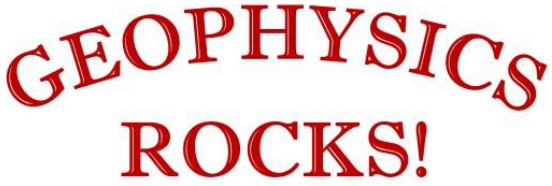
UNL Geophysics Team Newsletter

Academic year of 2025-2026

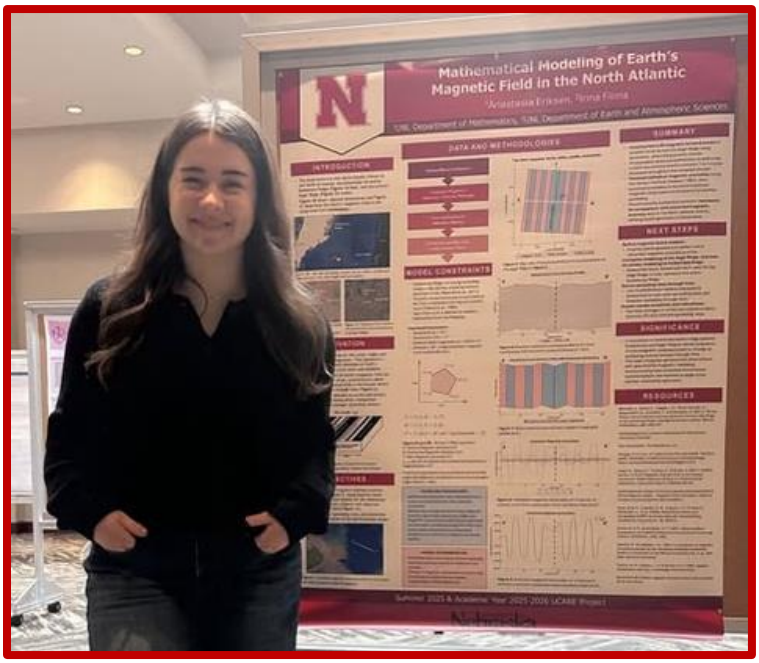


Dear Friends of the UNL Geophysics Team,

We had a rough school year of 2025-2026 with the University deciding to eliminate our department. Many of us had to think of alternative paths, while some of us are still not sure what will happen in the future. As of now, **the Department of Earth and Atmospheric Sciences has been officially eliminated**. Current students have an opportunity to finish their degrees (although it is not clear how they are going to do that when many professors are gone). **Dr. Filina's tenure has been revoked for a bona fide reason** (i.e., not her fault), and she received a separation notice with **her position to be terminated in May 2027**. Despite this devastating news, the team had many achievements throughout the past academic year, which are listed in this newsletter. **We are extremely grateful to you for all the support that we got from you throughout this past year.** Thank you!

- In Fall of 2025, we welcomed a new undergraduate student, **Anastasia Eriksen**. She is a Mathematics major, who wants to apply her coding skills to Earth Science problems. Anastasia had to remove her minor in Statistics because the Department of Statistics was eliminated too.

- For her project, Anastasia computes magnetic field anomalies in the Northern Atlantic Ocean to study the evolution of two spreading centers: the active Kolbeinsey Ridge and the extinct Aegir Ridge.



- Anastasia received funding from UNL through the UCARE program for two (!) academic years. In addition, Anastasia is a recipient of the Scholarship from the Society of Exploration Geophysicists. Even more, Anastasia is spending this current academic year in Italy (!!!), where she does a study abroad program toward her new minor in Education.

- Anastasia was recently featured at the UNL website **https://cas.unl.edu/news/meet-anastasia-eriksen/**

