

Global Irminger Sea Array - Ice Detection Model

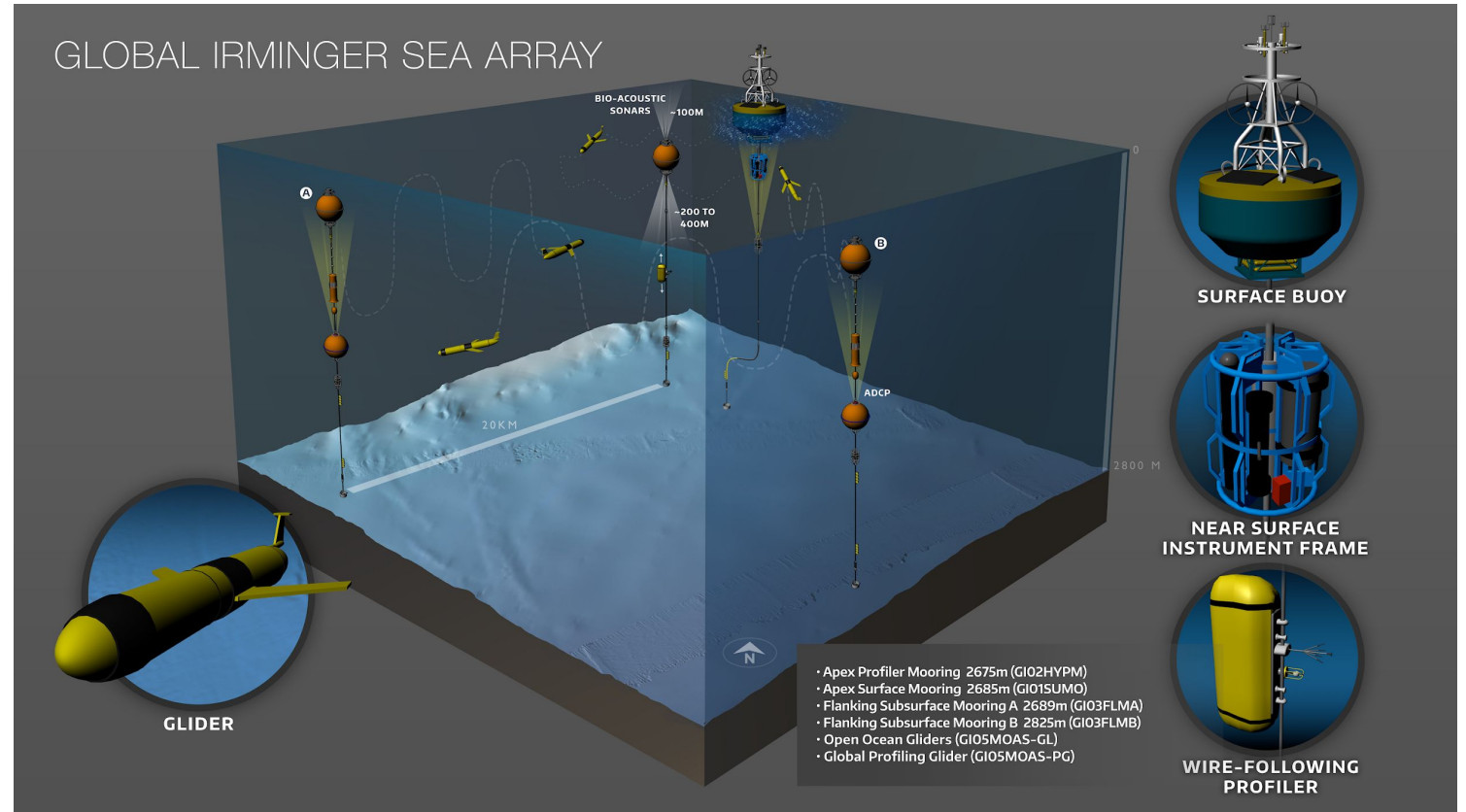
Dylan Hermosillo | Ocean Observatories Initiative
Mentors: Jeffrey Glatstein & Sam Dahlberg



GLOBAL IRMINGER SEA ARRAY

Sensor Issues

- Cameras added to surface buoy
- Sensors were being iced over



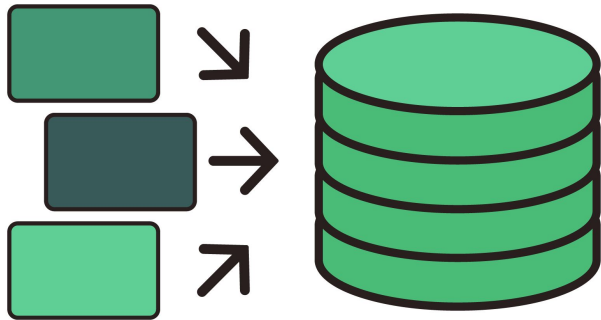
GLOBAL IRMINGER SEA ARRAY

Data Generation

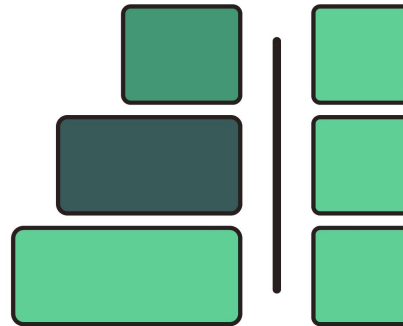
- Thousands of still image data generated by mooring cameras.
- Project idea: model to detect ice floes



