



INTERNATIONAL GLACIOLOGICAL SOCIETY

International Symposium on  
Ice Streams and Outlet Glaciers



Durham University  
Durham, UK  
21–25 July 2025

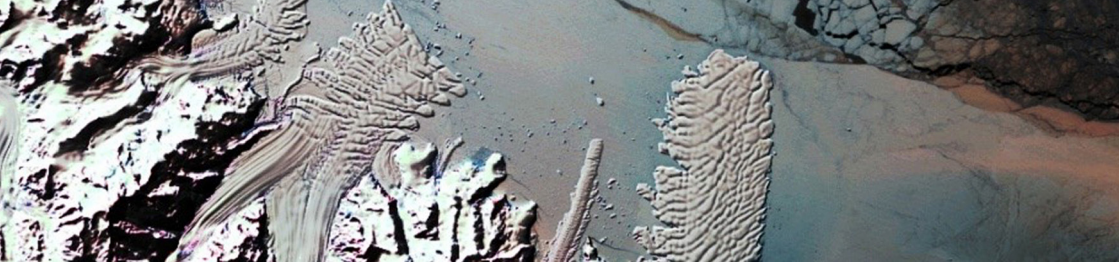
*Co-sponsored by:*

❄ Department of Geography, Durham University



SECOND CIRCULAR  
January 2025

<https://www.igsoc.org/symposia/2025/durham>  
Local website: <https://pay.durham.ac.uk/event-durham/international-symposium-on-ice-streams-and-outlet-glaciers>



The International Glaciological Society will hold an International Symposium on 'Ice Streams and Outlet Glaciers' in 2025. The symposium will be hosted by the Department of Geography, Durham University, Durham, UK, on 21–25 July 2025.

## THEME

Ice streams and outlet glaciers are important components of an ice sheet's mass balance and their behaviour directly impacts on global mean sea level. These corridors of fast-flowing ice have been described as the 'arteries' of an ice sheet and their distinction is largely semantic, with ice streams bordered by slower-moving ice and outlet glaciers bordered by exposed bedrock at the surface. Since the recognition of the importance of these features in the 1970s, there has been a huge growth in their investigation. This began with the pioneering work on West Antarctic ice streams and has subsequently expanded to studies of ice streams and outlet glaciers in all of the world's major ice sheets and ice masses. Of urgent concern for society are recent observations of dynamic changes in ice streams and outlet glaciers, which are thought to be partly responsible for an acceleration in global mean sea-level rise.

In parallel, those studying palaeo-ice sheets have long recognized the distinctive geomorphology of ice streams in both marine and terrestrial settings. The study of palaeo-ice streams offers an unprecedented opportunity to reconstruct their behaviour over time-scales much longer than modern observations permit, generating new insights into the spatial and temporal controls on their flow, including longer-term perspectives on retreat rates and thinning histories. Their beds and marginal areas are also more accessible for investigation, leading to new insights regarding the mechanisms of sediment erosion, transport and deposition beneath fast-flowing ice, including the formation of subglacial bedforms; while also informing understanding of meltwater transport pathways and processes operating at the ice–ocean interface.

In addition to empirical studies, there have been major advances in our ability to simulate ice stream and outlet glacier behaviour in numerical models. Moreover, observations and reconstructions of ice streams/outlet glaciers have provided useful data to test and calibrate numerical models, and recent developments have seen improved projections of mass loss.

The aim of this symposium is to bring together scientists working on both modern and palaeo-ice streams/outlet glaciers, along with those using numerical modelling, in order to facilitate greater interaction and the cross-pollination of ideas, data and theoretical insight on one of glaciology's most important topics.