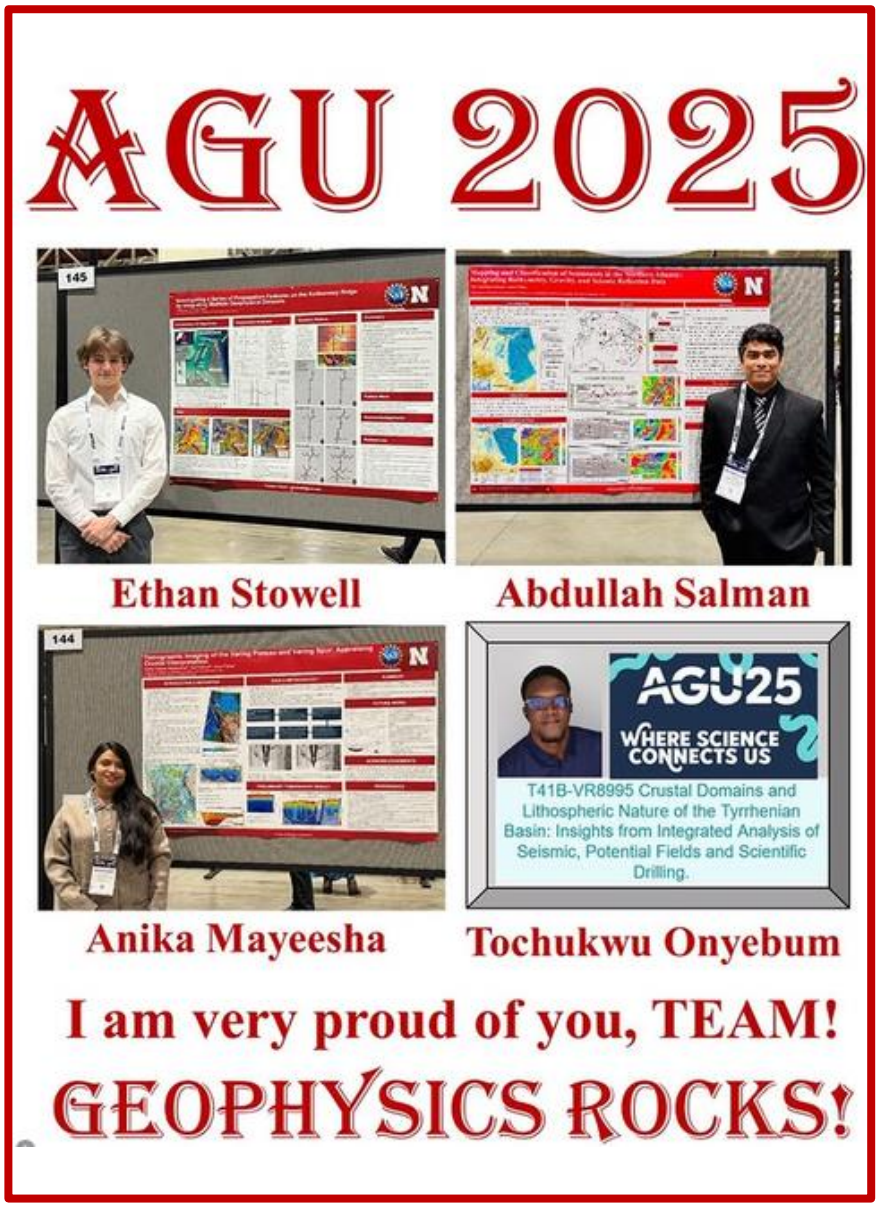
- Three students have graduated at the end of the past academic year:

Zachary Clowdus, Modeling the Greenland-Iceland-Faroe Ridge Using Integrated Geophysical Analysis**, MS Thesis**

Ethan Stowell, Evolution of Propagator Wakes on the Kolbeinsey Ridge from an Integrated Geophysical Perspective, **BS Thesis**

Anika Mayeesha, Crustal Structure of the Vøring Plateau and Vøring Spur from Joint Refraction and Reflection Travel-time Tomography**, MS Thesis**

We presented **4 posters** at the annual convention of the **American Geophysical Union** (AGU) in December of 2025. One of our students (**Anika Mayeesha**) received the AGU student travel grant.



E. Stowell, I. Filina, **2025**, Investigating a Series of Propagation Features on the Kolbeinsey Ridge by Integrating Multiple Geophysical Datasets, ***American Geophysical Union***, paper T31A-0145

M. A. Salman, I. Filina, **2025**, Mapping and Classification of Seamounts in the Northern Atlantic: Integrating Bathymetry, Gravity, and Seismic Reflection Data, ***American Geophysical Union***, paper V41B-0065

A. Mayeesha, I. Filina, **2025**, Tomographic Imaging of the Vøring Plateau and Vøring Spur: Appraising Crustal Interpretations, ***American Geophysical Union***, paper T31A-0144

T. Onyebum, I. Filina, F. Loreto, **2025**, Crustal Domains and Lithospheric Nature of the Tyrrhenian Basin: Insights from Integrated Analysis of Seismic, Potential Fields and Scientific Drilling, ***American Geophysical Union***, paper T41B-VR8995

We remain very active in **the Society of Exploration Geophysicists (SEG)** through our **UNL SEG Student Chapter.**

- This year, our chapter received the **Ridge Status**, the second-highest of the three recognition levels, which is a significant accomplishment for us and reflects our commitment to supporting students and engaging with SEG opportunities.

