

第3回北極科学大臣会合に対する ADSの貢献 ～ASM3 Project Databaseの構築～

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北極科学大臣会合 (Arctic Science Ministerial)

- 北極科学大臣会合(ASM)は、北極における研究・観測や主要な社会的課題への対応の推進、関係国間や北極圏に居住する先住民団体との科学協力の更なる促進を目的とした会合です。
- 2016年 第1回は、米オバマ政権末期にアメリカ主導で ワシントンで開催された。

日本に関連する北極の歴史

- 1986年：ソ連ゴルバチョフ書記長による「北極解放」
- 1996年：北極8か国と先住民団体6団体による北極評議会 (AC) 発足
- 2008年：第1回国際北極研究シンポジウムISAR開催
- 2011年：日本：文部科学省 GRENE北極気候変動研究分野開始 (~2015)
- 2013年：日本：ACのオブザーバー承認
- 2015年：日本：ASSW 2015 (北極科学サミット週間；ISAR-4, ICARP-III など) 開催 (富山市)
文部科学省 北極研究推進プロジェクト (ArCS) 開始
内閣府「我が国の北極政策」発表
- 2016年：ASM1開催
- 2020年：日本：文部科学省 北極研究加速プロジェクト (ArCS II) 開始



北極研究の歴史

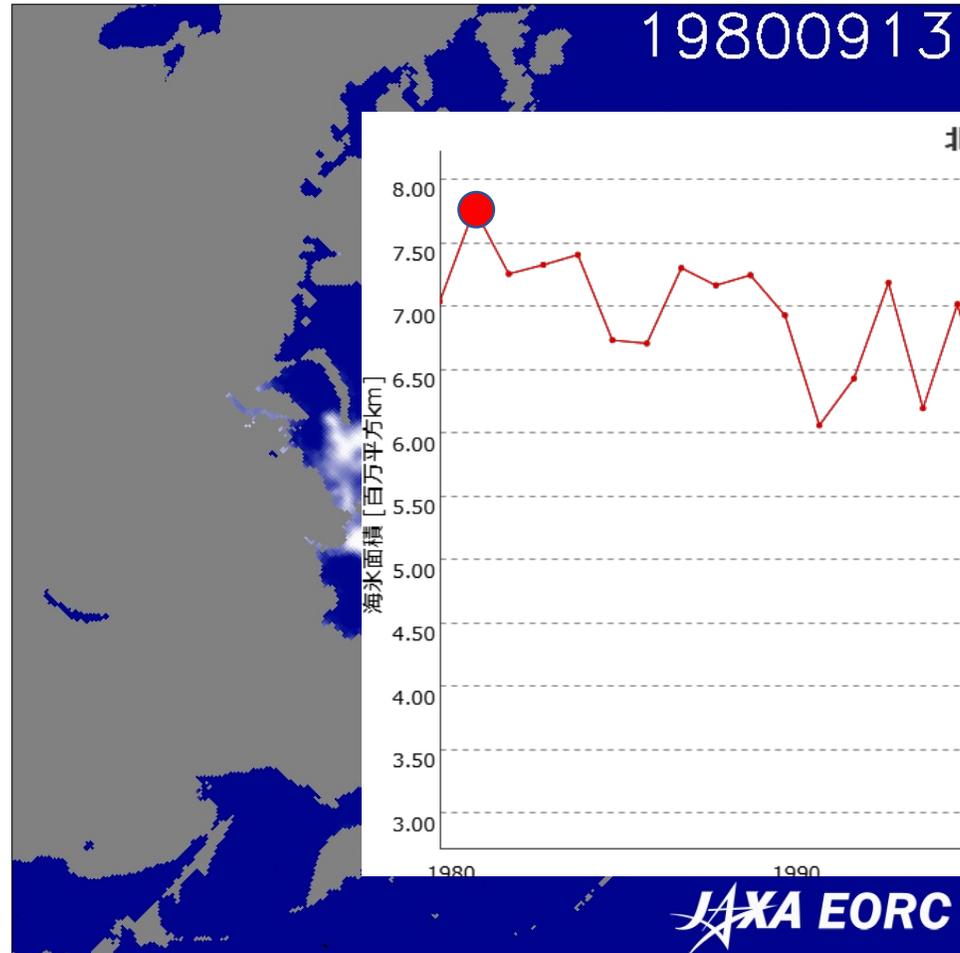
<https://ads.nipr.ac.jp/arcticTimeline/#/timeline>