## SUGGESTED TOPICS

We seek papers and presentations on any aspect of ice streams and outlet glaciers, including observations at a range of spatial and temporal scales and insights gleaned from numerical modelling. Key topics include (but are not limited to):

1. Observations of ice streams/outlet glaciers and their links to the ocean–climate system
2. Interactions between ice streams/outlet glaciers and floating ice shelves/ice tongues
3. Geophysical studies of ice streams/outlet glaciers, including englacial and subglacial observations, and processes of sediment erosion, transport and deposition
4. The influence of hydrology on ice stream/outlet glacier dynamics (e.g. evolution of subglacial drainage systems, meltwater pathways and supraglacial/subglacial lake drainage)
5. Reconstructions of palaeo-ice streams/outlet glaciers, including their links to the ocean–climate system and investigations of their subglacial sediments and landforms
6. Numerical modelling studies of past, present and future ice stream/outlet glacier behaviour and/or of key processes relating to their behaviour
7. The role of ice streams/outlet glaciers in ice sheet instabilities (e.g. Heinrich events)

## INVITED SPEAKERS

**Chris Clark** (University of Sheffield, UK), **Ellyn Enderlin** (Boise State University, USA), **Christina Hulbe** (University of Otago, New Zealand), **Ian Joughin** (University of Washington, Seattle, USA), **Eric Rignot** (University of California Irvine, USA), **Monica Winsborrow** (UiT – The Arctic University of Norway, Tromsø, Norway)





## REGISTRATION FEES

All fees are in UK pounds sterling, £

Early-bird registration until 5 May 2025

– Participant (IGS member):	£355
– Participant (not IGS member):	£385
– Student or retired (IGS member):	£295
– Student or retired (not IGS member):	£325
– Registration surcharge 5 May–5 July 2020:	add £50
– Accompanying person ( $\geq 16$ ):	£100
– Accompanying person ( $< 16$ ):	£50

**The registration fee includes the Icebreaker, the mid-week excursion (including packed lunch), all lunches and morning/afternoon refreshments on Monday, Tuesday, Thursday and Friday, and refreshments during the poster session.** The Conference Dinner on Thursday is limited to 200 people (first come, first served) and can be paid for separately at registration:

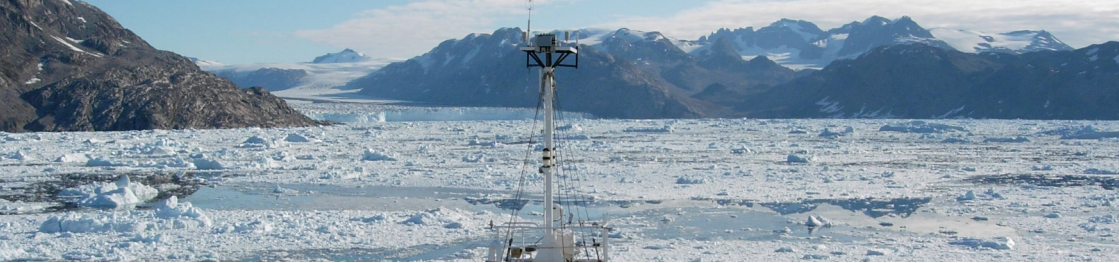
– Conference Dinner (three course meal, including some complementary drinks): £50

Accompanying persons are welcome to attend the excursion and conference dinner, which can be paid for separately.

Please register for the symposium through the Event Durham website: <https://pay.durham.ac.uk/event-durham/international-symposium-on-ice-streams-and-outlet-glaciers>

Please check whether you will require a visa to enter the UK. If you need an invitation letter, please contact the IGS office at [igsoc@igsoc.org](mailto:igsoc@igsoc.org). The sooner you do this the more likely it is that your visa will be processed in time.





## STUDENT AND EARLY-CAREER EVENTS AND SUPPORT

An ECR workshop is planned for the Tuesday evening (22 July), focusing on how to successfully network with peers and academics of all career stages. The workshop will involve a series of short talks and a Q&A session on best practice, which will be followed by a speed-dating style event. This aims to facilitate discussions between participants and put into practice advice on how to market your research. Further details will be provided in the conference programme.

