

NSF Report to the UNOLS AICC

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https://www.nsf.gov/geo/opp/arctic/res_log_sup.jsp

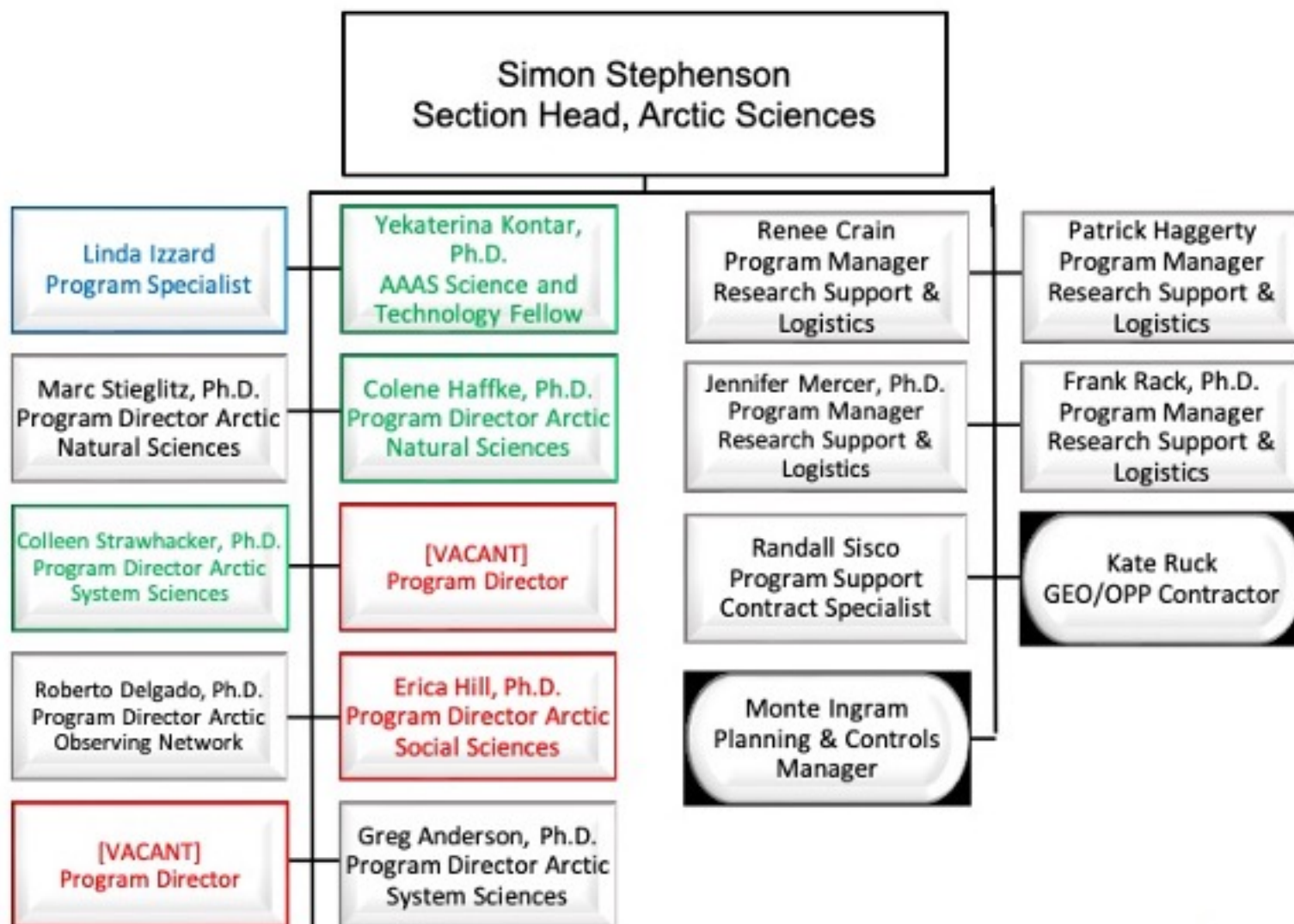


NSF Budget Update

Appropriations	FY20	FY21
Research & Related Activities:	\$ 6,737 M	\$ 6,910 M
Education and Human Resources:	\$ 940 M	\$ 968 M
Major Research Equipment & Facilities Construction (MREFC):	\$ 243 M	\$ 241 M
Other (Agency Operations & Award Management, OIG, NSB):	<u>\$ 358 M</u>	<u>\$ 346 M</u>
NSF Total:	\$ 8,278 M	\$ 8,487 M