北極圏の温暖化

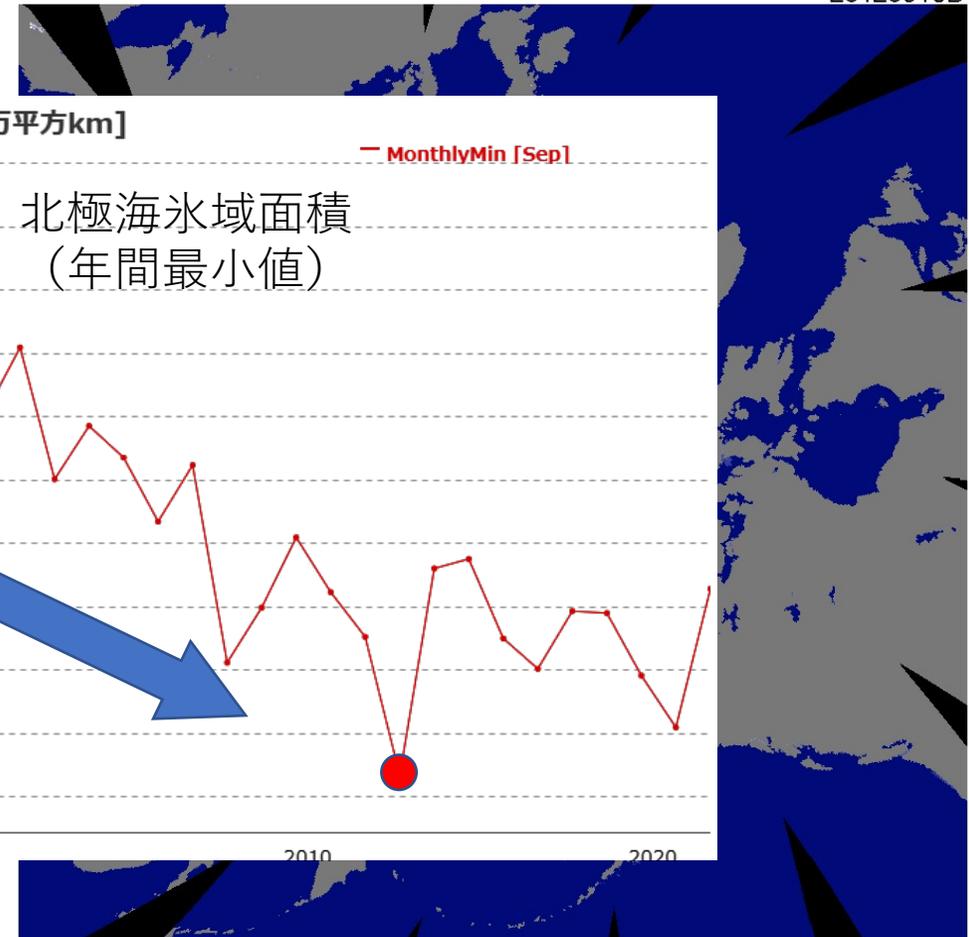
Sea Ice Concentration

AMSR2 Sea Ice Concentration

20120916D



777万km²

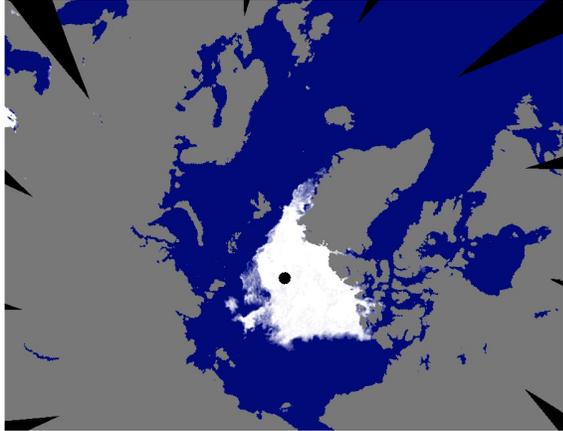


318万km²

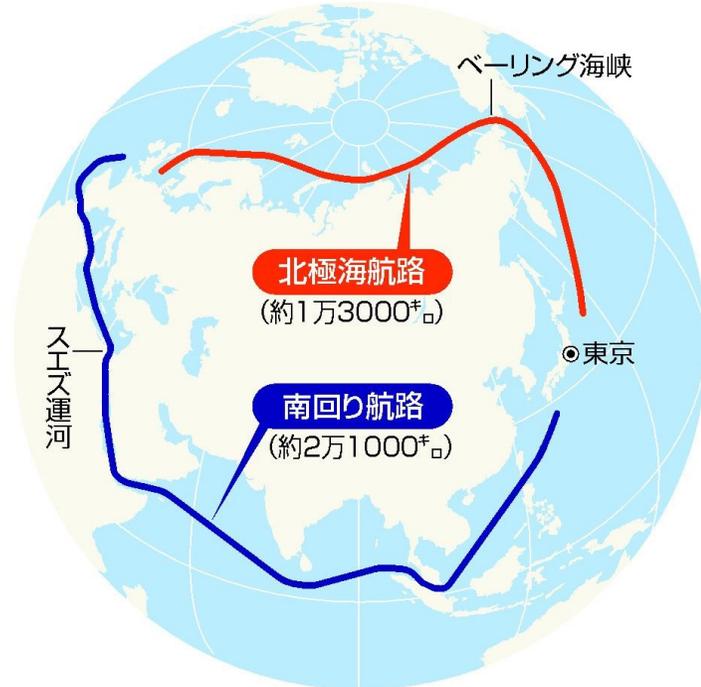
何故北極なのか？

AMSR2 Sea Ice Concentration

20120916D



北極海航路と南回り航路



- 北極圏は世界の他の地域より約3倍速いペースで温暖化が進行
- 地球温暖化に伴う海氷減少で北極圏が「より開かれた海」に変わりつつある
- 新たな航路や資源をめぐる大国間競争が過熱
- **北極海航路**
- 夏季には氷で閉ざされていた海に新たな航路が出現。この北極海航路を使えば、アジアから欧州への航行距離はスエズ運河を抜ける南回り航路の6割に短縮され、輸送コストも大幅に削減
- 航海の安全性確保が喫緊の課題
- **資源問題**
- 北極圏には世界の未発掘の石油の13%、天然ガスの30%が埋蔵。鉱物資源や漁業資源も豊富

第1回北極科学大臣会合(ASM1)

アメリカが主催

- 2016年9月28日（ワシントンDC）
- ASM1のテーマ
 - 北極科学を取り巻く課題とその地域的・全球的影響
 - 北極観測と観測データ共有の強化
 - 北極地域の強靱性と世界的な取組のための北極の科学的理解の促進
 - 北極科学を活かしたSTEM教育（理数科教育）による市民のエンパワーメント
- 参加国（政府）（25）
 - カナダ、中国、デンマーク、フェロー諸島、フィンランド、アイスランド、インド、イタリア、日本、韓国、オランダ、ニュージーランド、ノルウェー、ポーランド、ロシア、シンガポール、スペイン、スウェーデン、スイス、英国、米国 + 欧州連合（EU）
- 先住民団体(6)
 - 北極圏アサバスカ評議会, グイッチン国際評議会, ロシア北方民族協会, イヌイット極域評議会, サーミ評議会, アリュート国際協会



第2回北極科学大臣会合(ASM2)

欧州委員会、フィンランド、ドイツが共同主催

- 2018年10月26日（ベルリン）
- ASM2のテーマ
 - 北極観測の強化・統合化・持続化、北極データへのアクセスの促進、北極研究基盤の共有
 - 北極の変化の地域的および世界的なダイナミクスの理解
 - 北極の環境と社会の脆弱性の評価と回復力の構築
- 参加国（政府）（26）
 - オーストリア、ベルギー、カナダ、中国、デンマーク、フェロー諸島、フィンランド、フランス、ドイツ、英国、グリーンランド、アイスランド、イタリア、日本、韓国、オランダ、ノルウェー、ポーランド、ポルトガル、ロシア、スウェーデン、シンガポール、スイス、スペイン、米国 + 欧州連合（EU）
- 先住民団体(6)
 - 北極圏アサバスカ評議会, グイッチン国際評議会, ロシア北方民族協会, イヌイット極域評議会, サーミ評議会, アリュート国際協会



第3回北極科学大臣会合(ASM3)

