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Lara Pérez will attend the EGU meeting in Vienna with "Evolution of a trough-fan system: Scoresby Sund fjord, central-east Greenland" in Session CL1.08/BG4.12/CR6.7/OS2.9 Polar continental margins and fjords – climate, oceanography, tectonics and geohazards

Do you want to present your data? check out some good 2016 conferences!

William Smith Meeting 2016 - Glaciated Margins: The Sedimentary & Geophysical Archive
<https://www.geolsoc.org.uk/wsmith16>
Past Gateways 4th International Conference
<http://www.ngu.no/aktivitet/past-gateways-4th-international-conference>



Kevin and Benjamin at work on an exposure of diamictos and sands left by the last glaciation in Northern England

GLANAM appointments in 2016

Dear GLANAM associates,
as a reminder, here are the two important appointments of this year, please note the dates down into your diary and don't forget to start looking for flight/train tickets.

- 1) The 2016 GLANAM Workshop and Fieldtrip will be held in Ireland. The workshop will start at Coleraine (Northern Ireland) on Monday 6th June and end on Friday 10th June. Details of the programme of events will follow at a later date.
- 2) The final GLANAM transferrable skills course for the Fellows on 'Dealing with the Media' will be held separately from the Workshop this year. It will take place in Durham University on May 4th and 5th. It is a full two day course and the fellows will need to travel either side of these dates.

Looking forward to see you all in Durham and Ireland.

Riccardo Arosio

Seismic architecture and evolution of the Disko Bay trough-mouth fan, central West Greenland

Fast-flowing ice streams and outlet glaciers have played a key role in the mass balance and stability of polar ice sheets. Despite their significance for Greenland Ice Sheet dynamics, our understanding of the evolution and long-term behaviour of ice streams in the Disko region, particularly during glaciations older than the LGM, is still limited (e.g. Rignot and Kanagaratnam, 2006).

The central West Greenland margin is characterized by a broad continental shelf where a series of troughs extend from fjords to the shelf edge (Fig. 1), acting as focal points for trough-mouth fan (TMF) accumulations. These major depositional systems are prograded depocentres that

were largely formed during glacial maxima when ice streams reached the shelf edge, rapidly delivering large amounts of sediments onto the continental slope (e.g. Vorren et al., 1988).

To unravel the seismic stratigraphic architecture of the Disko Bay TMF and establish its gross depositional development linked to ice-stream evolution, I used 2D- and 3D-seismic reflection data, seabed bathymetry and stratigraphic information from exploration wells Hellefisk-1 and Ikermiut-1 (Fig. 1).

Three stages of TMF development were identified (Hofmann et al., submitted). The Early Stage (seismic Unit 1; Fig. 2A-B) marks the onset of a central depocentre below the

modern mid-shelf fed by sediment dispersal through at least two pathways formed by fast-flowing, grounded ice (Fig. 3A). At that time, ice-stream routing in the Disko Bay shelf region was mainly controlled by the pre-glacial topography and was associated with zones of weakness at structural boundaries, characterized by neotectonic fault activity.

During the middle evolutionary stage (seismic Units 2 and 3; Fig. 2C-D), the focus of deposition shifted from the mid-shelf to two elongate areas on the outer margin. The marginal depocentres may have developed as a consequence of basin subsidence surrounding the structural highs, resulting in relative sea-level rise and subsequent contour-current sedimentation along the northern margin (Fig. 3B).

The latest stages of TMF development (seismic Units 4 and 5; Fig. 2E-F) are characterized by the marginal depocentres becoming less significant while aggradation occurs over large parts of the mid-outer shelf. This is suggestive of the existence of a rather thin, grounded ice sheet that was close to floatation, or a floating ice shelf during this period (Fig. 3C), interrupted by intermittent and short-lived advances of grounded ice streams.

