

IPY-5: A crucial new phase in organising regular IPYs

The **5th IPY (2032-33)** will build on four groundbreaking IPYs convened between 1881 and 2009 (IPY-1: 1882-1883; IPY-2: 1932-1933; IPY-3 / IGY: 1957-1958; IPY-4: 2007-2008). Together with millennia of Indigenous Peoples' knowledge production, the IPYs form a long chain of coordinated polar research and credible scientific evidence on socio-ecological changes in the polar regions. This record of biophysical and social changes and our understanding of their impacts to the polar systems themselves (particularly for Indigenous communities, residents and human visitors), offers a unique opportunity to more deeply understand global processes, make informed decisions and act accordingly.

Encompassing planning, project, and legacy phases implemented over a span of ten years, **IPY-5** is an opportunity for many countries, institutions, and networks to coordinate their research, observations, protocols, and expeditions in the polar regions. It provides the necessary opportunities for global and trans-disciplinary coordinated research action among polar researchers, knowledge holders, rights holders, educators, and other stakeholders to produce urgently

needed actionable information that will support evidence- and human rights-based solutions to local and global challenges. Meaningful impact is supported by an inclusive and coordinated approach across different scientific disciplines, programmes, and knowledge systems including through co-production and co-creation of knowledge as well as education and community/citizen science approaches. **IPY-5** also supports progress towards achieving implementation of international treaties, agreements, and other large-scale international processes including the UN Declaration on the Rights of Indigenous Peoples, the UN Sustainable Development Goals (SDGs), the 2023 Helsinki Declaration on Climate Change and Antarctica adopted by the Antarctic Treaty Consultative Meeting, and the 4th International Conference on Arctic Research Planning Process (ICARP IV), as well as several relevant UN Decades.

IPY-5 will leverage these, and other initiatives, which together highlight the need for greater international coordination to provide the credible scientific evidence needed for effective decision-making on urgent local to global issues.

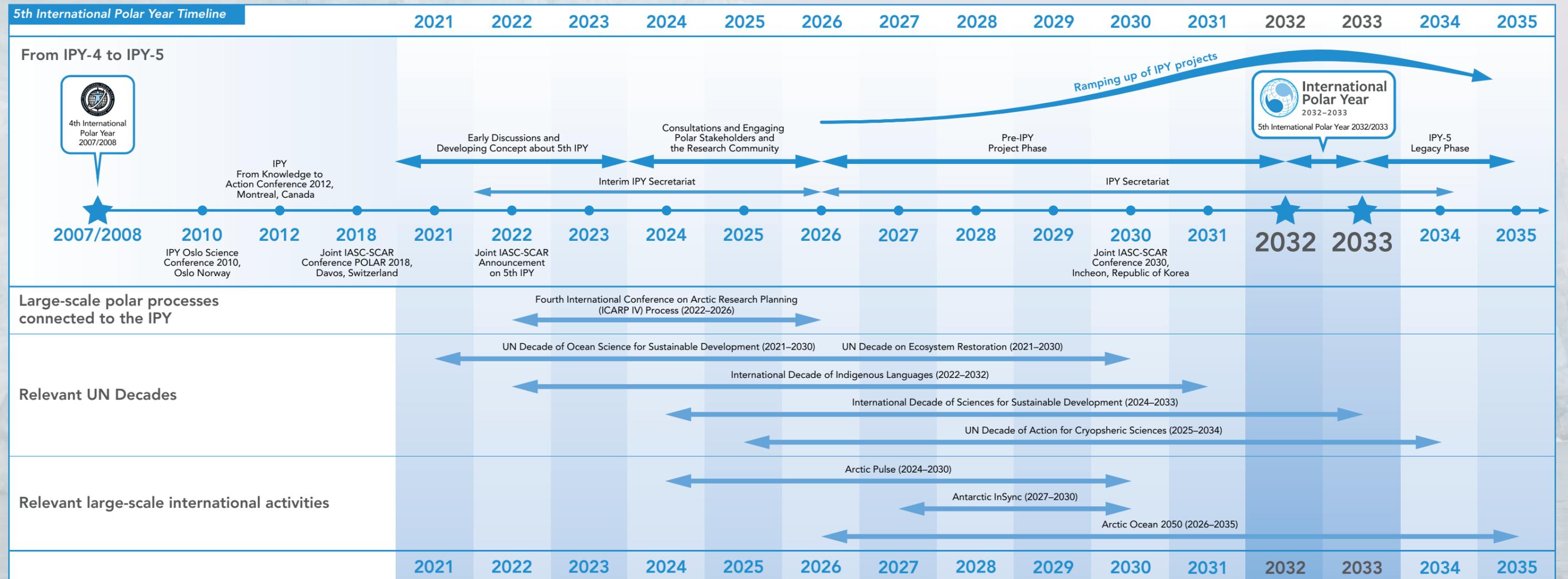
IPY-5 will:

- Provide a unique and essential opportunity for strengthened international cooperation and partnership to advance polar research and knowledge production.
- Allow researchers and knowledge holders to build on the outcomes of previous IPYs, including by: expanding integrated and coordinated observations of accelerating changes; supporting modelling efforts; deepening understanding through transdisciplinary syntheses studies; and expanding the long-term monitoring of current conditions required to understand deeply integrated Earth systems and inform predictions of future impacts of climate and environmental changes.
- Build specifically on the methodological, technological, educational, and epistemological advancements of the 4th IPY, including major shifts toward working across knowledge systems and transdisciplinary research with specific emphasis on equitable and ethical engagement with Indigenous Peoples and their knowledge systems.