Office of Polar Programs - Arctic Sciences Section



Office of Polar Programs - Arctic Sciences Section

Program Officers

Arctic Natural Sciences (ANS): Colene Haffke*, Marc Stieglitz

Arctic Observing Network (AON): Roberto Delgado

Arctic Social Sciences Program (ASSP): Erica Hill*

Arctic System Science (ARCSS): Greg Anderson, Colleen Strawhacker

Paleo Perspectives on Climate Change (P2C2): Frank Rack

Polar Cyberinfrastructure: Allen Pope*

Research Support and Logistics (RSL): Renee Crain, Pat Haggerty,
Jennifer Mercer, Frank Rack

Polar Education: Lisa Rom

*new to Arctic Sciences in the past year

AAAS Fellow: Katia Kontar

<https://www.nsf.gov/geo/opp/arctic/index.jsp>



Arctic Research Opportunities (NSF 21-516)

NSF Arctic Sciences: Programs and Priorities Under NSF 21-516

Arctic Natural Sciences (ANS) investigations to advance understanding of Arctic *processes*.

Arctic Observing Network (AON) makes *field observations to detect and understand Arctic system change....and generate data that are intended for wider use* by the scientific research community.

Arctic Social Sciences Program (ASSP) supports the study of Arctic *social and cultural systems, present and past, and research* relevant to understanding these systems. The program has a special interest in a wide range of *indigenous scholarship*.

Arctic System Science (ARCSS) projects that study *systems of the Arctic* operating at multiple temporal and spatial scales, systems that can inform our understanding of Arctic processes, and the relationship of *Arctic systems to other global and regional systems...*

https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5521

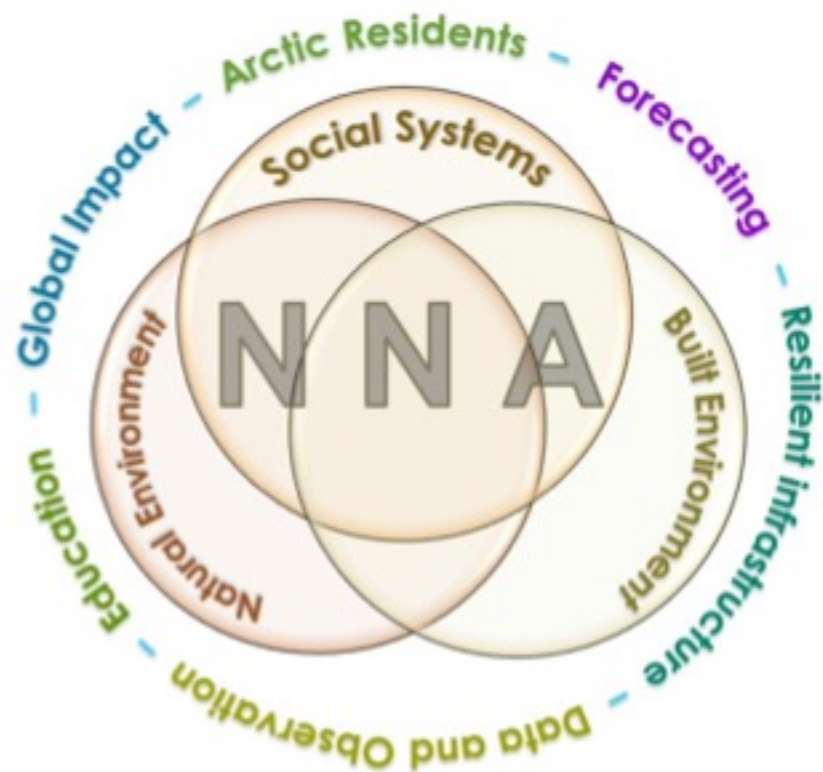


Navigating the New Arctic (NSF 21-514)

One of NSF's 10 Big Ideas

NSF-wide initiative to tackle
*convergent scientific
challenges*

Proposals due March 5, 2021



Information: <http://bit.ly/NNAatNSF>

Contact NNA@nsf.gov

https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505594



Navigating the New Arctic (NNA) Community Office



The NNA-CO's central objective is to support communication, coordination, and learning within the NNA community and beyond. In addition, the NNA-CO will implement its mission through the following four strategic objectives:

- Co-production of Knowledge
- Convergence Research
- Education and Outreach
- Open Science

Alaska Pacific University (APU), the University of Alaska Fairbanks (UAF), and the University of Colorado Boulder (CU Boulder) will host the Navigating the New Arctic Community Office.