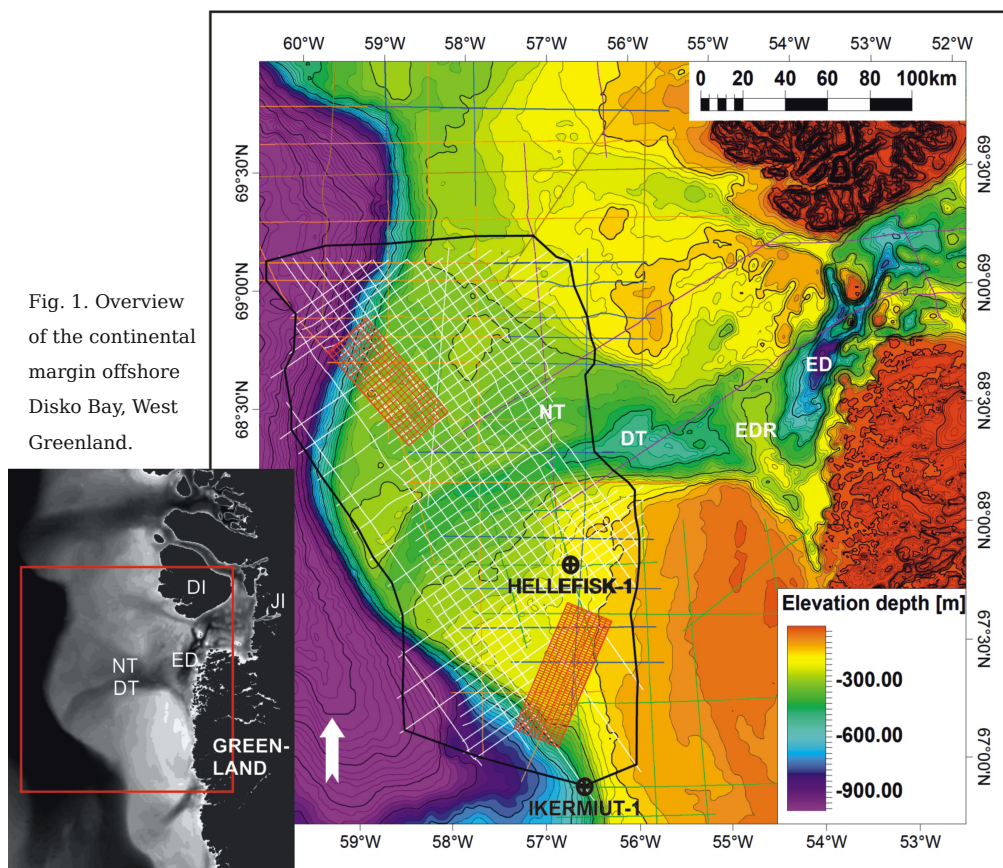


Fig. 1. Overview of the continental margin offshore Disko Bay, West Greenland.

A controlling factor for this last stage may have hereby been the formation of the Egedesminde Dyb Ridge, located on the inner shelf (Fig. 1) and emerged due to neotectonic adjustments and/or isostatic rebound, representing a major topographic obstacle for the ice to overcome.

Julia Hofmann

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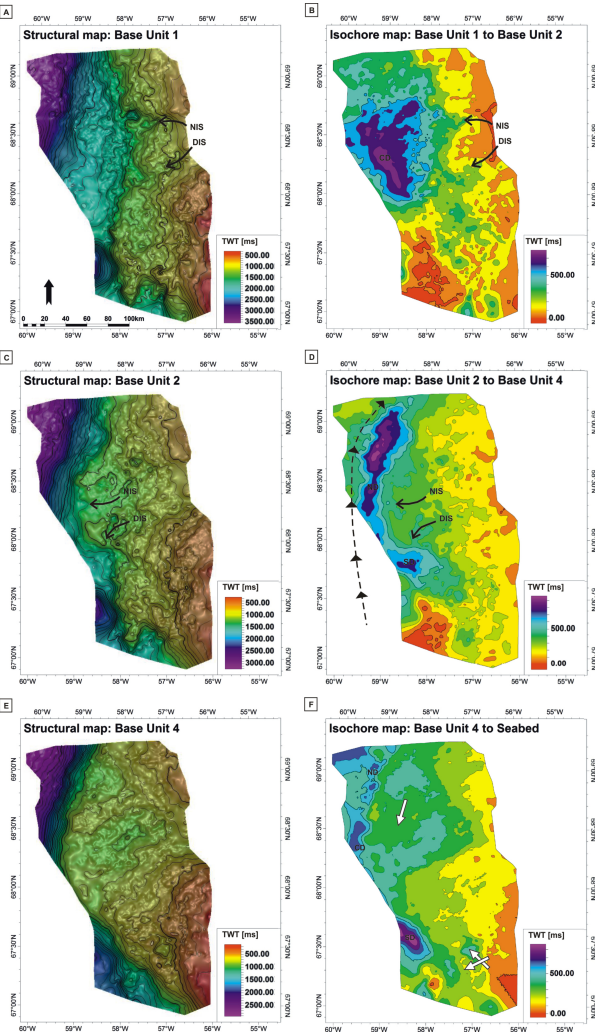


Fig. 2. Structural and isochore maps of the three TMF stages in two-way travel-time underlain by a dip angle relief. Black arrows = former ice-flow directions, white arrows = direction of progradation, black dashed arrows = flow direction of alongslope bottom-currents. Modified after Hofmann et al. (submitted).