Data Prep



DATA COLLECTION

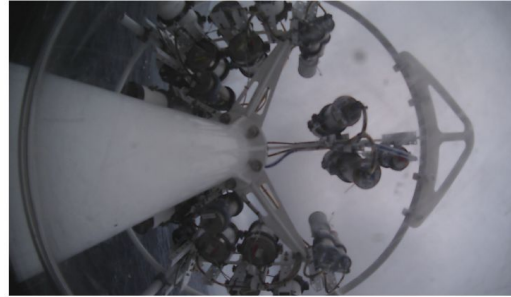


PREPROCESS



ANNOTATION

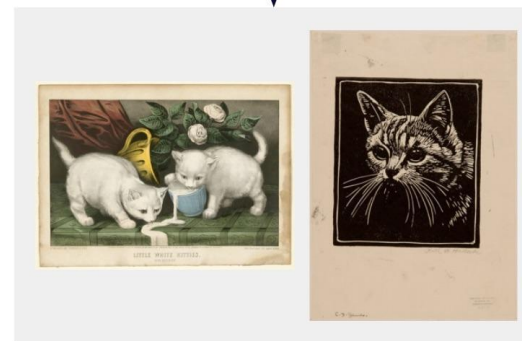
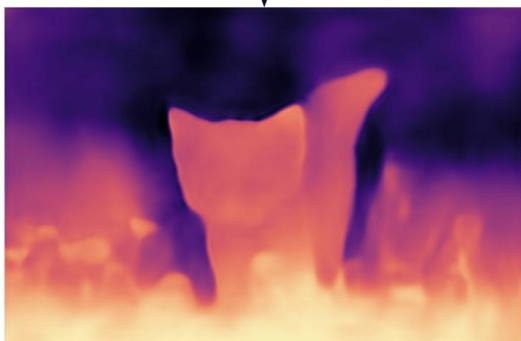
The Problem:



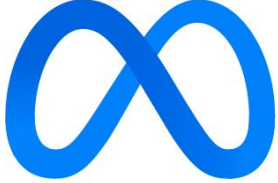
**256K
PHOTOS**

The Solution:

Meta
DINOv2

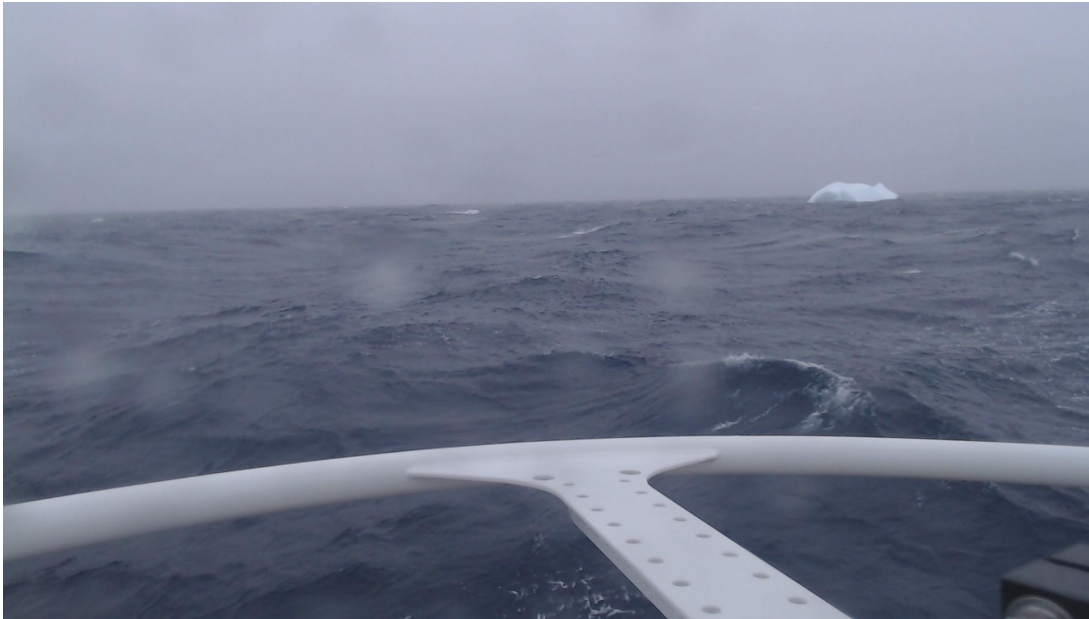


The Solution:

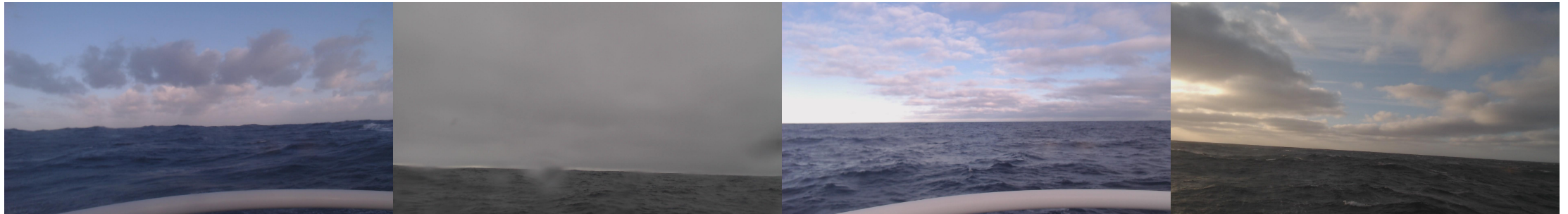
 Meta
FAISS



The Results:



Next Steps:



NC STATE UNIVERSITY

 **BIOINFORMATICS RESEARCH CENTER**

Questions?



OCEAN
OBSERVATORIES
INITIATIVE

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