

## **CASCADES Expedition: Call for proposals**

Deadline: 2 June 2025, 12:00 CEST (noon)

### **Summary**

The CASCADES expedition is a joint initiative of the Institut Nordique du Québec (INQ), the Swiss Polar Institute (SPI) and the French Polar Institute Paul-Émile Victor (IPEV) aiming to foster scientific collaboration between the scientific communities of Switzerland, France and the Canadian programme Transforming Climate Action (TCA).

The expedition will focus on the coastal region of West-Greenland, Baffin Bay and Ellesmere Island. It will be carried out in two legs of 28 days each during summer and autumn 2026 onboard the Canadian research icebreaker CCGS Amundsen (see here for [CCGS Amundsen vessel description](#)).

The first leg will be carried out from South to North along the coastal region of West-Greenland during the peak of the melt season. This leg will comprise investigations focusing on glacier/fjord environments, the land-ocean continuum and oceanographic transects across the West Greenland Current system. The second leg will concentrate on western Baffin Bay between the straits of Nares and Davis during the initial stages of sea-ice formation (freeze-up period). Specific working areas will be identified during the leg based on ice conditions and remain open at this stage. For this reason, this leg may not be suitable to land deployments other than on an opportunistic basis.

Research teams led by a Principal Investigator from TCA (Canada), France or Switzerland are invited to submit proposals through the application form available on the [SPI application portal](#). Proposals should be directed specifically to one of the subjects highlighted in the below section *Research topics*. A combination of different subject areas into multi-disciplinary projects is also possible. Collaborative projects between Canadian, French and Swiss teams are particularly encouraged.

Access to the vessel and its facilities (incl. helicopter) will be free of charge for all teams selected by the scientific review panel. In addition, French and Swiss teams are invited to apply for funding for the operational costs of their participation in the expedition (travel, shipments, consumables, etc.).

Deadline for the submission of applications is 2 June 2025, 12:00 CEST (noon). Successful projects will be notified at the latest by October 2025.

A call for complementary projects on the FOREL will be issued in spring 2025. FOREL is a sailing boat managed by the Forel Heritage Association and dedicated to oceanographic research in polar and sub-polar regions, specifically in coastal areas inaccessible to larger research vessels. The FOREL 2026 summer season will be embedded into the CASCADES expedition's scientific plan and focus on



# SWISS POLAR INSTITUTE

complementary regions to those covered by the CCGS Amundsen with the goal to broaden the geographic coverage and scientific scope of the of the expedition. More details will be available upon the publication of the call.

## Research topics

1. Interactions between the atmosphere, coastal glaciers, sea ice, the ocean and terrestrial ecosystems along the land-to-sea continuum of NW Greenland and Baffin Bay.
2. Impacts of glacial meltwater on the physical and ecosystemic functioning of Greenlandic fjord systems. Emphasis will be placed on a few rapidly retreating glaciers (see below), with respect to (A) the characterization/mapping of marine habitats, (B) the biodiversity, biological productivity and health of marine ecosystems, and (C) possible adaptation strategies for coastal communities.
3. Transfer of freshwater, carbon, macronutrients, trace elements (micronutrients) and pollutants (e.g., plastics, chemicals) to the broader marine environment of Baffin Bay through the local and regional ocean circulation.
4. Dynamics of early sea-ice formation and colonization by organisms with associated impacts on sympagic and oceanic biogeochemistry, vertical mixing and convection, and air-sea gas exchange.

## Geographic focus of the expedition

The expedition will focus on the coastal region of West-Greenland, Baffin Island and Ellesmere Island.

The first leg (South to North along the West-Greenland coast) will provide sampling opportunities along oceanographic transects and a latitudinal spread of glacier/fjord environments, including the possibility for land deployments.

Fjord systems / glaciers of interest include:

- Jakobshavn area (Disko)
- Kjer/Alison/Hayes group
- Melville/Tracy/Heilprin group
- Peterman
- Inglefield Land/ Humboldt

Fjords to be investigated will be selected from the list above based on the science projects selected for the expedition. The vessel will specifically target each fjord system on average for two to three days for scientific

# SWISS POLAR INSTITUTE

work. The exact duration of station work and organisation of the expedition will be based around the requested access within successful proposals.