Guided by a broad set of principles

IPY-5 will be guided by a broad set of principles, including:

- Fostering the widest possible international collaboration to produce knowledge for action with direct societal relevance.
- Committing to inclusive and diverse practices, including the implementation of equitable and ethical standards for engagement and cooperation with Indigenous Peoples and their knowledge systems.
- Striving for holistic, systemic, transdisciplinary research approaches that minimise environmental footprints. This includes co-design of research programs and co-production of knowledge across different knowledge systems, as well as ensuring that funding programs are directly supporting and financing Indigenous Peoples' comprehensive participation for the benefit of all parties.
- Ensuring balanced involvement and information flow, identification of areas of common interest, and effective knowledge exchange across Arctic and Antarctic polar research communities and networks.
- Encouraging open science and open data, according to the FAIR (Findable, Accessible, Interoperable, Reusable) and CARE (Collective benefit, Authority to control, Responsibility, and Ethics) data principles.
- Encouraging effective and inclusive science communication, polar education, and public engagement, both in the polar regions and globally.
- Engaging in capacity building and sharing for early-career scientists, Indigenous Peoples and those from historically under-represented groups across the polar regions and polar research disciplines.
- Support, connect and extend networks of Indigenous Peoples, academics, local leaders, and early career and community researchers to understand the human and environmental links, impacts and feedbacks with the polar regions and beyond.
- Document, understand, and amplify experiences and knowledge held by Indigenous Peoples and the societies in the Arctic in the context of rapidly changing interconnected natural and human systems.
- Inform and support local to global evidence-based mitigation and adaptation solutions and progress towards achieving the UN Sustainable Development Goals, including by supporting enhanced science- and knowledge policy interfacing.
- Produce education and outreach opportunities to engage the wider community with open and accessible communication strategies, platforms and co-developed content, including by identifying new ways to communicate research and engage communities worldwide to seek solutions and act.
- Support education, recruitment, and capacity-building for the new generation of experts needed to continue Arctic and Antarctic changes as well as their global implications.



Moving forward together

The 5th IPY is envisioned as a coordinated international, multi-year activity with three distinct phases:

1. Planning phase (2021-25):

Conceptual discussions among several polar research and Indigenous Peoples' Organisations started in 2021. Between 2023-25, a period of broad consultation is being carried out to understand the needs of the relevant stakeholders, including national and international funding bodies to:

- Refine planning documents
- Co-develop timelines, structures, priorities, visions and ambitions
- Establish processes to support IPY-5 initiatives

2. Project phase (2026-33):

The IPY-5 project phase will include the initiation and implementation of IPY initiatives culminating in 2032-33 in a two-year period of intensive polar fieldwork and analysis, modelling efforts and process understanding studies, as well as education and outreach activities. The project phase will connect communities through key polar research initiatives and events including a joint IASC-SCAR Conference 2030, and will engage closely with related regional and global efforts such as the Fourth International Conference on Arctic Research Planning process (ICARP IV), the Antarctic InSync initiative, and relevant UN Decades

3. Legacy phase (2034+): In the years following the 5th IPY, the data collected will continue to be fully utilised and archived. This will involve analysis and synthesis activities, with a focus on knowledge transfer, reporting, and establishment of supporting frameworks for legacy outcomes. In addition, an evaluation of the impact of the 5th IPY will be undertaken at the start of the legacy phase.



Planning Structure

Since the initial 5th IPY concept note was published in October 2023, a more detailed planning structure has been set up which includes:

- **IPY Planning Group** comprised of representatives of international organisations that meets twice a year and:
 - provides input, advice and overall direction for the IPY planning process and the IPY Executive Committee
 - prepares, presents and assists on taking forward specific issues to the IPY Executive Committee
- **IPY Executive Committee** composed of representatives of the International Arctic Science Committee (IASC), the Scientific Committee on Antarctic Research (SCAR), the International Science Council (ISC) and the World Meteorological Organization (WMO), plus others as needed. This committee moves planning efforts forward between IPY Planning Group Meetings and takes overall responsibility for the direction and development of the IPY.
- **Task Groups** are set up by the IPY Planning Group to work on specific aspects of the planning process in more detail. The task groups report back periodically to the IPY Planning Group.
- **Interim IPY Secretariat** provided by the Secretariats of IASC and SCAR with additional contributions from the ISC and WMO. A call for a host and funding for a dedicated IPY Secretariat will be issued in 2025.

How to get involved in the IPY

Interested stakeholders can get involved in the IPY process over the coming months in various ways, including by:

- Participating in the 5th IPY Planning Group* and Task Groups;
- Contributing to upcoming town hall meetings / fora held among others at upcoming polar conferences or online; and
- Sharing ideas and suggestions of how to contribute to the planning, delivery and legacy of the International Polar Year.

*An open-ended call for international and regional organisations to join the IPY Planning Group was issued in July 2024. This call was directed specifically at regional or international organisations / unions / associations (scientific, Indigenous, educational, etc.) that

- work on / in the polar regions, including organisations working to deliver/enable science in the polar regions (e.g., logistics), and
- are committed to contributing directly and long-term to the planning and delivery of the IPY 2032-33.

More information on opportunities to participate in the IPY planning process will be shared on the 5th IPY website starting mid-October 2024.

More information

Contact the interim IPY Secretariat at:
ipy-secretariat@iasc.info
Website: www.ipy5.info