アイスランド、日本が共同主催

- 2021年5月8－9日（東京） ← 当初、2020年11月21－22日を予定
- ASM3のテーマ：「持続可能な北極のための知識」
 - 観測：観測ネットワークの構築、データの共有
 - 理解：北極の環境・社会システムの理解と予測能力の向上、これらの変化が地球に与える影響の把握
 - 対応：持続可能な開発の運用、脆弱性と回復力の評価、知識の活用
 - 強化：人材育成、教育、ネットワーク化を通じた次世代への準備；強靱性
- 参加国（政府）（29）
 - カナダ、デンマーク、フェロー諸島（政府）、グリーンランド（政府）、フィンランド、アイスランド、ノルウェー、ロシア、スウェーデン、米国、オーストリア、ベルギー、中国、チェコ共和国、フランス、ドイツ、インド、イタリア、日本、韓国、オランダ、ポーランド、ポルトガル、シンガポール、スペイン、スイス、タイ、マレーシア、英国） + 欧州連合（E U）
- 先住民団体(6)
 - 北極圏アサバスカ評議会、グイッチン国際評議会、ロシア北方民族協会、イヌイット極域評議会、サーミ評議会、アリュート国際協会

基本的にオンラインでの開催
萩生田文部科学大臣をはじめとして
20か国の在京大使館からの来場者





Third Arctic Science Ministerial ASM3

08 – 09 May 2021

Toranomon Hills Forum
Tokyo, Japan

当初、2020年11月21 – 22日を予定



Government of Iceland
Ministry of Education,
Science and Culture

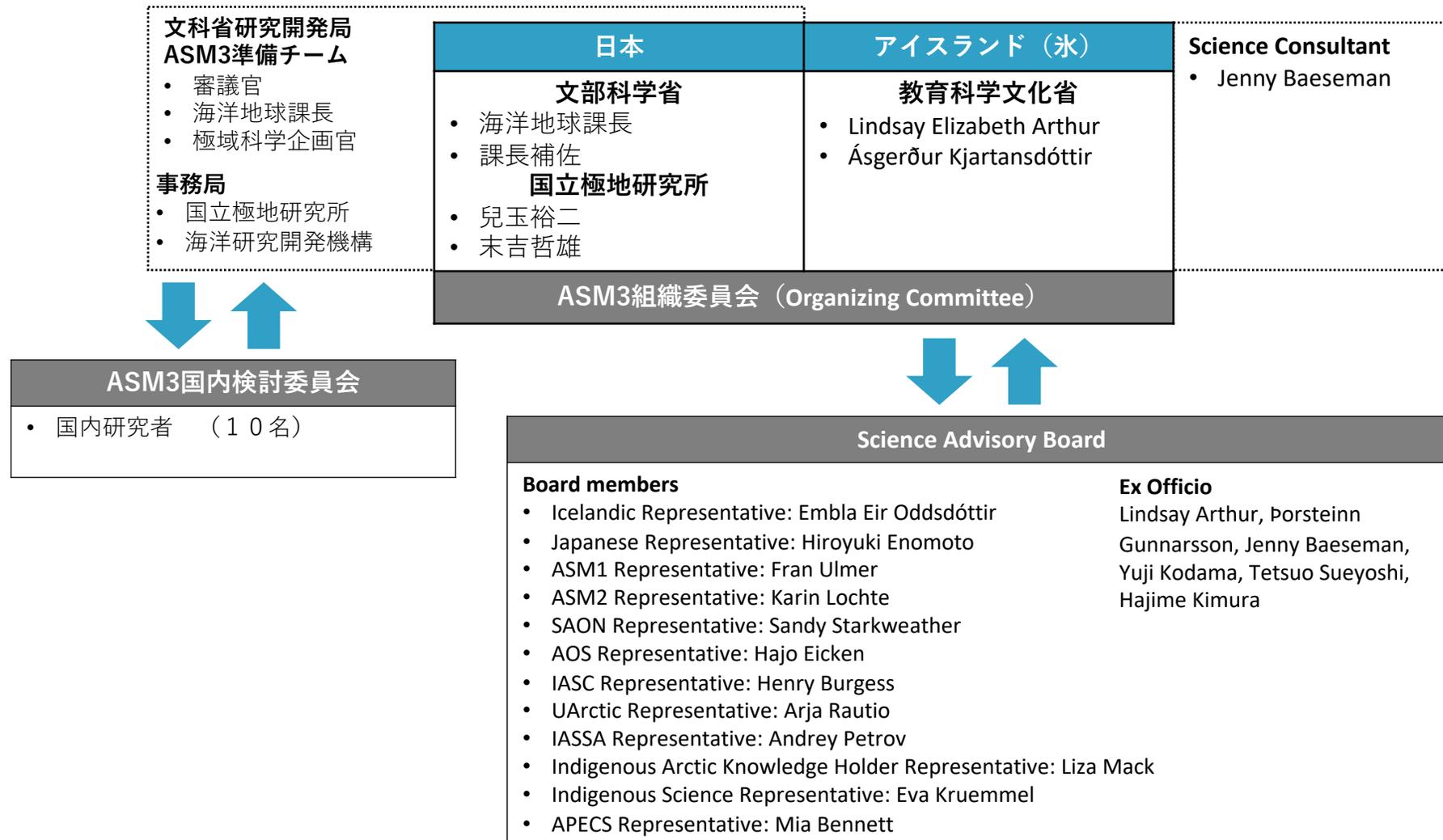


MEXT

MINISTRY OF EDUCATION,
CULTURE, SPORTS,
SCIENCE AND TECHNOLOGY-JAPAN

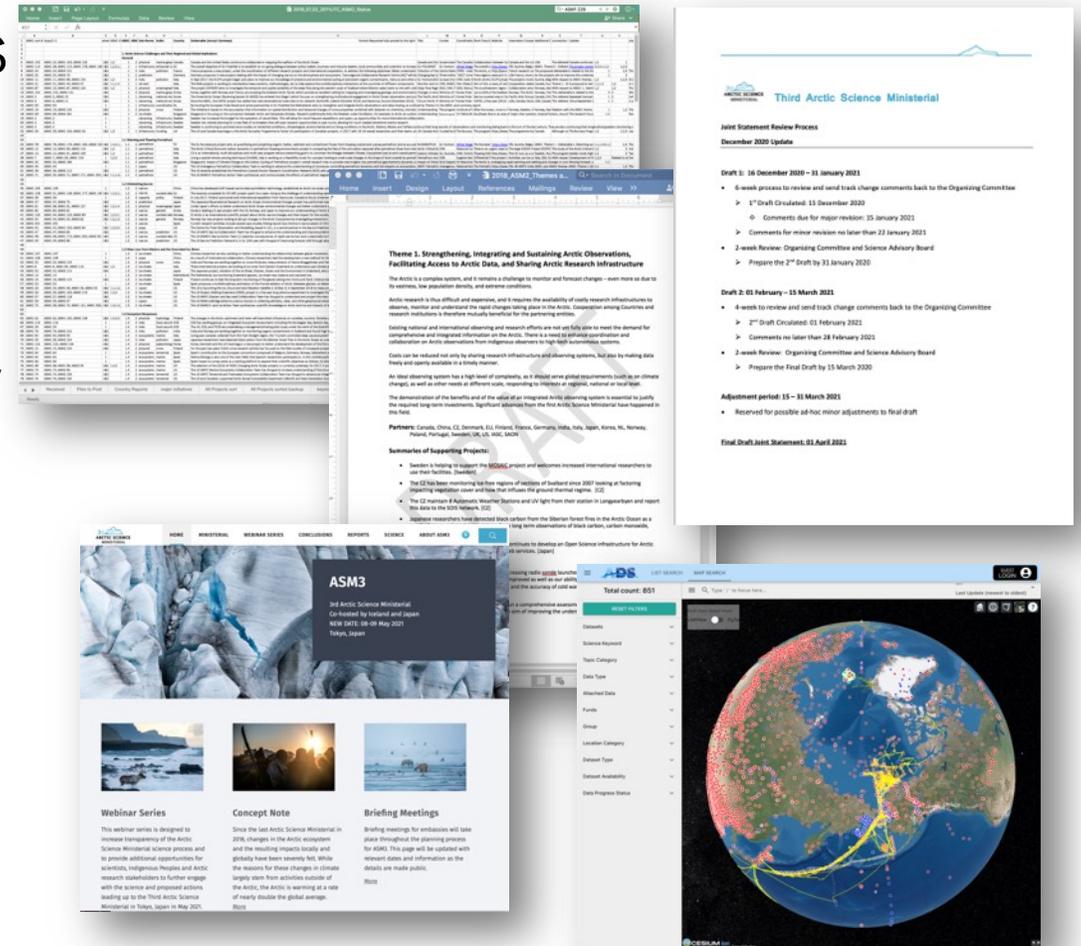


ASM3準備体制



ASM3 Science Process

- Country / Organization Participants
 - Arctic Research Overviews
 - ASM2 Project Updates
 - New Projects in Support of ASM3
 - Collaboration and Cooperation Survey
- Online Feedback Forms
- ASM3 Research Community Workshops (IASC/IASSA/APECS), ISAR-6, AOS



ASM3最終成果

- **Joint Statement of Ministers**
 - https://www.asm3.org/library/Files/ASM3_Joint_Statement.pdf
- **ASM3 Report**
 - https://www.asm3.org/library/Files/ASM3_Final_Report.pdf
 - Science Summary (世界の北極研究の概要)
 - Arctic Research Overview (各国の北極研究、各国 2 ページ)
 - Moving Forward (サイエンスアドバイザリボード (SAB) からの提言)
 - Apendeix
 - 国際学会提言 (ISAR-6, AOS2020, ASSW2020, ICASS X)
- Recordings of the all of **webinar series** (全8回)
 - <https://asm3.org/webinar-series/>
- International **Opportunities** Resources
- **ASM3 Project Database**
 - **ASM3 + ADS (NIPR)**
 - <https://ads.nipr.ac.jp/ASM3DB/>



ASM3 Project Database

参加各国から提出された成果報告に含まれる詳細なプロジェクト情報を集計

- 期間, キーワード ...
- 場所, 共同研究先 (国), 資金源, ASM テーマ, ...

Appendix 2 – Project Deliverables Contributing to the ASM Themes/Goals

Guidelines for submitting project deliverables, updates and new initiatives for ASM3

In the [Joint Statement from ASM2](#), parties agreed on a number of important issues needing stronger collaboration. To map the progress since ASM2, we ask the signatory parties, participating Indigenous Peoples and International Science Organizations, to document their major international activities that have contributed to the goals identified from ASM2.

