


Japan's Update to FARO 2026 on Arctic Research Activities



Yoshifumi Nogi
National Institute of Polar Research
Research Organization of Information and Systems
Japan

Arctic Change for Sustainability

ArCS-3

2025-2030

Lead Organization: National Institute of Polar Research

Sub-Lead Org: Japan Agency for Marine-Earth Science and Technology

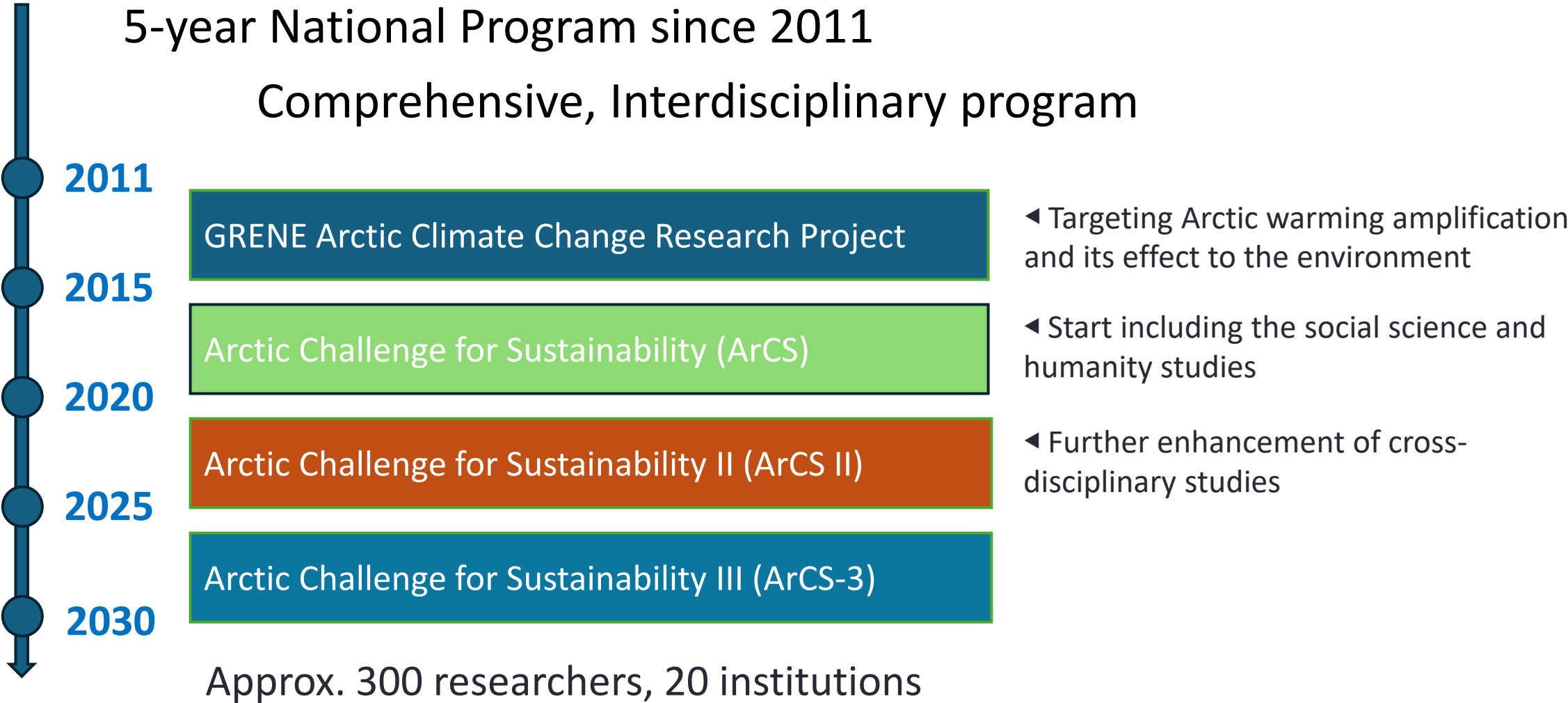
Sub-Lead Org: Hokkaido University



Japan's Arctic Research as National Program

5-year National Program since 2011

Comprehensive, Interdisciplinary program



Lead Organizations

National Institute of Polar Research (NIPR)

