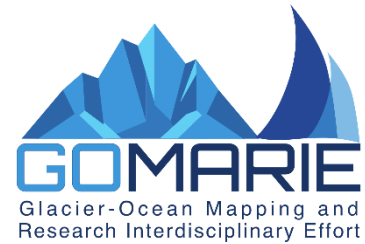




GO-MARIE 2023 –

APEX Float Deployment

During the GO-MARIE 2023 campaign, operations were led by Ocean Research Project (ORP) Inc. 501c3, under the supervision of Field Operations Scientist, Nicole Trenholm and Captain Matthew Rutherford aboard the SRV Marie Tharp within Baffin Bay.



These activities were coordinated with Dr. Michael Wood at Moss Landing Marine Laboratories and the San Jose State University for an APEX float deployment along with a RBR CTD water column profile at the deployment site. Two RBR Concerto CTDs were deployed on the same cage to 500 m just prior to APEX float deployment. CTD S/N 060671 was calibrated in May 2023 and S/N 204223 (S/N 060671 has turbidity (NTU) whereas, S/N 204223 has Chl a ($\mu\text{g/L}$) and they both have Dissolved Oxygen Concentration ($\mu\text{mol/L}$)).



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The ice guard plastic pieces were affixed to the APEX float with zip ties to best protect the integrity of the exposed sensors and in a manner that would remain clear of disrupting sensor performance.



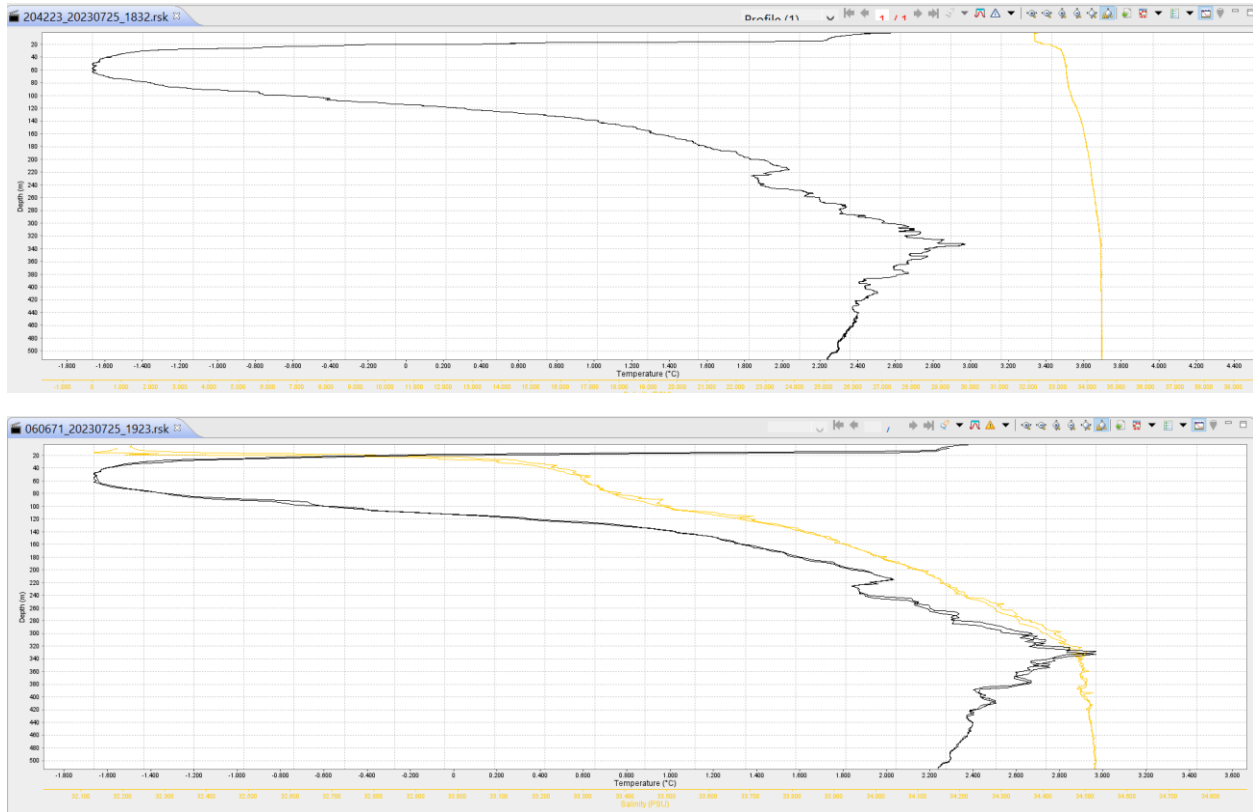
The APEX was deployed from the SRV Marie Tharp (22m) stern via the swim platform at the waterline to ensure a controlled entry into the water. The float was released after it could self adjust to the vertical position after the float bottom compartment filled with water ensuring a proper ballast orientation before release.

Immediately after release the time and position were recorded. During deployment winds were at < 5 knots and variable while the sea state was at < 1 m making for an optimal deployment condition.

The MODIS satellite image depicts the regional conditions of Baffin Bay sea ice near the time of the deployment. The APEX float deployment and CTD locations with time in the label are overlain with the satellite image. However, the satellite image is from July 19th.

Apex Float Deployment	
Date	07/25/2023
APEX S/N	10051
Time (UTC)	1910
Geographic Location	73° 15.460 N 57° 53.348 W
Baffin Bay depth (m)	1005
CTD Profile	
Date	07/25/2023
Geographic Location	73° 15.442 N 57° 53.410 W
Time (UTC)	1834
CTD Depth (m)	500
Filename(s)	204223_20230725_1832.rsk and 060671_20230725_1923.rsk

RBR Ruskin Data Interface: Temperature & Salinity



Deliverables:

Including this report both CTD .rsk files, .txt, .kml, and Excel files will be shared within hours of the deployment with Dr. Wood.