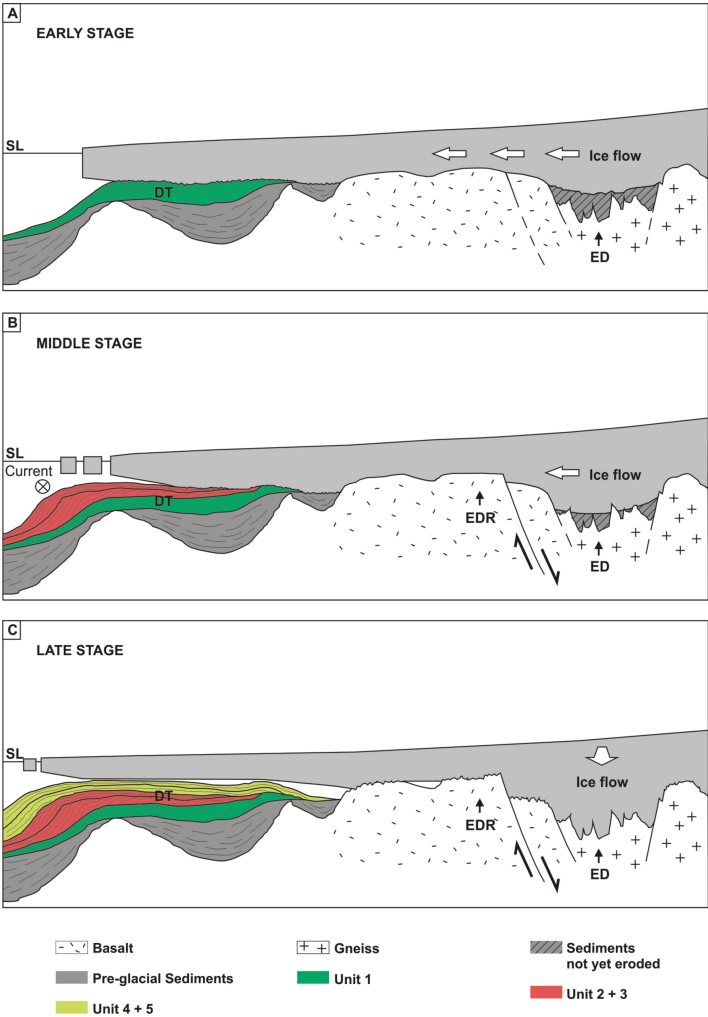


Fig. 3. Three-step evolution model of the Disko Bay TMF system across the shelf. SL = sea level, ED = Egedesminde Dyb, EDR = Egedesminde Dyb Ridge, DT = Disko Trough. Early Stage (A), progradational development encouraged by fast-flowing and grounded ice streams. Middle Stage (B), a combination of progradation and shelf-margin build-up involving alongslope bottom-currents. Late TMF Stage (C), glacial erosion of the Disko Trough ceased and deposition occurred probably mainly by melt-out of debris below an ice shelf extending from the EDR. Modified after Hofmann et al. (submitted).

Career opportunities after GLANAM

“GLANAM aims at improving the career prospects and development of young researchers in both the public and private sector within the field of earth science, focusing specifically on North Atlantic Glaciated Margins.”

As stated in the very first sentence in the GLANAM proposal, the idea of the project is, not only to do some awesome science, but also to improve and develop our- the researchers, possibilities of a future career both in the public and the academic sector. This means that during the three years the project has run, training of various character have been available to us, thereby earning up to the fact that GLANAM first and foremost is an International Training Network, (ITN).

From my experience of applying to jobs, especially in the non-academic sector, getting as broad a background as possible is always an advantage. Often the message a young graduate gets with a job refusal is, “you lack experience in general” or “you are too specialized, and don’t have a broad enough understanding of the job”. With the Interdisciplinary workshops held each year, GLANAM aims to eradicate this problem. The workshops have been focused on both scientific

and non-scientific topics such as: written and oral communication and presentation skills, networking and research ethics and scientific writing. On top of that, we have at all times throughout the project been encouraged to seek out research specific courses, both to further our research project, but also to increase our personal understanding of scientific work methods, and research.

This scientific/non-scientific approach to our training, differs from other young researchers, who might only have the funding to focus on research specific training, and will therefore, by the end of the research, be very specialised in their project. Not only will this give us a major advantage when applying for jobs in the future, but also the fact that we for the last three years has been part of a larger network, cooperating across both countries, disciplines and sectors, will give us a broad platform from which our future careers can draw from. So all in all the GLANAM aim of improving our career prospects, at least on paper, seems to be fulfilled. The next big question will be if this also holds true when we start applying for our new lives after GLANAM. Time will tell.

Kasper Weilbach

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