## PROGRAM

The symposium will include oral and poster sessions, with ample free time for discussion. Additional activities will include an opening Icebreaker (evening of Monday 21st), a conference dinner in Hatfield College (Thursday 24th) and a midweek excursion on Wednesday 23rd to explore the glacial history and glacial geomorphology of palaeo-ice stream beds in northern England, including a visit to the UNESCO World Heritage site of Hadrian's Wall.

## VENUE

The symposium will be held in the Teaching and Learning Centre, Durham University, which is located on the Lower Mountjoy Campus, just 10–15 minutes walk from the historic centre of Durham city, where there are numerous restaurants and traditional pubs, bars and cafes; as well as several tourist attractions and walking trails along the wooded banks of the River Wear. Durham University is England's third oldest and the Department of Geography (founded in 1928) is recognized as one of the leading centres of geographical research and education in the world and with a strong focus on ice sheets, ice streams and sea level change.

## LOCATION

Durham is a small (pop. 50 000) but spectacular cathedral city in north-east England with a rich heritage. Narrow cobbled streets wind their way around the rocky peninsula carved by a meander in the River Wear to the majestic Norman cathedral and castle, which are a designated UNESCO World Heritage site.





## ACCOMMODATION

We are pleased to be able to offer budget bed-and-breakfast accommodation in one of the University's 16 residential undergraduate colleges:

- **Single standard room at Hatfield College (DH1 3LG), £60 per room per night**, which includes breakfast.

Delegates wishing to book and pay for this accommodation directly to Durham University can do so at the following link:

<https://pay.durham.ac.uk/event-durham/international-symposium-on-ice-streams-and-outlet-glaciers>

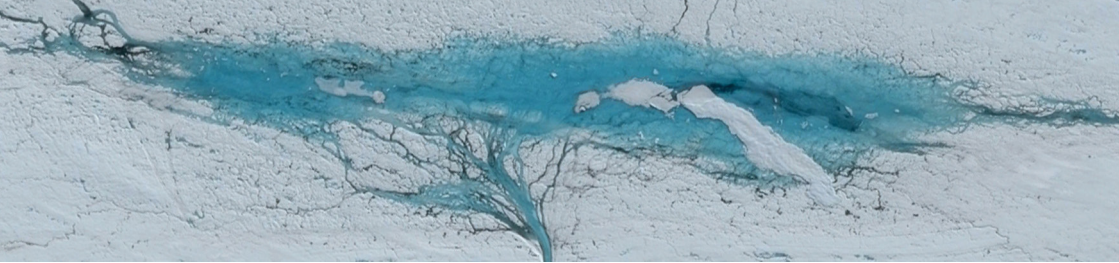
A number of hotels have provided University rates for the symposium delegates. You must contact these hotels and make the bookings yourself, quoting 'Durham University' in your booking. All hotels listed below are located within 15-20 min walking distance of the conference venue. July can be busy with tourists and early booking is recommended.

Hotel Indigo (££££)	Durham Royal County Hotel, Marriott (££££)
Radisson Blu, Durham (££££)	Kingslodge Inn, Durham (£££)
Travelodge, Durham (££)	Premier Inn, Durham City (££)

## TRAVEL

Durham city is well-served by various transport links. Newcastle International Airport is only 45 min by road/rail and is well connected to various European hubs (e.g. London Heathrow, Amsterdam, Paris). There are also regular train services along the East Coast railway line to London (2 h 40 mins) and Edinburgh (1 h 40 min), and regular services to Manchester, including direct train routes to Manchester Airport (2 h 30 min).





### ICEBREAKER

The Icebreaker will be held on the evening of Monday 21st – location to be announced closer to the time.

### CONFERENCE DINNER

The conference dinner will be held in Durham University's Hatfield College on the evening of Thursday 24th July. Founded in 1846, it occupies a city centre site above the River Wear on the World Heritage Site peninsula, lying adjacent to North Bailey and only a short distance from Durham Cathedral. The cost (£50) includes a three-course meal with complementary drinks, and a cash bar will also be available.