The second leg will concentrate on sea-ice formation in the western Baffin Bay and in the Davis Strait. The working areas for this leg will be defined based on ice conditions and remain open at this stage. This leg will focus on open ocean work and thus not be suitable for land deployments other than on an opportunistic basis.

See Annex: Geographic focus of the expedition and timing

## Timeframe

Both legs are foreseen to last 28 days, including working time and transit. Provisional planning foresees the following timeframe:

Leg 1: 6 August 2026 to 3 September 2026 – leaving from Iqaluit (Canada) and arriving at Pituffik Space Base (near Qaanaq, Greenland)

Leg 2: 29 October 2026 to 26 November 2026 – leaving from Resolute (Canada) and arriving at Québec City.

The schedules and ports of call above are provisional and subject to future changes.

## Access to the vessel

Transfers between the respective ports of call and Québec City will be arranged centrally and paid for by the expedition organisers. Travel to and from Québec City will have to be organised and budgeted by participants.

Shipping of scientific equipment and samples should be foreseen to and from Québec City. The window for loading equipment on the vessel is foreseen in late June or early July 2026. Unloading will take place around late November.

Additional and more definitive details will be given to selected participants in autumn 2025/winter 2026.

## Eligibility

Eligibility for application is limited to researchers based at public research institutions. Principal Investigators (PIs) must be affiliated to a French or Swiss public research institution or be a member of the Canadian TCA programme based at Dalhousie University, Université Laval, UQAR and Memorial University.

# SWISS POLAR INSTITUTE

Collaborations between Canadian (TCA), French and Swiss teams are particularly encouraged.

## Finances

Access to the vessel and its facilities (incl. helicopter time) will be free of charge for all scientific teams whose projects are selected.

For Canadian TCA participants, it is assumed that all other costs are already covered by their TCA funding as part of their Large Research Project.

Projects led by PIs based in France and Switzerland can apply for the following support:

A) A sum of CHF 5'000 per participant and leg to cover personal expenses such as travel costs, insurances, clothing, medical checks, etc.

B) An additional contribution of up to CHF 20'000 to cover the following eligible costs:

- Consumables and supplies
- Small equipment (upon justification, max. CHF 15'000)
- Logistics costs for shipping of material and equipment

Please note that overhead and taxes cannot be considered eligible costs.

## Permits

Research permits will be coordinated by the organisers. Selected participants should be aware that research permit applications will only be submitted once the science programme is defined. No guarantees can be made regarding the obtention of all requested permits.

## Proposal submission

The application will consist of:

- Completed [online form](#) (contact and main information on project)
- Attachments to be uploaded onto the online platform as PDF:
  - A completed application template in pdf (proposal using the predefined format (Word template))
  - Letters of support (optional)

- CVs of the applicant and main partners, incl. publication lists as PDF (compulsory – free format, max 4 pages per person)

The completed application should be submitted online by 2 June 2025, 12:00 CEST (noon). The link for the submission can be found on the SPI website and on the application portal.

Since TCA investigators have already been funded as part of an international review process, their teams (or work packages) are asked to fill in a part of the form (clearly signalled in the application template). This will enable organisers of the expedition to conduct an informed review of project requirements, avoid duplication of proposed work, and bring cohesion to the overall science programme.

## **Evaluation and results**

Eligible proposals submitted before the deadline will be evaluated by an external evaluation panel and the expedition management (feasibility only).

The proposals will be evaluated based on the following criteria:

- Scientific merit and topicality of the proposed project
- Originality of the project
- Feasibility (methodology, requirements from the expedition/vessel, time plan of the expedition and logistics)
- Experience and expertise of the PI and partners for the proposed project
- Complementarity of the proposed research consortium

In addition, the evaluation panel will seek a balanced participation of Canadian, Swiss and French research groups across both legs.