Japan Agency for Marine-Earth Science and Technology (JAMSTEC)

Hokkaido University (HU)

Project Goal

Creating comprehensive knowledge to resolve social issues caused by environmental and social changes in the Arctic region

3 Targets and 10 Research Themes

Target 1: Creating information on changes in the Arctic environment based on cross-disciplinary observations and advanced simulations

Target 2: Contributing to building a society that adapts to changes in the Arctic environment

Target 3: Understanding the emergence and transformation process of indigenous culture and Arctic governance

7 Foundations: Infrastructure, Outreach, Capacity Development

- Capacity Development
- Outreach
- Research Vessel
- International Collaborative Stations
- Arctic Data archive System (ADS)
- Arctic Simulation System
- Earth Observation Satellite

Concept of ArCS-3 Project

Aerosol

Climate disaster

GHGs

Biodiversity

Arctic Ocean
Protection/Utilization

Land/Human
activities

Costal Community

Historical
Perspective

Indigenous
topics

Governance

Target 1

Creating information on Arctic changes based on cross-disciplinary observations and advanced simulations

Target 2

Contributing to building a society that adapts to changes in the Arctic environment

Target 3

Indigenous cultures and the Arctic region, origins and changes in governance sustainability

Research Infrastructure / Capacity Building / Outreach

Capacity
Building

Outreach
Publicity

Research
Vessels

Research
Stations

Data
Archive
System

Simulation
System

EO
Satellites

Goal of the project :

Creating comprehensive knowledge to solve social issues caused by environmental and social changes in the Arctic region

Activities in 2025: Fostering next generation

ArCS-3
若手人材海外派遣プログラム

2025年 4月21日 出発
2025年 5月16日 到着 12:00
2025年 5月22日 帰国



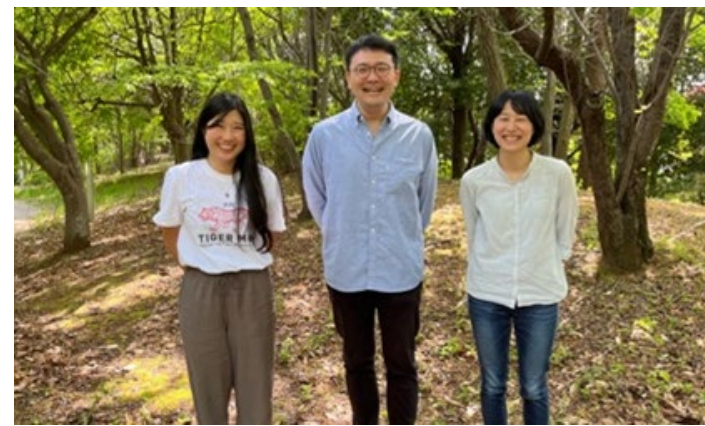
Hokkaido Summer Institute 2025
Special Lecture on Arctic and Antarctic Science II

講師: Prof. Wilhelm Hagen (University of Bremen)
Prof. Helen Blatter (ETH Zurich)
Prof. Lauren Miller (University of Virginia)
Prof. Jason Amundson (University of Alaska Southeast)
Prof. Ralf Greve (Hokkaido University)

日程: 5月22日(水) 18:30-18:00 海氷と気候
5月23日(木) 18:30-18:00 陸氷と雪
5月24日(金) 18:30-18:00 氷河
5月25日(土) 14:45-18:00 氷河、氷床
5月26日(日) 14:45-18:00 氷河の過去と未来

Early Career researcher exchange
7 graduate students to 5 Arctic countries

Polar science education
Glacier field course (8 graduate students)
Special lecture series (20 graduate students)



Recruiting Three Project Assistant Professors
Training and Support for research

Saroma Sea Ice School 2026
28 Feb. - 9 Mar. 2026, Saroma-ko Lagoon, Hokkaido, JAPAN

