

MONTHLY NEWSLETTER

9TH EDITION

IGS British Branch 2026, Aberdeen



Friday 23rd October, 2026



Welcome...

to the ninth issue of the CryoExchange Newsletter!

We hope you are all doing well! It's been a little while since our last update, but we are back with a fresh round of news and highlights from across our community.

A particular highlight from recent months was this year's IGS-BB meeting, hosted by Aberdeen's Cryosphere and Climate Change research group. The conference was a brilliant success, bringing together over 90 scientists from across the country, including a fantastic showing from our CryoExchange community. It was a wonderful gathering filled with inspiring talks, insightful posters, and a memorable conference meal at the Aberdeen Town House, complete with a welcome from Aberdeen's Lord Provost. Great work Aberdeen!

Thank you to all those who contributed; if you have any feedback or news to share, please reach out at: cryoexchange.sages@gmail.com

Happy reading!

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Remember, to add your profile to our new website, please complete the form below!

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Publications

Gapp, I., Høegh, N., Rawlins, L. (2026) Glacial Fractures: An Environmental Art History of Sioqqap Sermia (Frederikshåb Isblink), Kalaallit Nunaat. *Art History*, 49(2), 236–256. <https://doi.org/10.1093/arthis/ulag018>

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Oien, R. P., & Lee, E. Morphometric analysis of cirques in central Siberia's western Putorana Plateau: A proxy for palaeoclimate. *Boreas*. <https://doi.org/10.1111/bor.70086>

Oien, R. P., & Kurjański, B. (2026). Cirque morphology in relation to ice-sheet retreat in central West Greenland and Disko Island (Qeqertarsuaq). *Quaternary International*, 776, 110381. <https://doi.org/10.1016/j.quaint.2026.110381>

Wheel, I., Benn, D.I., Crawford, A.J. (2026) Emergent Dynamics From a Position-Based Calving Function and the Limits of a Rate-Based Calving Function. *JGR Earth Surface*, 131, e2025JF008631. <https://doi.org/10.1029/2025JF008631>

Fieldwork

Svalbard

Will Spicer (University of St Andrews) spent much of the summer at the University Centre in Svalbard (UNIS) as a guest PhD student, including attending a summer school and joining various field trips. In late July he was joined by **Doug Benn**, Adrian Luckman (Swansea) and Riko Noormets (UNIS), and undertook a week of intensive fieldwork aboard the UNIS vessel Hanna Resvoll. The team focused on two glaciers - **Wahlenbergreen** and **Tunabreen** - where they monitored calving events using time-lapse cameras and conducted high-resolution drone and side-looking sonar surveys before and after calving events. Will will use these data as input for his simulations of calving processes with the **Helsinki Discrete Element Model (HiDEM)**.



Svalbard

Niamh Doherty and **Anna Ranger**, PhD students at Aberdeen, accompanied by **William Harcourt**, **Bartosz Kurjanski** and **Will Spicer** (St Andrews), recently completed a 4-week field trip at **Borebukta, Isfjorden**, in August. The fieldwork contributed to their PhD projects: Niamh's research into the impact of **glacier surges** on **surface mass balance**, and Anna's research of **crevasse squeeze ridges** (CSRs). The fieldwork specifically focused on (1) comparing the surface melt rates on the adjacent actively surging Borebreen and quiescent Nansenbreen glaciers, (2) improving understanding of basal conditions during surges using CSRs and studying how CSRs degrade over time with exposure to subaerial weathering.



Anna conducted **ground-penetrating radar** (GPR) surveys over the terminus region of **Nansenbreen**. Niamh installed **ablation stakes** on Nansenbreen to provide point-calibration measurements alongside repeated drone surveys of the termini, trunk regions, and forelands of both glaciers. The team plans to remeasure the stakes and repeat the drone surveys in April 2027. Overall, the fieldwork was a success, with some great wildlife, including Arctic foxes, terns, reindeer, and belugas. The drone surveys further achieved some pretty impressive stats, accumulating a total flight time of **31 hr 57 min** across 90 flights. In total, **1,159 km** were covered and **41,737 images** were captured!



Canada

Eilidh Campbell (University of Aberdeen) spent four months over the summer in Canada working with the **Ontario Geological Survey (OGS)**, carrying out fieldwork in **Ontario's Algonquin Highlands**. Eilidh dug more holes than she cares to count, collecting nearly **600 kg of till** samples for geochemistry and indicator mineral analysis to characterise glacial dispersal patterns and aid the assessment of critical mineral resource potential in the area. She also carried out sediment and landform mapping, pebble counts, till clast fabrics, and ice-flow indicator measurements to help reconstruct palaeo-ice flow and the glacial history of the region, while filling a gap in the provincial surficial geology coverage with a new map to be published by the OGS. **Matteo Spagnolo** joined for the last part of the field season and helped collect rock samples for cosmogenic nuclide exposure-age dating. There was lots of wildlife, including bears and moose, though thankfully none showed interest in the till.



Outer Hebrides

In July, **Ania Kurop** (University of Stirling) conducted PhD fieldwork where, together with **Tom Bradwell** (University of Stirling) and Jerry Lloyd (Durham University), she spent ten days sampling sediments in the Outer Hebrides. The project's aim is to collect new evidence of **late-glacial sea-level change** and **ice retreat** onto the islands, thereby helping to understand how the sea and ice interacted in the last stages of **deglaciation** across north-west Scotland.