- In the last academic year, we participated in the **SEG Challenge Bowl competition**.

- **Tochukwu Onyebum** from our team was featured at the SEG website

- Four of our students received the SEG Fellowship (**Tochukwu Onyebum**, **Anika Mayeesha**, **Ethan Stowell** and **Anastasia Eriksen**)

- We hosted two invited speakers this year: **Dr. Gregory De Pascale** from University of Iceland and **Dr. Gillian Foulger** from Durham University.

- Our Chapter's President (**Abdullah Salman**) was sponsored to participate in the Chevron Leadership Symposium in Houston, TX.

- **Tochukwu Onyebum** and **Abdullah Salman** participated in IMAGE2026 convention in Houston, TX.

We also remained very active in the **Nebraska Academy of Science**

- In April of 2026, we presented **6 talks** at the annual meeting in **Lincoln, NE**

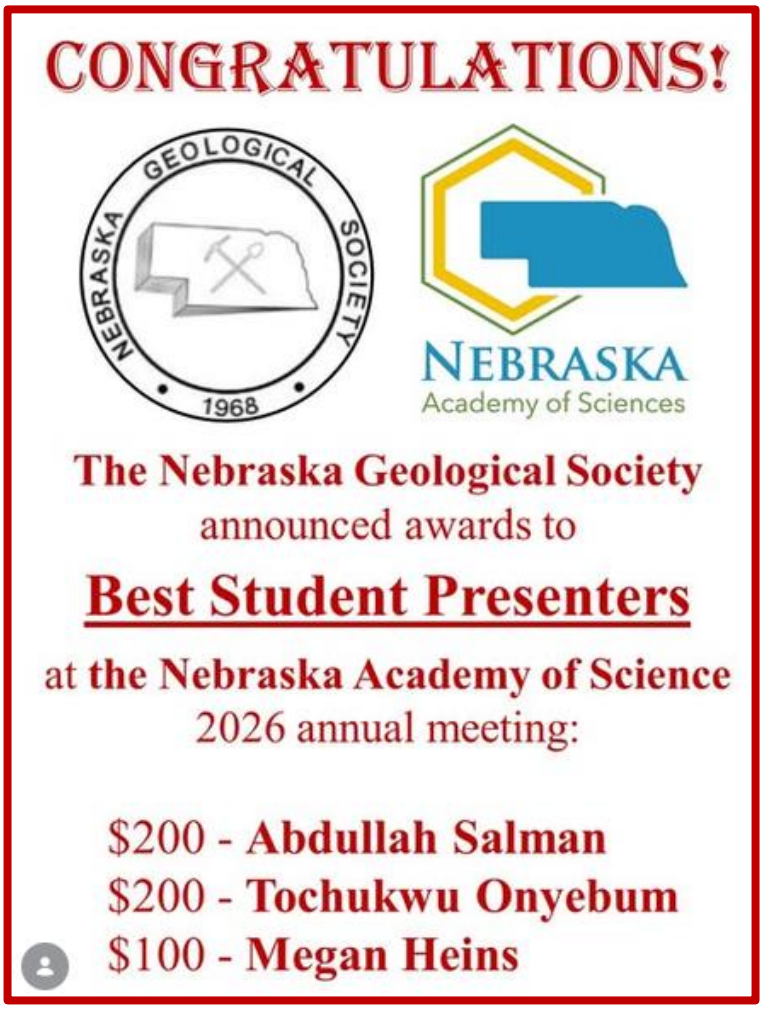
- Our students got **two out of three best student awards.** The prizes were provided by the **Nebraska Geological Society** (Thank you for your generosity, NGS!)