The information submitted will show where significant activity has occurred, achievements have been accomplished, and what areas may require additional resources for progress. The information will contribute to the ASM3 discussions and research summary report indicating project progress and highlighting opportunities for increased collaboration and support. The report will be provided to ASM3 participants in addition to being accessible on the ASM3 website. The information will also be used as a foundation for a database outlining international Arctic research efforts which will provide a tool for scientists, Indigenous Peoples, regional governments and other stakeholders to monitor progress and identify potential collaborators.

To help focus and simplify input so it can be more efficiently synthesized, information on previously submitted projects (referred to as deliverables for past ASM3s) will be sent back to submitting parties in standardized forms. What is mainly required for updates is to verify information is still current, include a short statement on progress since ASM3, and help to categorize (via check boxes) project efforts. The following is an example of the questions that will be asked.

Update on Deliverables/Projects Submitted to ASM2

- Project Title
- Funding Program(s) and/or Organization(s)
- Coordinating organization(s)
- Name of main contact person
- Contact email address
- Summary of Project/Project Goal (300 character limit)
- Description of the deliverable/project (3000 character limit)
- Website
- Duration of Deliverable/Project (YYYY to YYYY)
- Personnel/Staff Involved
Note: The purpose of this question is to try to understand the size of the project. In comparing across countries and currencies, the number of people can be more reflective of this than comparing budgets. Please include researchers, technicians, and project managers.
- What is the diversity of project personnel/Staff (e.g. gender, career stage, Indigenous representation) (1500 character limit):

- Stage of Project Development

<input type="checkbox"/> Proposed	<input type="checkbox"/> Final Stages
<input type="checkbox"/> Early Planning	<input type="checkbox"/> Finished
<input type="checkbox"/> On going	
- Next steps for the project if in the proposed, early planning, or ongoing stages (1500 character limit).
- Major progress/development(s) since ASM2 (1500 character limit)
Note: For national projects contributing to major international projects such as SARN, MOSAIC, and YOPP, please describe your countries direct contributions/progress.
- Are there opportunities for new collaborators to join? If so, please describe them.
- Collaborating Countries/Governments. (Choose all that apply)

