



The Grace Anne Stewart Speaker Series



Welcome!

To keep EAS informed of Grace Anne Stewart Speaker Series (GASSS) activities, we will be circulating monthly newsletters throughout the year!

About the Grace Anne Stewart Speaker Series

The Grace Anne Stewart Speaker Series (GASSS) is a student-led equity, diversity, and inclusion (EDI) initiative which aims to address issues related to EDI in the Earth and Atmospheric sciences department at the UofA and broader geoscience community. The issues we wish to address include underrepresentation, inequality, discrimination, and bias related to gender, sexual orientation, race, ethnicity, ability, and neurodiversity in geoscience.

GASSS update and events

Upcoming Talks

Thursday December 2, 2021, 11 MDT: Dr. Lavanya Ashokkumar (Women in Geoscience, BIPOC) from the University of Arizona

Title: Future projections of global sea level rates from glacier models

Abstract: Glaciers contribute significantly to mass loss and sea-level rates. Apart from anthropogenic causes, thermal and ocean warming are the major causes for glacier melt. Compared to glaciers worldwide, ice mass loss rates from Alaska and the Canadian Archipelago are highest and it is expected to increase through the end of the century in response to increasing temperatures. We developed a glacier model based on regional calibration from GRACE monthly observations for estimating the future evolution of mass loss from Alaska and Canadian Archipelago. The main purpose of using GRACE observations is to include the mass balance seasonality at monthly temporal intervals from all glaciers within a specific region in the model calibration. Our estimates of future sea level rates are based on the inclusion of GRACE mass balance (seasonality) for the observation period between 2002 and 2017, instead of calibrations

from direct observations. The high temporal and regional spatial resolution of GRACE mass balance estimates allows us to estimate regional glacier sensitivities to atmospheric changes in temperature and precipitation, while accounting for glacier area and volume changes.

We find substantial mass loss from Alaska, Arctic Canada South, followed by Arctic Canada North. Alaska contributed -22 ± 6 mm of SLE under RCP 2.6 and -38 ± 11 under RCP 8.5, Arctic Canada North contributed -18 ± 8 mm under RCP 2.6 and -38 ± 12 under RCP 8.5, while Arctic Canada South contributed -12 ± 4 under RCP 2.6 and -21 ± 6 at RCP 8.5. The mass loss rates from our model were nearly consistent with other glacier models under the GlacierMIP2 initiative. The mass loss rates are slightly higher from CESM-LE. In case of volume loss, we find that Alaska (26% at RCP 2.6 and 46% at RCP 8.5) and Arctic Canada South (28% at RCP 2.6 and 40% at RCP 8.5) are the largest contributors to volume loss.

GASSS EAS Gear Drive

We are organizing a department gear drive ahead of the upcoming field school and field work season. Our goal is to collect items over the next few months to help undergraduate and graduate students in EAS that have limited access to field gear. If you have any spare items that you no longer use, please consider donating them! We will accept any items ranging from field clothing to equipment. More details on where and when you can donate items are coming soon. In the new year we will put a call out for students in need of the items donated.

GASSS Program - Mentorship Program

We are happy to announce the launch of the pilot Mentorship Program in EAS. During the pilot program running from September 1, 2021 to April 30, 2022 we hope to improve the student experience in EAS and ensure better pastoral care. Mentor-mentee relationships will work to bridge the gap in communication between various levels of the department body and improve the sense of community for all in EAS. Our hope is to initiate a permanent mentorship program after feedback from the pilot program. If you have any questions or concerns about the mentorship program please feel free to contact EASmentorship@gmail.com. If you missed the chance to participate as a mentee or mentor in the pilot program, everyone is able to view the [handbook](#) that provides a collection of resources on various topics from mental health to scholarships.

GASSS Program - Unlearning Racism in Geoscience (URGE)

As many know, a group from our department participated in the URGE program that took place from January 2021 to May 2021. This program was a 16-week structured reading and seminar course to learn about racism in geoscience, what we

can do to be more inclusive, and develop policy and guidelines that are actively anti racist. To view the outcomes of the URGE program please visit:

<https://cms.eas.ualberta.ca/gass/unlearning-racism-in-geoscience/>

[URGEOSCIENCE – Unlearning Racism in Geoscience](#)

Other Speaker Series and EDI initiatives

GeoWomen: [Advancing women working in the geoscience professions \(geowomen.org\)](#)

GeoWomen talks continue after the holidays on January 18, 2022. Details to follow.

Scientific QUEERies: [Promoting the LGBTQIA2S+ community in STEM](#)

Tuesday December 14th 2021 at 1 pm MDT: Dr. Nancy S.B. Williams, Associate Professor, Keck Science Department of Claremont McKenna, Pitzer, and Scripps Colleges (Chemistry).