母于里雪氷学習の参加者を募集します

INTERNATIONAL SYMPOSIUM ON THE OKHOTSK SEA & POLAR OCEANS
北方圏国際シンポジウム オホーツク海と流氷

ECR session in Monbetsu



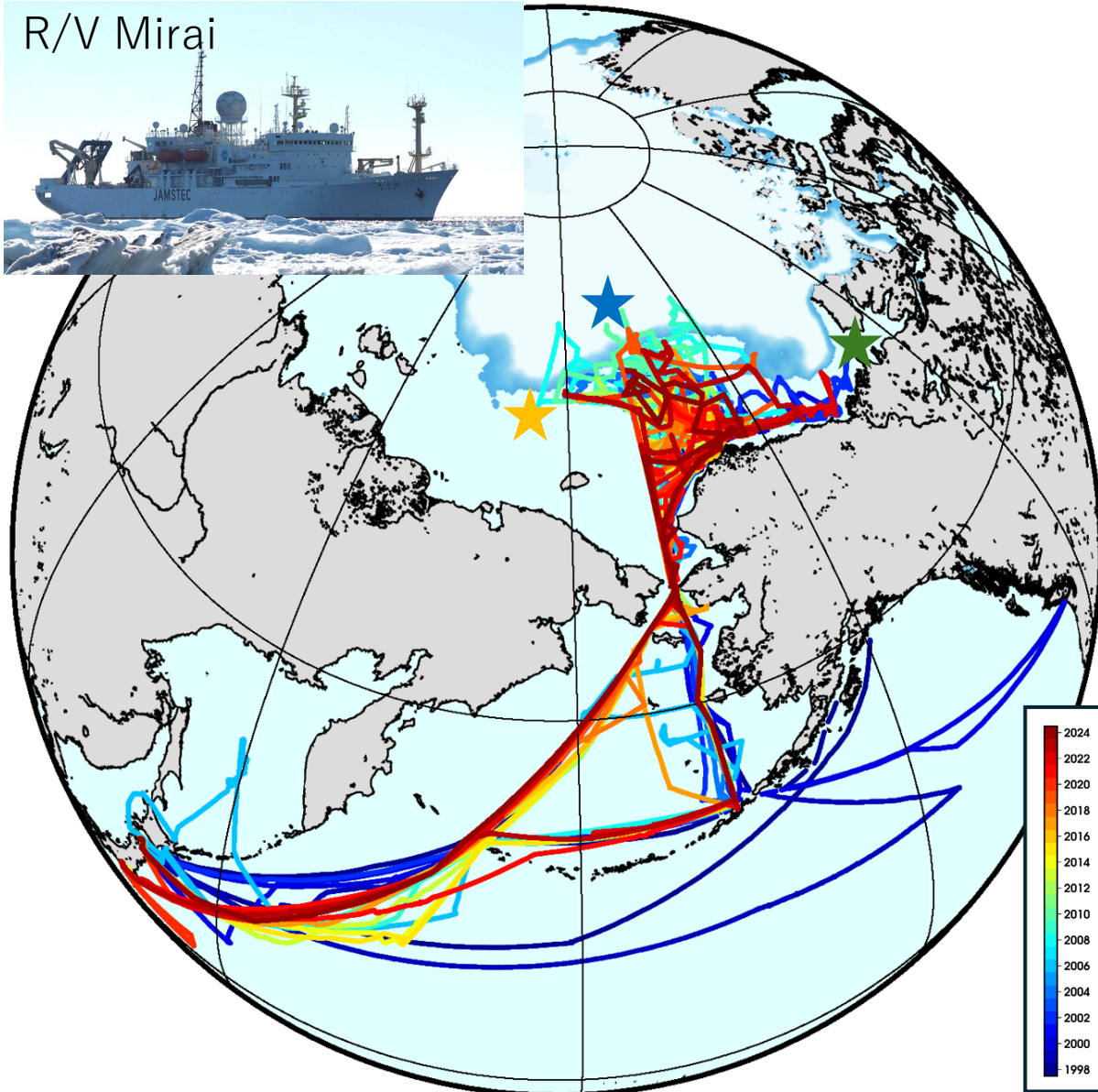
Snow field course, Saroma Sea ice School, ECR session in Monbetsu, Oshoro-maru Cruise

R/V Mirai Arctic cruise

23 times for 28 years

(1998~2025)

1998, 1999, 2000, 2001, 2002, 2003, 2004,
2005, 2006, 2007, 2008, 2009, 2010, 2011,
2012, 2023, 2014, 2015, 2016, 2017, 2018,
2019, 2020, 2021, 2022, 2023, 2024, 2025



We have conducted Arctic Ocean cruises with R/V Mirai in regions of sea ice reduction in the Pacific sector of the Arctic Ocean since 1998, when sea ice began to decline rapidly in the region.