<input type="checkbox"/> Austria	<input type="checkbox"/> Greenland	<input type="checkbox"/> Russia
<input type="checkbox"/> Belgium	<input type="checkbox"/> Iceland	<input type="checkbox"/> Singapore
<input type="checkbox"/> Canada	<input type="checkbox"/> India	<input type="checkbox"/> Spain
<input type="checkbox"/> China	<input type="checkbox"/> Italy	<input type="checkbox"/> Sweden
<input type="checkbox"/> Czech Republic	<input type="checkbox"/> Japan	<input type="checkbox"/> Switzerland
<input type="checkbox"/> Denmark	<input type="checkbox"/> Netherlands	<input type="checkbox"/> UK
<input type="checkbox"/> Faroe Islands	<input type="checkbox"/> Norway	<input type="checkbox"/> USA
<input type="checkbox"/> Finland	<input type="checkbox"/> Poland	<input type="checkbox"/> EU
<input type="checkbox"/> France	<input type="checkbox"/> Portugal	<input type="checkbox"/> Other(s) _____
<input type="checkbox"/> Germany	<input type="checkbox"/> Republic of Korea	
- Location of Project (Choose all that apply)

<input type="checkbox"/> Global	<input type="checkbox"/> Eastern Siberia
<input type="checkbox"/> Polar in General	<input type="checkbox"/> Western Siberia
<input type="checkbox"/> Arctic in General	<input type="checkbox"/> Arctic Ocean in General
<input type="checkbox"/> Sub-Arctic in General	<input type="checkbox"/> Central Arctic Ocean
<input type="checkbox"/> Alaska in General	<input type="checkbox"/> Bering Sea
<input type="checkbox"/> Alaskan Arctic	<input type="checkbox"/> Chukchi Sea
<input type="checkbox"/> Canadian Arctic in General	<input type="checkbox"/> Beaufort Sea
<input type="checkbox"/> Yukon	<input type="checkbox"/> Hudson Bay
<input type="checkbox"/> Northwest Territories	<input type="checkbox"/> Labrador Sea
<input type="checkbox"/> Nunavut	<input type="checkbox"/> Davis Strait
<input type="checkbox"/> Nunavik	<input type="checkbox"/> Baffin Bay
<input type="checkbox"/> Labrador	<input type="checkbox"/> Denmark Strait
<input type="checkbox"/> Greenland	<input type="checkbox"/> Norwegian Sea
<input type="checkbox"/> Icelandic in General	<input type="checkbox"/> Greenland Sea
<input type="checkbox"/> Faroe Islands	<input type="checkbox"/> Barents Sea
<input type="checkbox"/> Norway in General	<input type="checkbox"/> Kara Sea
<input type="checkbox"/> Norwegian Arctic	<input type="checkbox"/> Laptev Sea
<input type="checkbox"/> Svalbard	<input type="checkbox"/> East Siberian Sea
<input type="checkbox"/> Sweden in General	<input type="checkbox"/> Sea of Okhotsk
<input type="checkbox"/> Swedish Arctic	<input type="checkbox"/> North Pacific Ocean
<input type="checkbox"/> Finland in General	<input type="checkbox"/> North Atlantic Ocean
<input type="checkbox"/> Finnish Arctic	<input type="checkbox"/> No Geographic Orientation
<input type="checkbox"/> Russian Arctic in General	<input type="checkbox"/> Other Regions _____

- Stage of Project Development

<input type="checkbox"/> Proposed
<input type="checkbox"/> Early Planning
<input checked="" type="checkbox"/> On Going
<input type="checkbox"/> Final Stages
<input type="checkbox"/> Finished
- Next steps for the project if in the proposed, early planning or ongoing stages (1500 character limit):
Write: EDU-ARCTIC PL in the next year we are planning to organise series of webinars and lectures, second edition of the Arctic competition for Polish society, less expeditions to Svalbard, Polar Festival and 3d mapping (multimedia presentation about polar research.
Write: EDU-ARCTIC2 we are planning preparation of 40 educational packages dedicated to polar topics (to be used by secondary
- Major progress/development(s) since ASM2 (1500 character limit):
Major developments consist of:
- organisation of 60 webinars for 2441 participants;
- organisation of 6 open lectures, 3 lectures for PhD age universities, 7 workshops for children universities for 2678 participants;
- elaboration of 20 popular science articles and 10 expert videos dedicated to polar regions and scientific investigations;
- organisation of Arctic competition for 3 age categories.
Additionally, preparation of the proposal to EEA call succeeded in granting EDU-ARCTIC2, which started in 2020.
- Are there opportunities for new collaborators to join? If so, please describe them. (1500 character limit)
In the ongoing projects the partnership is fixed and new partners cannot join so, please describe them. (1500 character limit)
In collaboration or sharing the experience and educational materials are very welcome to contact us in order to establish new cooperation and initiate new educational initiatives in this field.
- Collaborating Countries/Governments (Choose all that apply)

<input type="checkbox"/> Austria	<input type="checkbox"/> Greenland	<input type="checkbox"/> Russia
<input type="checkbox"/> Belgium	<input type="checkbox"/> Iceland	<input type="checkbox"/> Singapore
<input type="checkbox"/> Canada	<input type="checkbox"/> India	<input type="checkbox"/> Spain
<input type="checkbox"/> China	<input type="checkbox"/> Italy	<input type="checkbox"/> Sweden
<input type="checkbox"/> Czech Republic	<input type="checkbox"/> Japan	<input type="checkbox"/> Switzerland
<input type="checkbox"/> Denmark	<input type="checkbox"/> Netherlands	<input type="checkbox"/> UK
<input type="checkbox"/> Faroe Islands	<input type="checkbox"/> Norway	<input type="checkbox"/> USA
<input type="checkbox"/> Finland	<input type="checkbox"/> Poland	<input type="checkbox"/> EU
<input type="checkbox"/> France	<input type="checkbox"/> Portugal	<input type="checkbox"/> Other(s): _____
<input type="checkbox"/> Germany	<input type="checkbox"/> Republic of Korea	
- Location of Project (Choose all that apply)