A. Salman, **I. Filina**, Seamount distribution and ridge segmentation along the extinct Aegir spreading center (award)

T. Onyebum, **I. Filina**, F. Loreto, Refining the opening of the Tyrrhenian basin using integrated geophysical modelling (award)

A. Mayeesha, **I. Filina**, P-wave travel time tomography of the Voring Plateau and Voring Spur, Northern Atlantic

E. Stowell, **I. Filina**, Assessing propagation and reorganization of the Kolbeinsey Ridge since 11 Ma using integrated geophysical method



A. Eriksen, **I. Filina**, Mathematical modelling of Earth magnetic Field

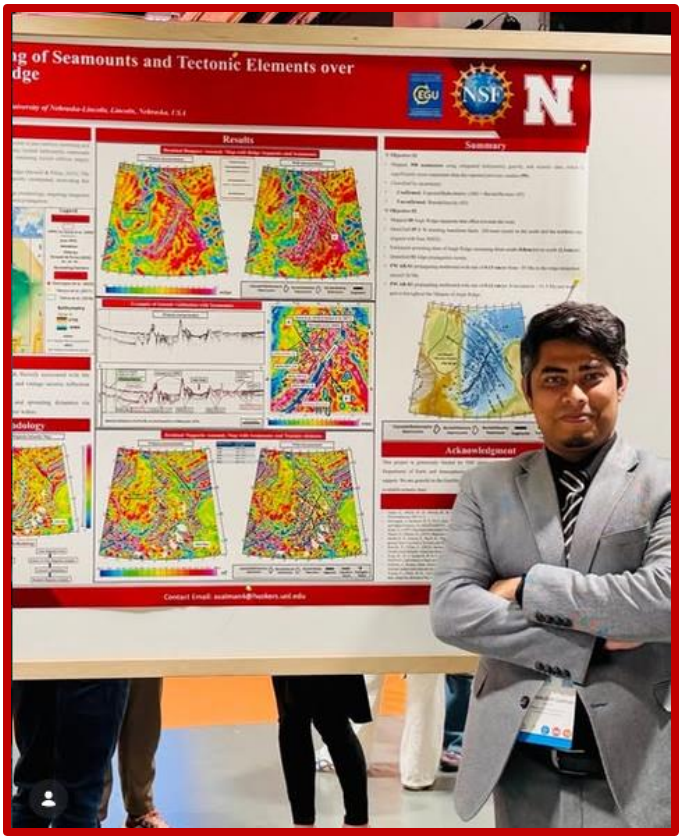
I. Filina, The upcoming Fulbright project in Iceland in Summer of 2026 (expanded abstract)

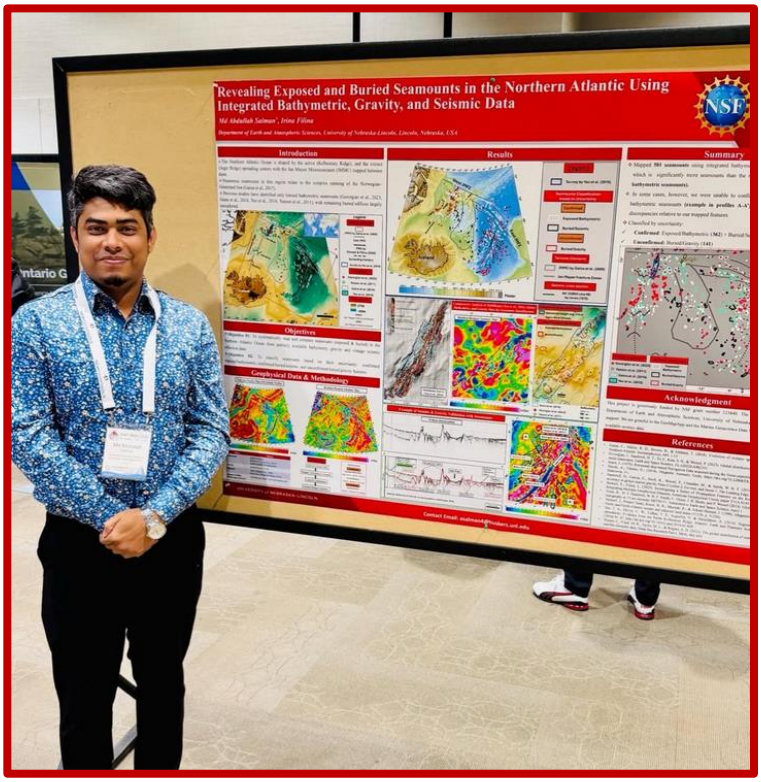
- **Dr. Filina** was awarded the **Friend of Science Award** (the highest recognition) by the **Nebraska Academy of Sciences**. She is very honored by this award and extremely grateful for the opportunity to promote science for Nebraska and Nebraskans. **Thank you, NAS!**

- In Fall 2026, Dr. Filina will present the **Teach-In Lecture** for the **Nebraska Academy of Sciences**

- In 2026, we participated in the **European Geoscience Union (EGU)** meeting again.