Some statistic

- Total days: 1,069 days (572 days in the Arctic Ocean)
- Total distance: about 400,000 km (equivalent to circling the Earth ten times)
- Number of total participants 946
- Number of total young researchers 150

- Most Northern point: 79d 11m N (2010)
- Most Eastern point: 127d W (2004)
- Most Western point: 174d E (2008)

Japan's first research icebreaker for Arctic science (ARV Mirai II)

May 2013

Japan became an observer of AC.
Japan's Arctic Policy was presented.

Oct. 2015

Dec. 2020

A construction of
Japan's new research icebreaker had been decided.

March 2023

Steel cutting ceremony

Mar. 2025

Launching ceremony

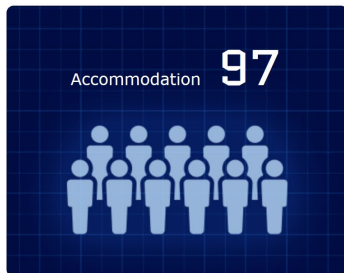
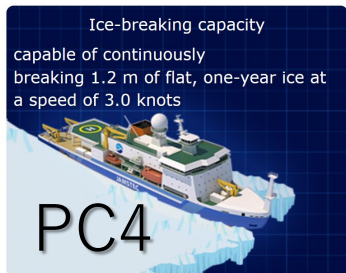
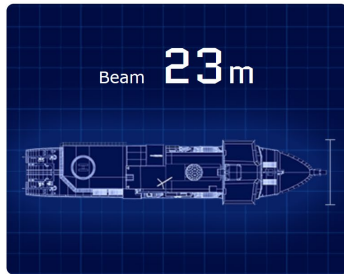
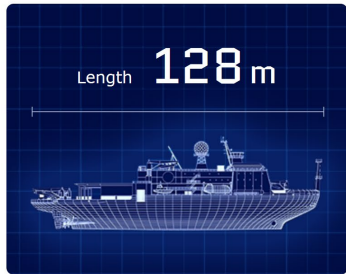
Nov. 2026

Delivery to JAMSTEC

Summer 2027

First Arctic cruise (plan)

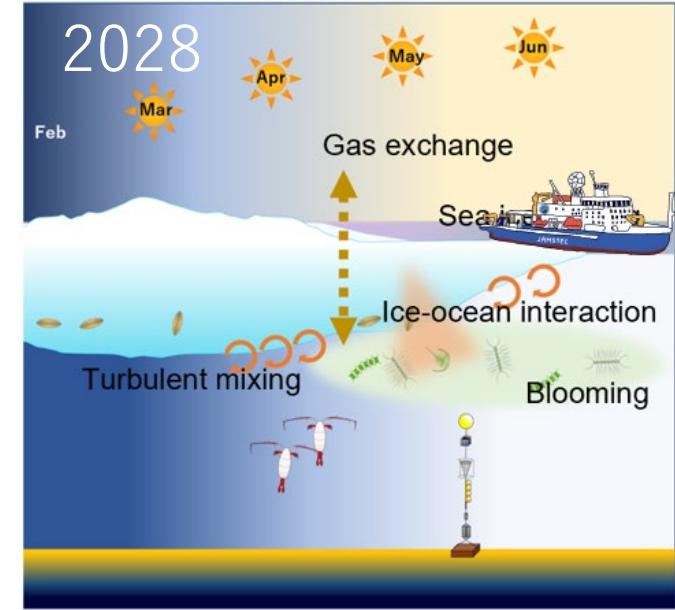
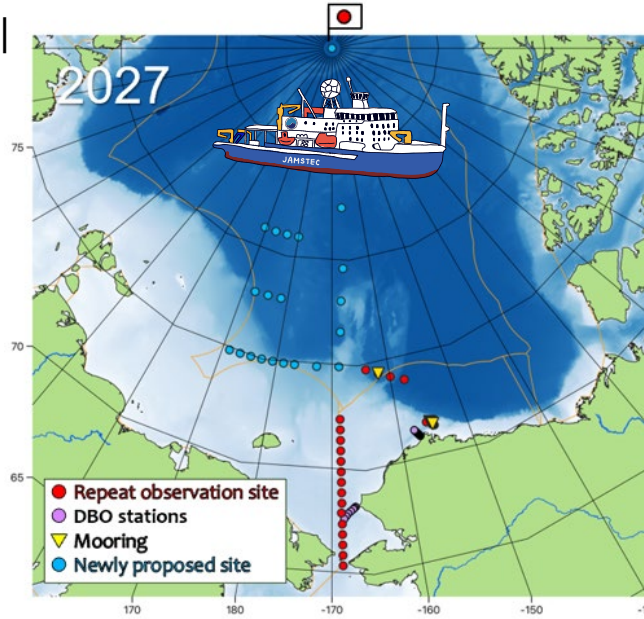
- Arctic research vessel
 - Consider the design of a research vessel for the Arctic as a new international Arctic research platform. with functions to enable participation in international Arctic observation projects using equipment such as autonomous underwater vehicles (AUV).