<input type="checkbox"/> Global	<input type="checkbox"/> Norway in General	<input type="checkbox"/> Labrador Sea
<input type="checkbox"/> Polar in General	<input type="checkbox"/> Norwegian Arctic	<input type="checkbox"/> Davis Strait
<input type="checkbox"/> Arctic in General	<input type="checkbox"/> Svalbard	<input type="checkbox"/> Baffin Bay
<input type="checkbox"/> Sub-Arctic in General	<input type="checkbox"/> Sweden in General	<input type="checkbox"/> Denmark Strait
<input type="checkbox"/> Alaska in General	<input type="checkbox"/> Swedish Arctic	<input type="checkbox"/> Norwegian Sea
<input type="checkbox"/> Alaskan Arctic	<input type="checkbox"/> Finland in General	<input type="checkbox"/> Greenland Sea
<input type="checkbox"/> Canadian Arctic in General	<input type="checkbox"/> Finnish Arctic	<input type="checkbox"/> Barents Sea
<input type="checkbox"/> Yukon	<input type="checkbox"/> Russian Arctic in General	<input type="checkbox"/> Kara Sea
<input type="checkbox"/> Northwest Territories	<input type="checkbox"/> Eastern Siberia	<input type="checkbox"/> Laptev Sea
<input type="checkbox"/> Nunavut	<input type="checkbox"/> Western Siberia	<input type="checkbox"/> East Siberian Sea
<input type="checkbox"/> Nunavik	<input type="checkbox"/> Arctic Ocean in General	<input type="checkbox"/> Sea of Okhotsk
<input type="checkbox"/> Labrador	<input type="checkbox"/> Central Arctic Ocean	<input type="checkbox"/> North Pacific Ocean
<input type="checkbox"/> Greenland	<input type="checkbox"/> Bering Sea	<input type="checkbox"/> North Atlantic Ocean
<input type="checkbox"/> Icelandic in General	<input type="checkbox"/> Ireland in General	<input type="checkbox"/> No Geographic Orientation
<input type="checkbox"/> Faroe Islands	<input type="checkbox"/> Chukchi Sea	<input type="checkbox"/> Beaufort Sea
	<input type="checkbox"/> Barents Sea	<input type="checkbox"/> Hudson Bay

- Keywords describing the Deliverable/Project (Choose all that apply)

<input type="checkbox"/> adaptation	<input type="checkbox"/> geophysics	<input type="checkbox"/> permafrost
<input type="checkbox"/> art	<input checked="" type="checkbox"/> geophysics	<input type="checkbox"/> policy
<input type="checkbox"/> atmosphere	<input type="checkbox"/> geopolitics	<input type="checkbox"/> pollution
<input type="checkbox"/> atmospheric sciences	<input checked="" type="checkbox"/> glaciers	<input type="checkbox"/> prediction
<input type="checkbox"/> biodiversity	<input type="checkbox"/> global	<input type="checkbox"/> remote sensing/GIS
<input type="checkbox"/> biology	<input type="checkbox"/> greenhouse gases	<input type="checkbox"/> resilience
<input type="checkbox"/> capacity building	<input type="checkbox"/> history	<input type="checkbox"/> resources
<input type="checkbox"/> carbon	<input type="checkbox"/> human & health sciences	<input type="checkbox"/> satellites
<input type="checkbox"/> change	<input type="checkbox"/> humanities	<input checked="" type="checkbox"/> sea ice
<input checked="" type="checkbox"/> climate	<input type="checkbox"/> ice sheets	<input type="checkbox"/> snow
<input type="checkbox"/> collaboration	<input type="checkbox"/> Indigenous Knowledge	<input type="checkbox"/> social sciences
<input checked="" type="checkbox"/> communication	<input type="checkbox"/> Indigenous Peoples	<input type="checkbox"/> society
<input type="checkbox"/> community	<input type="checkbox"/> industry	<input type="checkbox"/> space physics
<input type="checkbox"/> community driven	<input type="checkbox"/> infrastructure	<input type="checkbox"/> stakeholders
<input type="checkbox"/> coordination	<input type="checkbox"/> instrument development	<input type="checkbox"/> standardize
<input type="checkbox"/> cryosphere	<input type="checkbox"/> knowledge	<input type="checkbox"/> subsistence (activities)
<input type="checkbox"/> culture	<input type="checkbox"/> land	<input type="checkbox"/> sustainability
<input type="checkbox"/> data management	<input type="checkbox"/> languages	<input type="checkbox"/> technology
<input type="checkbox"/> disease	<input type="checkbox"/> law	<input type="checkbox"/> tourism
<input type="checkbox"/> ecology	<input type="checkbox"/> mapping	<input type="checkbox"/> vulnerability
<input type="checkbox"/> economic development	<input type="checkbox"/> marine	<input type="checkbox"/> water security
<input checked="" type="checkbox"/> ecosystems	<input type="checkbox"/> mitigation	<input checked="" type="checkbox"/> weather
<input type="checkbox"/> education	<input type="checkbox"/> modeling	<input type="checkbox"/> well-being
<input type="checkbox"/> fisheries	<input checked="" type="checkbox"/> monitoring	<input checked="" type="checkbox"/> wildlife
<input type="checkbox"/> food security	<input type="checkbox"/> observation	<input type="checkbox"/> Other:
<input type="checkbox"/> forecasts	<input type="checkbox"/> oceanography	
<input type="checkbox"/> freshwater	<input checked="" type="checkbox"/> outreach	
- Does the project include (Choose all that apply):

<input checked="" type="checkbox"/> Natural sciences	<input type="checkbox"/> Indigenous Knowledge	<input checked="" type="checkbox"/> Education/Capacity Building
<input type="checkbox"/> Social sciences	<input type="checkbox"/> Community driven research/monitoring	<input checked="" type="checkbox"/> Outreach
<input type="checkbox"/> Arts & Humanities		
- If this Deliverable/Project was submitted for ASM1, which theme does it most closely relate to? (Choose one)

Identifying Arctic Science Challenges and Their Regional and Global Implications

Strengthening and Integrating Arctic Observations and Data Sharing

Applying Expanded Scientific Understanding of the Arctic to Build Regional Resilience and to Shape Global Responses

Empowering Citizens through Science Technology, Engineering, and Mathematics (STEM) Education Leveraging Arctic Science

Not submitted to ASM1 / Do not know

ASM3 Project Database

<https://ads.nipr.ac.jp/ASM3DB/>

- 提出されたすべてのプロジェクト成果をデータベース化
 - 現在進行中のプロジェクトに簡単にアクセスできる
 - 国際共同研究を推進するツール

This screenshot shows the search interface of the ASM3 Project Database. On the left, there is a sidebar with 'RESET FILTERS' and a list of applied filters: 'Location of Project' (Global, Arctic, Polar), 'Update / New', 'Submit Country / Organization', 'ASM1 Theme', 'ASM2 Goals', 'ASM2 Contribution', 'ASM3 Theme', 'Ministerial Result', 'Collaboration', 'Location of Project', 'Keywords', 'Project Include', 'Personnel/Staff Involved', and 'Stage of Project Development'. The main area features a globe with colored overlays representing project locations. On the right, a list of project entries is visible, including '[ASM3_New_001] Assessment of Arctic Climate Change and its Impacts', '[ASM3_New_002] Assessment of Arctic Contaminants and Human Health Issues', and '[ASM3_New_003] INTERACT Fieldwork Planning Handbook and INTERACT Practical Field Guide'.

