



Project call Southern Ocean

Pulse of the Weddell Sea 2025 to 2030

The Swedish Polar Research Secretariat call for research in the Weddell Sea, Antarctica. The project time frame is 4 to 5 years, with the first field season starting in the austral summer 2025/26.

Apply by February 25, 2024.



**SWEDISH POLAR
RESEARCH SECRETARIAT**
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Background

The Swedish Polar Research Secretariat call for research in the Weddell Sea, Antarctica. The project time frame is 4–5 years, with the first field season starting in the austral summer 2025/26.

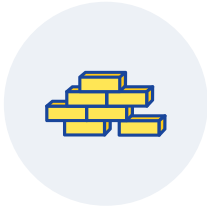
Researchers affiliated with a Swedish university or research institute are invited to apply for participation with their research projects during expeditions to Antarctica. International collaboration is encouraged. For the research theme Pulse of the Weddell Sea, one or two expeditions will be carried out. These take place during the Antarctic summer season.

This project call aims to build and strengthen the research theme, Pulse of the Weddell Sea: The functioning and significance of the Weddell Sea on our climate and ecosystems in a changing world, addressing scientific questions focused on understanding our ocean-climate system, ocean-cryosphere-atmosphere interactions, and their connections to biogeochemical cycling and ecosystems extending from primary producers to the upper trophic levels in the Southern Ocean.



Geographical focus area

The research theme will build on efforts from previous field seasons in the Weddell Sea, extending between approximately the Prime Meridian and the eastern edge of the Antarctic Peninsula. The target area for the research theme will also be decided based on which polar research vessel that will be available at the time.



Prerequisites for projects

Pulse of the Weddell Sea aims to address state-of-the-art scientific challenges related to the Weddell Sea's role in climate and ecosystems. The research challenges of the Southern Ocean and the Weddell Sea have been identified and prioritized internationally by international scientific bodies, ranging from physical to biological sciences and heritage – UN IPCC, CCAMLR, SOOS, SCOR, and SCAR. This theme should incorporate a spread of disciplines that span the natural sciences to assess the functioning of the ocean, atmosphere, and cryosphere and their implications to primary production, biogeochemical cycles, and all the way to the upper trophic levels of the ecosystem. The theme covers geographic domains of the open ocean, seasonal sea ice-covered ocean and possibly the coastlines of the Antarctic Peninsula.

Suggested research projects shall contribute to the [research theme](#) both methodologically and scientifically, promoting the cross-disciplinary nature of the theme. In multiple research areas, laboratory experimentation, modelling and satellite remote sensing techniques should extend the theme's impact beyond solely the in-field observational activities.

Projects should also contribute to Antarctica InSync (International Science & Infrastructure for Synchronous Observation), a new initiative within the Ocean Decade Action Programme that is endorsed by UNESCO. InSync is a project of synchronous scientific observations in Antarctica to allow for a circumpolar assessment of the connections between ice, ocean, climate, environment, and life, including human pressures and their solutions, such as marine protection.

Moreover, accepted projects are expected to contribute to a synthesis report after the expeditions. [Read more about the Secretariat's Polar Research Process here.](#)

Feasibility

The Pulse of the Weddell Sea research theme will be planned and executed to cover the different research topics during the Antarctic summer season 2025/2026 and continue until the Antarctic summer season 2029/2030. The research theme will be designed to cover one or more field seasons during the specified period.

The Swedish Polar Research Secretariat (SPRS) manages research infrastructure in Dronning Maud Land (DML), East Antarctica and has a well-established research and logistical network in the region. Depending on which polar research vessel that will be available, several logistical setups could be possible to achieve scientific and operational scenarios within the research theme Pulse of the Weddell Sea. For the operational logistics of the marine field components, all basic infrastructure, such as winches, cranes, etc., will be provided by the Swedish Polar Research Secretariat. Specific measuring instruments and research equipment are the responsibility of the research projects.

Any project consistent with the scope of the theme Pulse of the Wedell Sea and that can contribute to this research theme is welcome to apply.

To initiate the necessary planning, the Swedish Polar Research Secretariat invites accepted projects to a workshop in **Abisko on 21-24 March 2024** where the scientific and logistical needs will be discussed.



The application procedure

Submit the application form to office@polar.se. Please use the registration number **2023-223** in the subject line. The last day to apply is **25 February 2024**. You can download the application form [here](#).

Requested documentation

- » Name, affiliation and contact details of the lead applicant of the project proposal.
- » Names (can be preliminary or listed as NN) and affiliations of other Swedish-based or international collaborating project team members.
- » Number of persons required in the field, needed to execute the project. Indicate onboard sampling or observational tasks where the project relies on collaboration with other groups (e.g., CTD/Niskin, sediment sampling) and indicate how this may influence the required number of onboard participants/berths.
- » A scientific project description, including the aim and objectives that also clarify where and how the project work tasks are intended to be performed. Clearly motivate the fit and relationship to the overarching theme of the Pulse of the Wedell Sea expedition (appendix 1).

- » CV and a list of publications for the lead applicant and any deputy/co-lead participant. In the publication list, highlight up to ten selected publications that you find relevant for Pulse of the Wedell Sea. Also, include the number of citations of each publication for these ten (appendix 2).
- » Documentation that proves that sufficient and relevant research funding has been granted/is available to the project group. It is understood that this can come from a variety of sources, including external grants from national research agencies in Sweden, the EU or elsewhere. Given existing funding cycles, parts of this could be amended until 8 December 2024 (appendix 3).

According to Swedish law, the Swedish Polar Research Secretariat is bound by the principle of the Public Access to Information and Secrecy Act. Upon submission to the Secretariat, project proposals (including appendices) are thus considered general public documents. Consequently, the Swedish Polar Research Secretariat is obligated to disclose application documents if requested.



Assessment and selection

Submitted applications will be assessed according to the following criteria: i) scientific excellence, ii) relevance to the research theme, feasibility onboard a Polar research vessel and iii) how the project describes the applicability to synthesis work. A research project can only be accepted if the project has received funding through research financiers who use peer-review in selection or in any other way you see is relevant for the topic. There may be an exception to this requirement if the applicant can argue for other merits, that are highly relevant to the topic.



Contact

If you have any questions, please contact:

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