For cruise planning, we hold the “2nd International workshop on Arctic Ocean observation” in Yokohama, Japan on October 27, 2025.

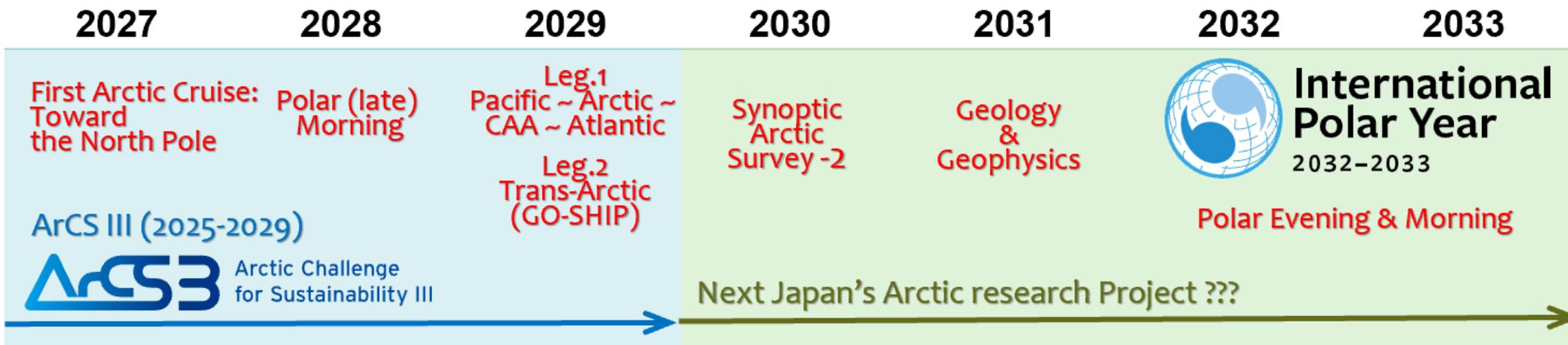


Group photo of 81 participants from 9 countries
(Canada 13, Germany 4, Korea 1, Norway 5, Spain 2, Switzerland 1, UK 3, US 4)



Schematics of Polar Morning

Toward the International Polar Year (2032-2033) ...