- **Abdullah Salman** (second year PhD student) presented his research at **EGU2026** in Vienna.





GAC-MAC 2026
St. John's May 25-28
FROM SHORE TO CORE

- **Abdullah** was also invited to present his research project in St. John's Newfoundland at the joint **Symposium of the Geological and Mineralogical Associations of Canada**

AWARDS AND RECOGNITIONS

CONGRATULATIONS!

Tochukwu Onyebum **Kyra Mauntel**

Our students are invited to serve on the SEG Near-Surface subcommittee.

SEG SOCIETY OF EXPLORATION GEOPHYSICISTS

Proud of you, guys!

CONGRATULATIONS!

SEG EVOLVE2025

SEG SOCIETY OF EXPLORATION GEOPHYSICISTS

Congratulation, Team NEBRASKA!

CONGRATULATIONS!

Anika Mayeesha

Anika is awarded **the AGU Travel Grant** to attend **AGU2025** in December in New Orleans, LA

Very proud of you, Anika!

CONGRATULATIONS!

Zachary Clowdus

The Department of Earth and Atmospheric Sciences awards Zach as an Outstanding Graduate Student in Geology!

CONGRATULATIONS!

Tochukwu Onyebum

Tochukwu received the first ever award in Mathematical Geology from the Department of Earth and Atmospheric Sciences!

CONGRATULATIONS!

SEG STUDENT LEADERSHIP SYMPOSIUM

15 April 2026

Dear Md Abdullah Salman,

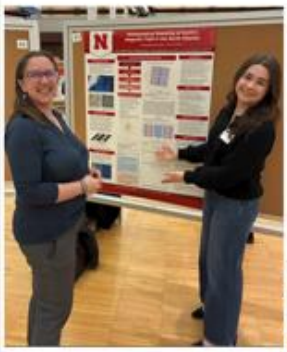
Abdullah Salman

Accepted to participate in SEG/Chevron Leadership Symposium and IMAGE convention!

CONGRATULATIONS OUR NEW PHD CANDIDATES!

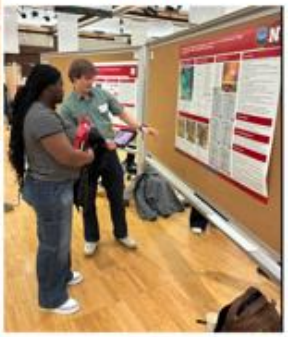
Very proud of you, Tochukwu and Abdullah!

UNL RESEARCH FAIR 2026



Anastasia Eriksen

Mathematical modeling of Earth's magnetic field in the Northern Atlantic



Ethan Stowell

Tectonic evolution of Kolbeinsey Ridge for the last 10 Myr

CONGRATULATIONS!

FULBRIGHT PROJECT

- **Dr. Filina** is awarded **Fulbright Scholarship** (details).
- She spent the summer of 2026 in **Iceland** investigating Icelandic tectonic evolution in collaboration with the **University of Iceland**.

- While in Iceland, **Dr. Filina** offered the **Schramm Course (GEOL 497/897 Economic and Exploration Geology)** that included a **10-day-long field trip to Iceland**

- **19 (!) UNL students** (sponsored by the **Alumni of the Department of Earth and Atmospheric Sciences**) participated in this class.
- The course was focused on three aspects: (1) tectonic history of Iceland, (2) geothermal exploration, and (3) carbon sequestration in Iceland

- We traveled around Iceland and stopped at many cool geological sites. We also visited the Hellisheiði geothermal plant, where carbon sequestration is routinely implemented.

THANK YOU, our Awesome Alumni!

WHAT IS NEXT?

- We are wrapping up our research lab's activities during the academic year of 2026-2027.
- Dr. Filina teaches three courses this year. Two in Fall 2026 are GIS and Environmental Geophysics; one in Spring 2027 is Geophysics.
- Our team will present **5 abstracts at AGU2026** in San Francisco in December of 2026.
- **Dr. Filina will be separated from the University of Nebraska – Lincoln on May 14, 2027**.

- **Tochukwu Onyebum** and **Abdullah Salman** plan to defend their PhDs in Spring of 2027 before Dr. Filina's tenure is terminated.
- We will continue reporting our progress on our website https://eas.unl.edu/geophysics-news/ and on our Instagram **@UNL_Geophysics.**

Thank you for all your support!

GEOPHYSICS ROCKS!