This screenshot shows a list of project results from the ASM3 Project Database. The total count is 434. The list includes the following entries:

- [ASM3_New_001] Assessment of Arctic Climate Change and its Impacts**
Submit Country / Organization: AMAP
Collaboration: Canada / Denmark / Faroe Islands / Finland / Greenland / Iceland / Norway / Russia / Sweden / United States
Location of Project: Arctic General
Keywords: climate
Duration of Project: 2019 - 2021
Stage of Project Development: On Going
- [ASM3_New_002] Assessment of Arctic Contaminants and Human Health Issues**
Submit Country / Organization: AMAP
Collaboration: Canada / Denmark / Faroe Islands / Finland / Germany / Greenland / Iceland / Italy / The Netherlands / Norway / Russia / Sweden / United States
Location of Project: Arctic General
Keywords: atmosphere / atmospheric sciences / carbon / change / climate / cryosphere / greenhouse gases / monitoring / pollution
Duration of Project: 2019 - 2021
Stage of Project Development: On Going
- [ASM3_New_003] INTERACT Fieldwork Planning Handbook and INTERACT Practical Field Guide**
Submit Country / Organization: APECS
Collaboration: Denmark / Germany / Norway
Location of Project: Arctic General
Keywords: capacity building / communication / education / infrastructure / knowledge / fieldwork
Duration of Project: 2017 - 2019
Stage of Project Development: Finished
- [ASM3_New_004] MOSAiC School**
Submit Country / Organization: APECS
Location of Project: Arctic General
Keywords: climate / collaboration / communication / education / sea ice

This screenshot shows the details of a project in the ASM3 Project Database. The 'Stage of Project Development' is 'On Going'. It includes the following information:

- Next steps for the project if in the proposed, early planning, or ongoing stages.**
The Arctic Data Committee is moving forward with recommendations and projects from its recently Third Polar Data Forum - <https://polar-data-forum.org/>
- Are there opportunities for new collaborators to join? If so, please describe them.**
Yes! The ACC is very much open for any of those interested to join. Please contact the leadership for more information. Interested people are also encouraged to join the PolarData email list <https://osidc.org/malman/listinfo/polardata>
- Collaborating Countries/Governments.**
Canada / China / Finland / Germany / Iceland / Italy / Japan / The Netherlands / Norway / Republic of Korea / Spain / Sweden / United States / EU / WMO / IEEE / ICES / Other
- Location of Project**
Global / Polar / Arctic General / Sub-Arctic General / Alaska General / Alaskan Arctic / Canadian Arctic General / Yukon / Northwest Territories / Nunavut / Nunavik / Labrador / Greenland / Iceland General / Icelandic Arctic / Faroe Islands / Norway General / Norwegian Arctic / Svalbard / Sweden General / Swedish Arctic / Finland General / Finnish Arctic / Russian Arctic General / Eastern Siberia / Western Siberia / Arctic Ocean General / Central Arctic Ocean / Bering Sea / Chukchi Sea / Beaufort Sea / Hudson Bay / Labrador Sea / Davis Strait / Baffin Bay / Denmark Strait / Norwegian Sea / Greenland Sea / Barents Sea / Kara Sea / Laptev Sea / East Siberian Sea / Sea of Okhotsk / North Pacific Ocean / North Atlantic Ocean / No Geographic Orientation
- Keywords describing the Deliverable/Project**
data management / monitoring / observation / standardize
- Does the project include**
Natural sciences / Social sciences / Indigenous Knowledge / Community-driven research/monitoring / Education/Capacity Building

ASM3 Project Database

提出された情報のまとめ:

- Total Submitted :**434**
- Project Updates from ASM2 :**177**
- New Project for ASM3 :**257**