Please use the following google form to sign up to the mailing list if you wish to receive details for these and future talks: <https://forms.gle/bgLWhHMwosBTzNrb6>. The future speaker schedule can be found on their [website](#).

Resources

- [Multiculturalism, Indigenous and Inclusion Grant Program](#)
- [Inclusion Alberta](#) assists families and individuals with developmental disabilities.
- Edmonton-based inclusive podcast: [The Well Endowed Podcast](#)
- [WISEST STEM podcast](#) is all about advancing the conversation around diversity and inclusion in science, engineering and technology.

Activities in Edmonton and Surrounding Areas

- [Beauty & The Grinch](#), Jubilations Dinner Theatre, Until January 8, 2022
- [Canadian Tire Magic of Lights](#), November 19, 2021 to January 8, 2022
- [Winter Wonder Forest](#), November 19, 2021 to January 9, 2022
- [Glow](#), November 24, 2021 to January 2, 2022
- [Royal Bison Art and Craft Fair](#), November 26 to December 12
- [Edmonton Christmas Market](#), November 26 to December 12
- [Enchanted Forest](#), November 26, 2021 to January 7, 2022
- [A Christmas Carol by Citadel Theatre](#), November 27 to December 23
- [St. Albert Indoor Christmas Market](#), November 27 to December 19
- [The Northern Light Dining Experience](#), November 29, 2021 to January 9, 2022

- [Luminaria](#), November 27, 2021 to January 9, 2022
- [Zoominescence at the Edmonton Valley Zoo](#), December 3, 2021 to January 2, 2022
- [ACUA Christmas Market](#), December 4, 2021
- [Intro to Natural Dyes and Porcupine Quills Workshop](#), a hands-on indigenous experience, December 4, 2021 to January 8, 2022
- [Candy Cane Lane](#), December 10, 2021 to January 1, 2022
- [The Festival of Trees](#), December 11, 2021 to December 19, 2021

Supporting EDI

We encourage you to support EDI in any way you can; whether it be by contributing to a fundraiser or supporting local businesses! The links below can get you started but it is no way an exhaustive list.

Fundraisers

- [Black Health Alliance](#) - This is a community-led registered charity working to improve the health and well-being of Black communities in Canada.
- [True North Aid](#) - Runs projects to support the critical needs of Indigenous communities and help reduce the poverty gap that exists between them and the rest of Canada.

Businesses

- [Zen Lion Loungewear & Design](#) - Edmonton Black-owned small business.
- [Workhall](#) - Indigenous-owned clothing business operating in Edmonton and Vancouver.
- [The QUILTBAG](#) - Edmonton LGBTQ2S+ and Black-owned business that is an LGBTQ+ retail shop. This shop carries pins, pronoun buttons, patches, stickers, art by local artists, and trans gear.
- [Mother Earth Essentials](#) - Edmonton Indigenous-owned beauty and wellness shop.
- [Indigenous-owned businesses in Edmonton](#)
- [Black-owned business in Edmonton](#)
- [Queer-friendly businesses in the Edmonton area](#)

Volunteer Opportunities

- There are many volunteer opportunities advertised by the city of Edmonton which you can find [here](#).
- [Edmonton Humane Society](#)
- [SPCA](#)
- [Zoey's Animal Rescue](#)
- [SCARS](#)

- [Meals on Wheels](#)
- [Edmonton Food Bank](#)
- [Homeless Connect YEG](#)
- [The Mustard Seed](#)
- [Campus Food Bank](#)
- [Edmonton Senior Centre](#)

Contact Information

Please reach out to us if you want us to look into certain resources or have information that can be included in our next newsletter. If you have any speakers that would be a good fit for our speakers series, feel free to let one of our committee members know or send us an email!

All monthly newsletters will be posted on our website along with additional resources to access at any time. Resources from previous newsletters will be posted on our website.

The [Grace Anne Stewart Speaker Series](#) Organizing Committee
Find links to all our platforms [here](#), including our **new website**.

*The speaker series is always looking for new volunteers, feel free to email us for more information on how to get involved at stewartspeakerseries@gmail.com! If you're interested, follow us on our social media as well for internal and external events:
Twitter: [@StewartSpeaker](#) Instagram: [@stewart_speaker_series](#)
and LinkedIn: [Grace Anne Stewart Speaker Series](#)*

*GASSS respectfully acknowledges that we are situated in ᑭᓄᓂᓐᓄᓐᓂᓐ ᐃᓄᓂᓐᓄᓐ
(Amiskwacīwāskahikan) on Treaty 6 territory, traditional lands of First Nations and Métis people.*