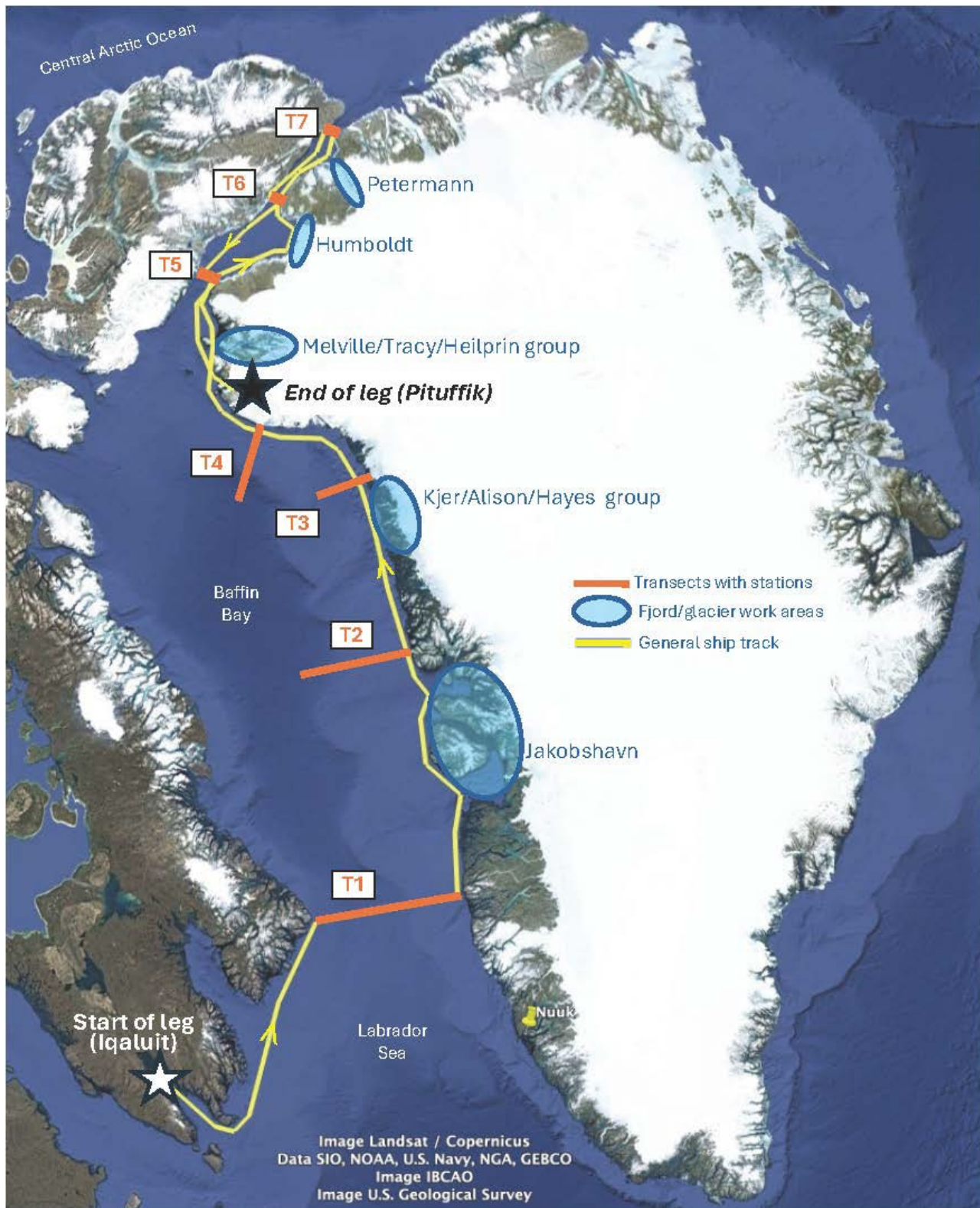
Evaluation results will be transmitted to applicants at the latest by October 2025. A grant agreement will be concluded with all selected PIs.

It should be noted that participation in the expedition (on board) will be subject to final approval by a clearance procedure defined by the operator of the research vessel.

17.3.2025

# SWISS POLAR INSTITUTE

Annex: Geographic focus of the expedition and timing – Leg 1 (6 August 2026 to 3 September 2026)



# SWISS POLAR INSTITUTE

Annex: Geographic focus of the expedition and timing – Leg 2 (29 October 2026 to 26 November 2026)