ASSW2027 Overview and Introduction to Hakodate, Japan

2026.3.27

ASSW 2027 Local Organizing Committee

Venue Information

Hakodate Civic Hall



■ Access

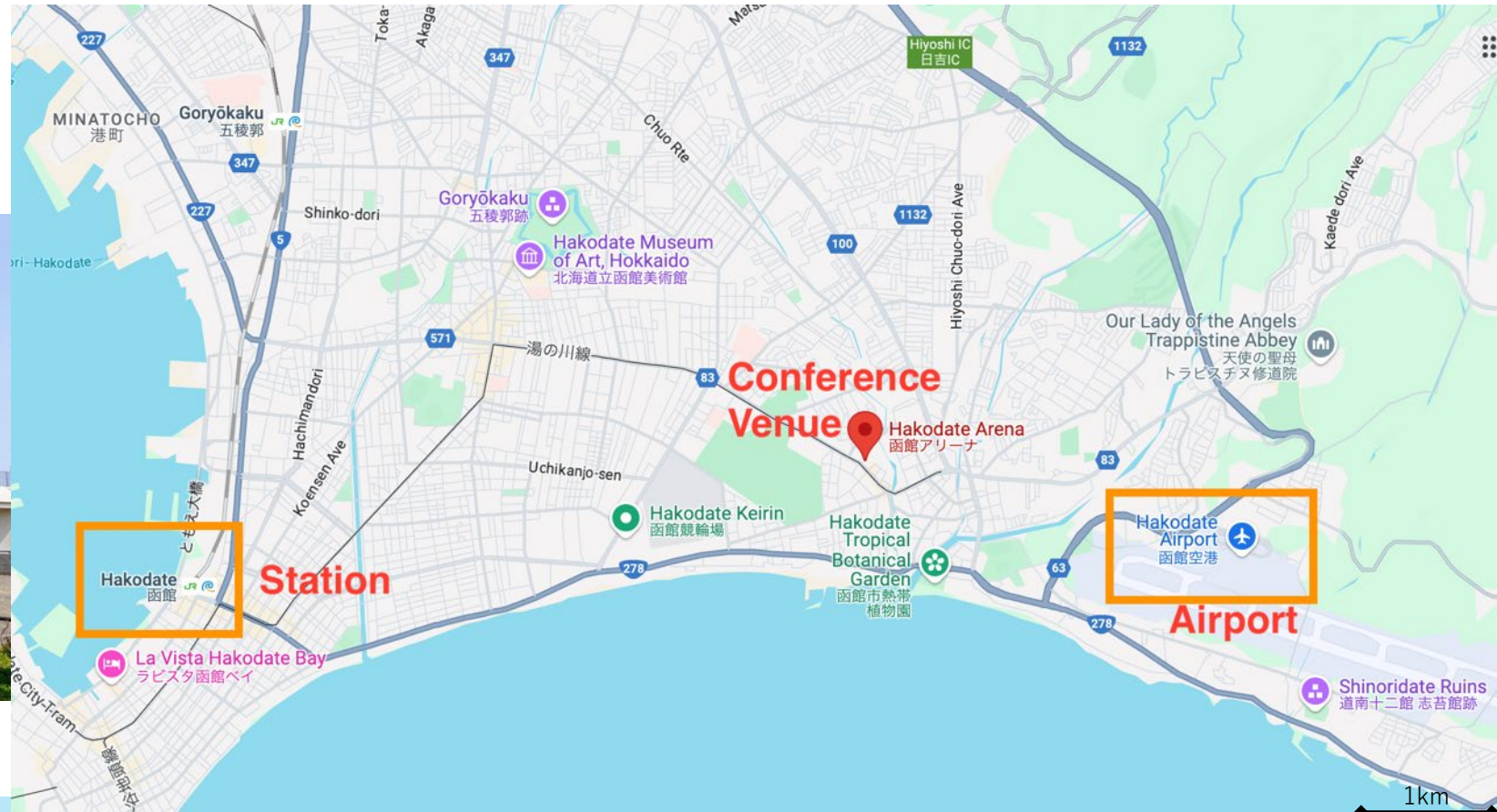
- 40min. from Hakodate Station by Municipal Tramway
- 20min. from Hakodate Airport by Shuttle bus

■ Capacity

- Around 10 meeting rooms secured at both venues, including a spacious area for poster sessions, exhibitions, etc.
- The Hakodate Civic Hall has a 1,370-seat main hall for plenary sessions.