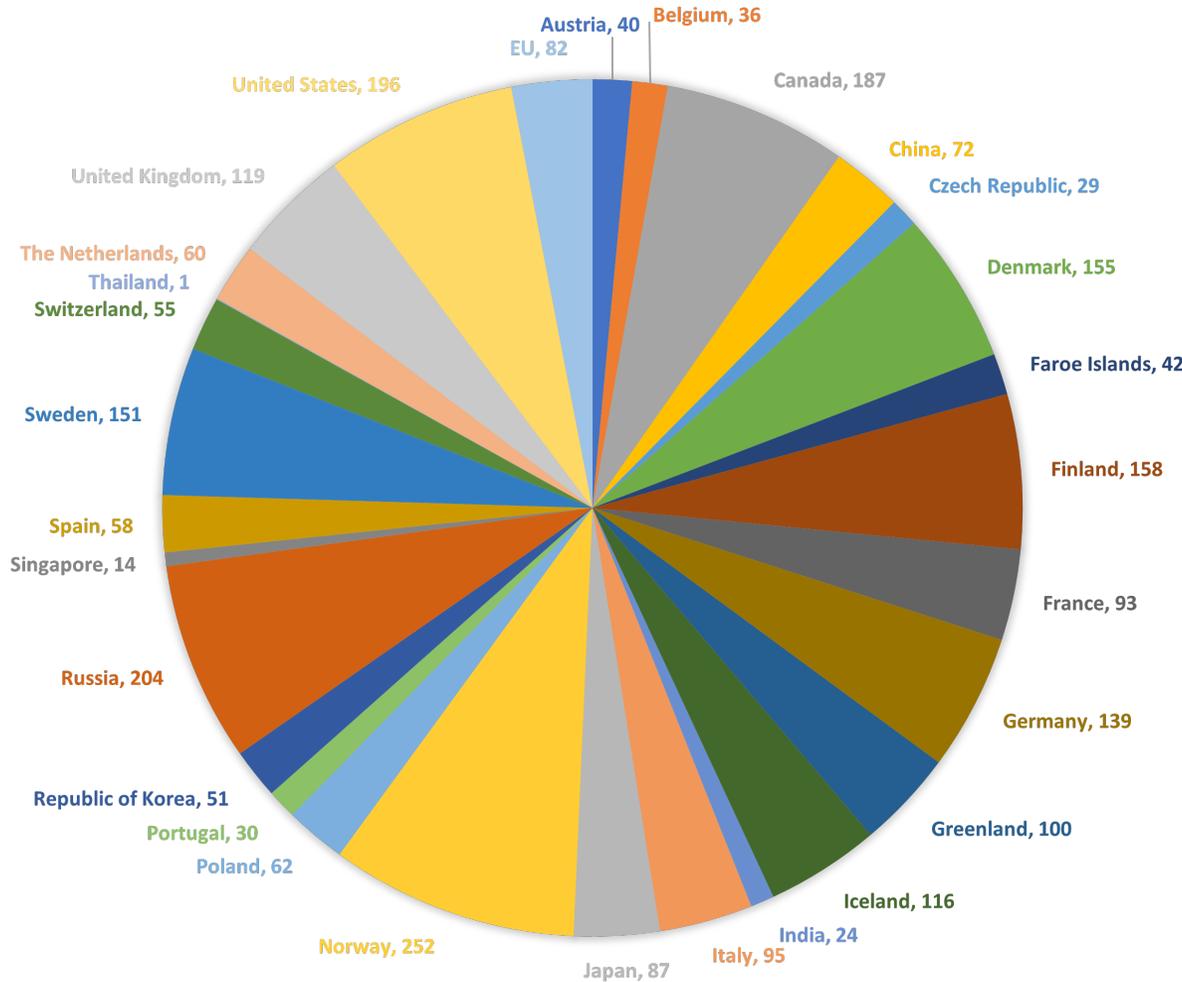
Country	Project Updates	New Projects	Total Submitted
Canada	10	4	14
China	13	1	14
Czech Republic	0	13	13
Denmark	7	12	19
Finland	8	2	10
France	3	1	4
Germany	5	4	9
Iceland	0	19	19
India	5	0	5
Italy	14	10	24
Japan	12	19	31
The Netherlands	2	2	4
Norway	18	28	46
Poland	3	0	3
Portugal	3	1	4
Republic of Korea	7	0	7
Russia	0	64	64
Singapore	7	2	9
Spain	5	7	12
Switzerland	0	1	1
Thailand	-	1	1
UK	4	10	14
USA	18	18	36
EU	16	9	25

Indigenous Organizations	Project Updates Submitted	New Projects Submitted	Total Submitted
ICC	4	0	4
Saami Council	4	0	4

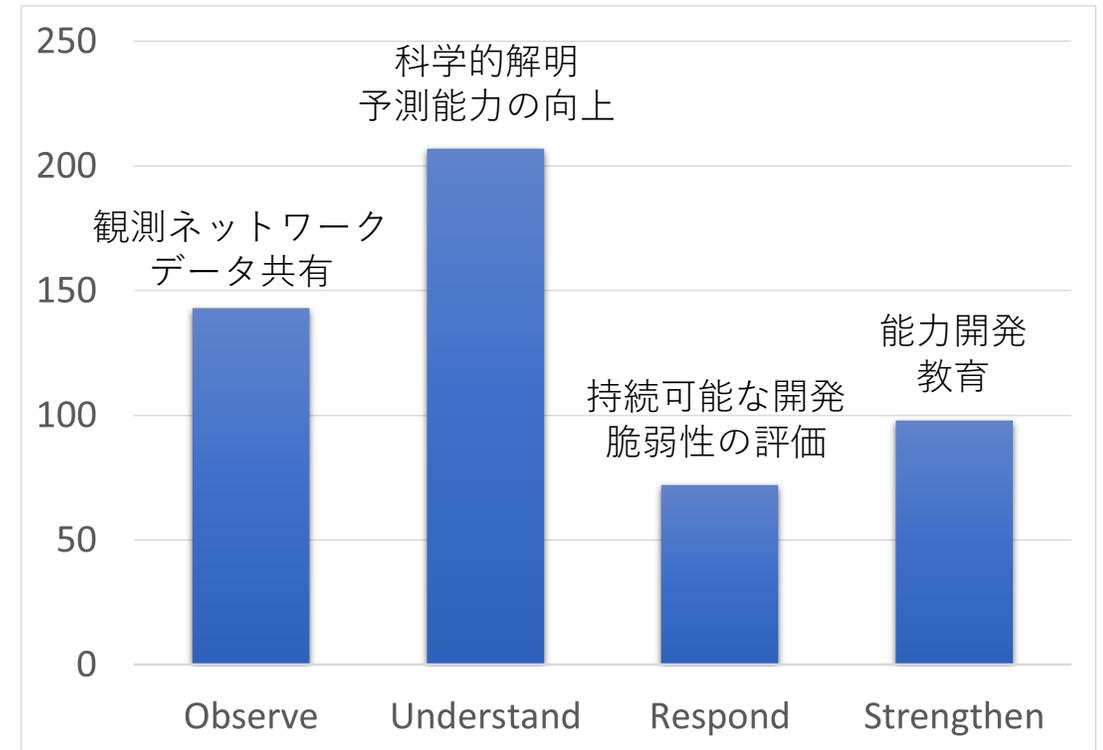
International Organizations	Project Updates Submitted	New Projects Submitted	Total Submitted
AMAP	-	2	2
APECS	0	2	2
CAFF	-	4	4
GEO	0	1	1
IASC	1	5	6
IASSA	2	3	5
ICES-PICES	2	0	2
INTERACT	1	0	1
PEI	-	3	3
SAON	0	1	1
SDWG	0	6	6
UArctic	1	0	1
UNEP	1	1	2
WMO	0	1	1

Total Submitted	177	257	434
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ASM3 Project Database



ASM3に提出されたプロジェクトで各国の共同プロジェクト数



提出したプロジェクトのASM3テーマ毎のプロジェクト数

まとめ

- ADSではアジア初となる第3回北極科学大臣会合（ASM3）へ、ASM3 Project Databaseを構築することで貢献した。
 - 北極で行われているプロジェクトの俯瞰が可能に
 - 各国の協力体制の可視化
 - 観測地域の空白域の抽出
 - 新規の観測の協力体制構築の推進
- ASM4 （開催国：ロシア・フランス）2023年
 - 要望があれば、
 - 我々は協力したいが、・・・

<https://ads.nipr.ac.jp/ASM3DB/>