

RESEARCH INTERESTS	Polar Oceanography, Ice-Ocean-Atmosphere Interactions, Biological-physical Interactions, Ocean Climate, Remote Sensing, Ocean Data Assimilation	
EDUCATION	Ph.D, Atmospheric and Oceanic Sciences <i>University of Maryland at College Park</i> • Advisor: Prof. James Carton	Maryland, USA 2026 (<i>expected</i>)
	M.S., Atmospheric and Oceanic Sciences <i>University of Maryland at College Park</i> • Advisor: Prof. James Carton	Maryland, USA 2025
	B.S., Physics <i>Georgia Institute of Technology</i>	Georgia, USA 2021
RESEARCH EXPERIENCE	Effects of Atlantification on Arctic Nutrients and Phytoplankton Stocks <i>University of Maryland at College Park</i>	2025 - Present
	<ul style="list-style-type: none"> I am combining ocean reanalyses, in situ observations, and remotely sensed chlorophyll from PACE and MODIS-AQUA to assess the impacts of increased Atlantic Water transport into the Amerasian Basin on nutrient inventories and chlorophyll concentrations. 	
	Trends and Variability in Arctic Atlantic Water <i>University of Maryland at College Park</i>	2024 - Present
	<ul style="list-style-type: none"> I am assessing long-term trends and dominant modes of interannual and decadal variability in the structure and transport of Atlantic Water through the Arctic using mesoscale-permitting ocean reanalyses (predominantly SODA4). 	
	Impact of Late Summer Storms on Subpolar Phytoplankton Productivity <i>Dalhousie University & University of Maryland at College Park</i>	2024 - Present
	<ul style="list-style-type: none"> I am using a regional ROMS model and in situ observations to investigate how intermittent vertical mixing by late summer storms contributes to fall phytoplankton production in the Northwest Atlantic and Bering Sea. 	
	Blended Ocean Surface Currents <i>University of Maryland at College Park</i>	2021 - 2025
PUBLICATIONS	<ul style="list-style-type: none"> I synthesized remotely sensed fields (including altimetry, sea surface temperature, scatterometry, and ice motion) to produce a near-realtime, global surface current product, with emphasis on improving estimates in the tropics and high latitudes. 	
	<ol style="list-style-type: none"> 1. Shaun Eisner, James Carton, Léon Chafik. Atlantic Water Heat Transport Variability and Trends into the Amerasian Basin: A first look using SODA4. <i>Journal of Geophysical Research - Oceans</i>, 2025. <i>Under Review</i>. 2. Shaun Eisner, James Carton, Léon Chafik. Increases in Heat Transport to the Central Arctic have been Mitigated by a Barents Sea Cooling Machine. <i>In prep</i>. 3. 	

- SELECTED PRE-SENTATIONS
1. **Shaun Eisner**, James Carton. The Impacts of Thermal Fronts and Sea Ice Motion on the Variability of Arctic Near-Surface Currents. *104th Annual AMS Meeting*, 2024.
 2. **Shaun Eisner**, Lee Cooper, jacqueline Grebmeier, James Carton. Evaluating the Impact of Summer and Fall Storms on Seasonal and Subseasonal Chlorophyll Dynamics in the Bering and Chukchi Seas. *AGU Fall Meeting*, 2024.
 3. **Shaun Eisner**, James Carton, Deirdre Byrne, Semyon Grodsky, Eric Leuliette. The Development of a New Daily Global Mesoscale Blended Ocean Surface Currents (BOSC) Product *EGU General Assembly*, 2023.

TEACHING

Teaching Assistant
University of Maryland at College Park Fall 2022 - Present

- Course: "AOSC 375 - Introduction to the Blue Ocean". Co-taught (including lecturing, preparing assignments, grading, and hosting office hours) an undergraduate course covering introductory topics in physical, biological, and geological oceanography.

RELEVANT OUTREACH

Nature Camp Volunteer
Irvine Nature Center 2022 - Present

- Ongoing volunteer at the Irvine Nature Center teaching earth sciences, environmental sciences, land stewardship, sustainability, and environmental education to children. Activities often involve hands-on experience in natural environments.

New Student Mentor
University of Maryland at College Park 2024

- Mentored an incoming graduate student in the Atmospheric and Oceanic Sciences department.

STEM Talk Keynote Speaker
Georgia Science Teacher's Association 2017

- Was invited as a keynote speaker to the Georgia Science Teacher's Association to discuss the impact that student-led STEM educational programs have on high schoolers and young adults.

- AWARDS AND HONORS
- **Visiting Scholar - LOREX Travel Award**, Dalhousie University 2024
 - **Undergraduate Research Award**, Georgia Tech College of Sciences 2020
 - **Excellence in Research Award**, Annual Research Symposium, 2022.12
 - **Academic Scholarship**, Tsinghua University 2022.09