Hakodate Arena



Venue Information

Hakodate Civic Hall , Main hall

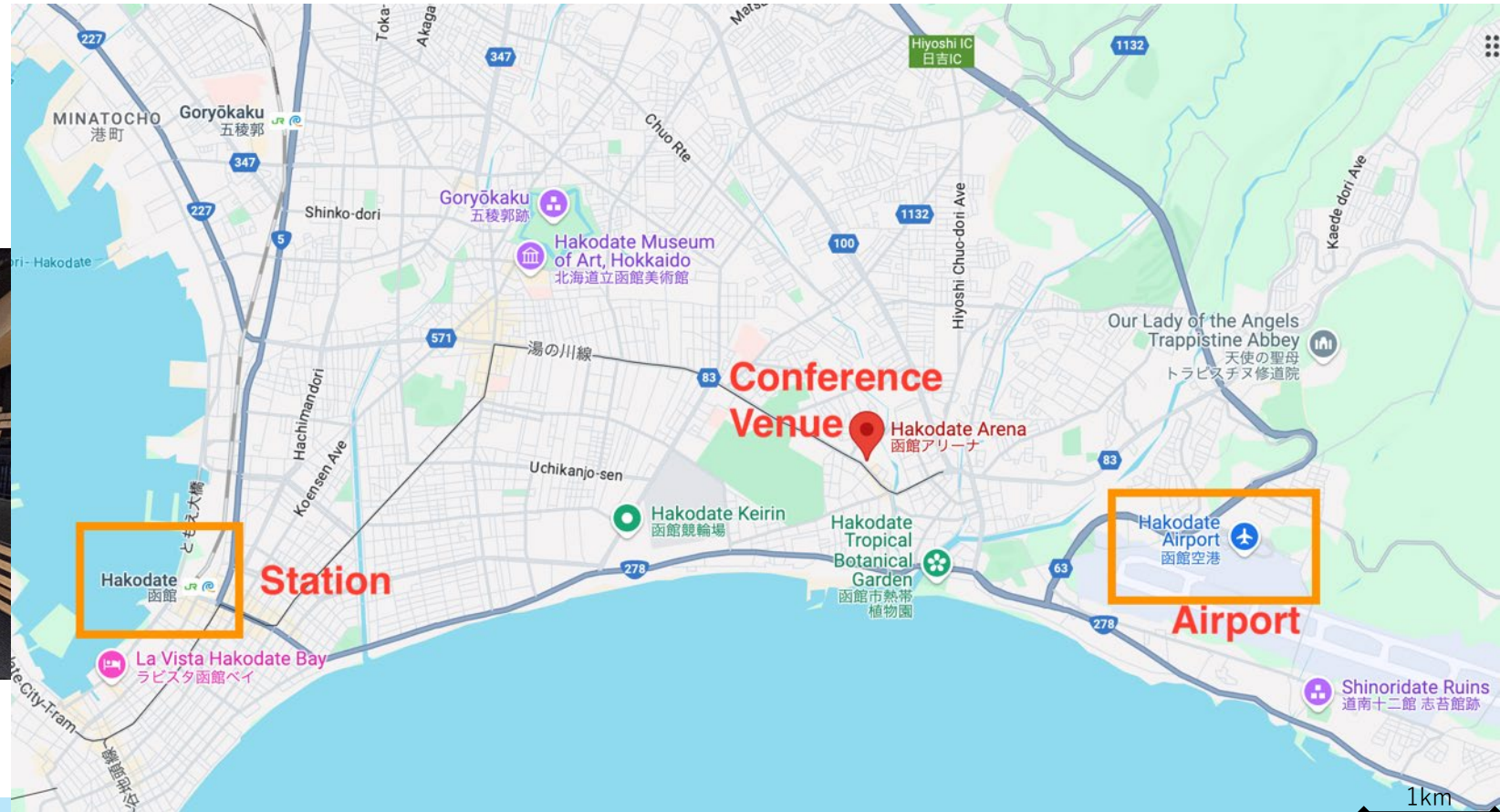


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Hakodate Arena, Main Arena

ASSW2027 Overview

Date	April 11 (Sun) to 20 (Tue), 2027	
Venue	Hakodate Civic Hall (1-32-1 Yukawa-cho, Hakodate City) & Hakodate Arena (1-32-2 Yukawa-cho, Hakodate City)	
Conference Format	Hybrid	
Local Organizers	<p>Science Council of Japan Japan Agency for Marine-Earth Science and Technology, JAMSTEC Hokkaido University National Institute of Polar Research, NIPR Hakodate City Japan Consortium for Arctic Environmental Research, JCAR</p>	
Support / Sponsor	Ministry of Education, Culture, Sports, Science and Technology, MEXT and Others	
Draft Program	<ul style="list-style-type: none"> • Days 1–5: Business and Community Meetings • Days 6–10: Science Symposium (The 9th International Symposium on Arctic Research, ISAR-9) 	
Side Events for ASSW Participants	<ul style="list-style-type: none"> • Tour for Arctic Research Vessel “<i>Mirai II</i>” at Hakodate Port on April 16 (Fri) • Excursion Tour for UPOPOY National Ainu Museum on April 21(Wed) 	



Arctic Research Vessel “*Mirai II*” 13