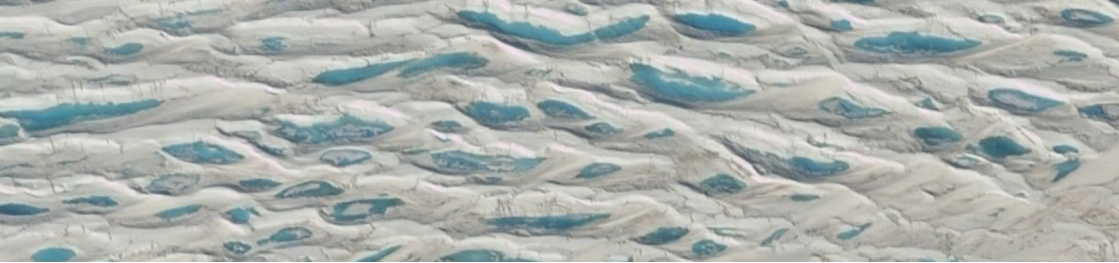
### MID-CONFERENCE EXCURSION

On Wednesday 23 July there will be a mid-conference field trip to explore the glacial history and glacial geomorphology of palaeo-ice stream beds in northern England, including a visit to the UNESCO World Heritage site of Hadrian's Wall. All transport and a packed lunch is included in the fee (£25), which is paid for separately.

### ABSTRACT AND PAPER PUBLICATION

Participants wishing to present at the Symposium (oral or poster) should submit an abstract by 24 March 2025. Accepted abstracts will be posted on the Symposium's website.

The Council of the International Glaciological Society will publish a thematic issue of the *Annals of Glaciology* (vol. 67, issue 84) on topics consistent with the symposium themes. Submissions to this issue will not be contingent on presentation at the Symposium, and material presented at the symposium is not necessarily affirmed as being suitable for consideration for this issue of the *Annals*. Participants are encouraged, however, to submit manuscripts for this *Annals* volume. Paper submissions will open on 1 May 2025 and the deadline for submitting papers is 1 December 2025. The call for papers is posted on <https://www.igsoc.org/ice-streams-and-outlet-glaciers-call-for-papers>



## SYMPOSIUM ORGANIZATION

### **Local organizing committee**

Caroline Clason and Chris Stokes (Co-Chairs), Tom Chudley, Katherine Deakin, David Evans, Stewart Jamieson, Holly Jenkins, Grant Macdonald, Colm Ó Cofaigh, Dave Roberts, David Small, Matilda Weatherley, Holly Wytiahlowsky.

### **Science steering committee and scientific editors**

Chief Editors: Chris Stokes and Caroline Clason (both Durham University)  
Scientific Editors: Louise Callard (Newcastle University, UK), Adrian Jenkins (Northumbria University, UK), Michalea King (University of Washington, USA), Dave Roberts (Durham University, UK), Andreas Vieli (University of Zurich, Switzerland); Further Scientific Editors may be added as needed

## FURTHER INFORMATION

Further information, including registration and abstract submission, is available via the conference website: <https://pay.durham.ac.uk/event-durham/international-symposium-on-ice-streams-and-outlet-glaciers>

## IMPORTANT DATES

### *International Symposium on Ice Streams and Outlet Glaciers*

Opening of online abstract submission:	1 February 2025
Opening of online registration:	1 February 2025
Abstract submission deadline:	24 March 2025
Notification of abstract acceptance:	7 April 2025
Early-bird registration deadline:	5 May 2025
Registration surcharge starts:	6 May 2025
Deadline for full refund:	5 June 2025
Deadline for registration:	5 July 2025
Symposium starts:	21 July 2025

### *Annals of Glaciology volume 67*

Paper submission deadline:	1 December 2025
Final revised papers deadline:	1 May 2026

The Call for Papers for the *Annals of Glaciology* is posted on <https://www.igsoc.org/ice-streams-and-outlet-glaciers-call-for-papers>  
Accepted papers will be published as soon as authors have returned their proofs and all corrections have been made.

Hard copy publication is scheduled for mid to late 2026.