They cored peat-filled coastal basins at varying elevations above present sea level to search for **marine microfossils**. They also collected samples of glacially transported boulders in the mountains of the Isle of Harris to trace the position of the ice margin by applying **cosmogenic nuclide exposure dating**.



St Andrews Glaciology News

It has been a busy summer for the **St Andrews Glaciology** group, with team members taking part in international conferences, supporting science outreach in Greenland, and catching up with the wider glaciological community at the IGS British Branch meeting in Aberdeen. We were also delighted to welcome six new members to our group! **Hannah Picton**, **Francesca Baldacchino**, and **Oscar Tovey Garcia** have joined us as postdoctoral researchers on the CALIX project. We also welcomed **Elizabeth Tofte** as a PhD student, alongside two new MRes students, **Felician Heim** and **Reka Ungar**.

Polar Academy

In August, **Emma Cameron** joined Scottish children's charity **The Polar Academy** for a three-week expedition to **East Greenland**. Working alongside Kyle and Hunter, two former Polar Academy graduates, Emma demonstrated and trialed a suite of new science experiments for future cohorts.

The expedition was a great success, with students deploying **CTDs** in Sermilik Fjord, calculating the **environmental lapse rate** as they climbed mountains, and measuring **water clarity** using a homemade 3D-printed Secchi disk. One student, who is about to start Higher Geography, has now seen more corries, arêtes, U-shaped valleys and moraines than his textbook could ever cover! **Emma will present the expedition in a talk to the Scottish Arctic Club in Nethy Bridge on November 6-7th.**



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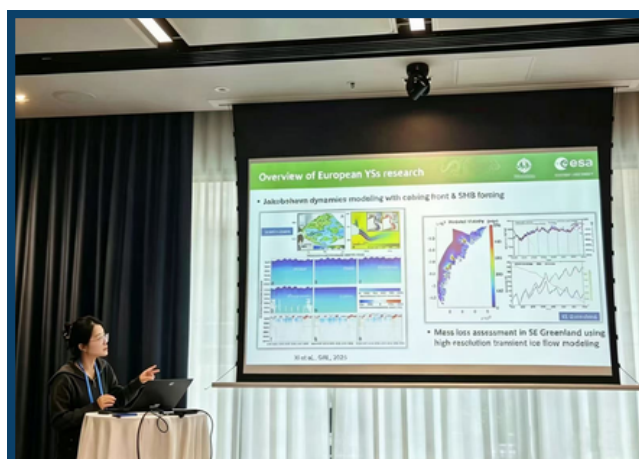


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Connecting the Greenland glacier research community: From Dublin to St Andrews

In late June, **Xi Lu** (University of St Andrews) attended the **European Space Agency (ESA) Dragon 6 Symposium** in Dublin, which brought together international researchers to share advances in **Earth Observation (EO)** and its applications to environmental and **climate research**. The meeting provided a great opportunity to exchange ideas and discuss ongoing research on **Greenland's glaciers**. Following the symposium, St Andrews hosted a **workshop** in early July, bringing together international collaborators to share recent findings and discuss ongoing work on **Greenland glacier dynamics** and **ice-ocean interactions**. The workshop provided a valuable opportunity to strengthen research links and explore future collaborations.



Conference Highlights

IGS Symposium on Interactions of Ice Sheets and Glaciers with the Ocean, San Diego

Emma Cameron, alongside fellow Cryoexchange members **Lokesh Jain**, **Beatriz Recinos Rivas**, and **Bertie Miles**, attended the International Glaciological Society (IGS) Symposium on Interactions of Ice Sheets and Glaciers with the Ocean, hosted by the Scripps Institution of Oceanography in San Diego, California. The symposium was a great opportunity to connect with the ice-ocean community and hear the latest developments in the field. The sunshine, great food, and beach excursions were also a real highlight!

SCAR Open Science Conference, Oslo

Anusha Goswami (University of St Andrews) attended her first International Conference as a PhD student! She thoroughly enjoyed the meeting, getting to know the wider Antarctic science community, and discussing her research on groundwater in Antarctica.

Clara Nyqvist, **Harry Davis**, **Bertie Miles**, **Sian Henley**, **Channing Prend**, and **Robert Bingham** (University of Edinburgh) were also in attendance presenting new, exciting research!

SYNCHRONY

The Horizon Europe project **Synchronous Southern Ocean Observatory (SYNCHRONY)** launched in August at the SCAR Open Science Conference. The SYNCHRONY project is dedicated to strengthening our understanding of **Antarctica** and the **Southern Ocean** – one of the most important yet least observed regions of the Earth system. With a consortium of over twenty research organisations from around the world, SYNCHRONY will establish a robust, internationally coordinated Southern Ocean **observing system** for **long-term climate** and **ecosystem monitoring**. By combining cutting-edge observations with advanced modelling, artificial intelligence, and interoperable data infrastructures, the project will improve our ability to detect change, understand complex ocean-ice-atmosphere interactions, and develop reliable indicators for climate and biodiversity. SYNCHRONY will contribute directly to the **European Green Deal**, the **UN 2030 Agenda**, and global efforts to safeguard our planet's future.

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