<https://nna-co.org/>



Battelle Arctic Research Operation (ARO) Team



BATTELLE



Stantec

SDSC
SAN DIEGO SUPERCOMPUTER CENTER



UNIVERSITY of COLORADO
denver / anschutz

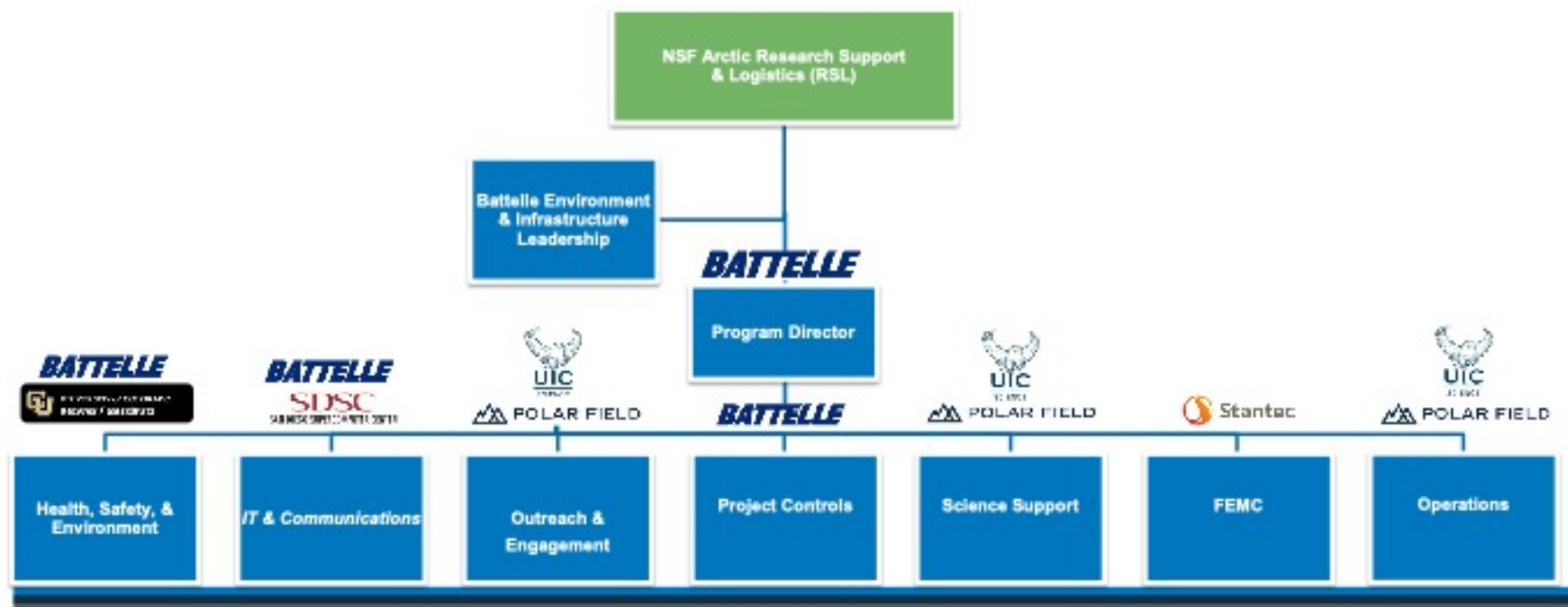


BATTELLE
Arctic Research Operations

<https://battlearcticgateway.org/>



Battelle ARO Team - 10,000ft View



<https://battlearcticgateway.org/>

arctic.planning@battelle.org



BATTELLE
Arctic Research Operations



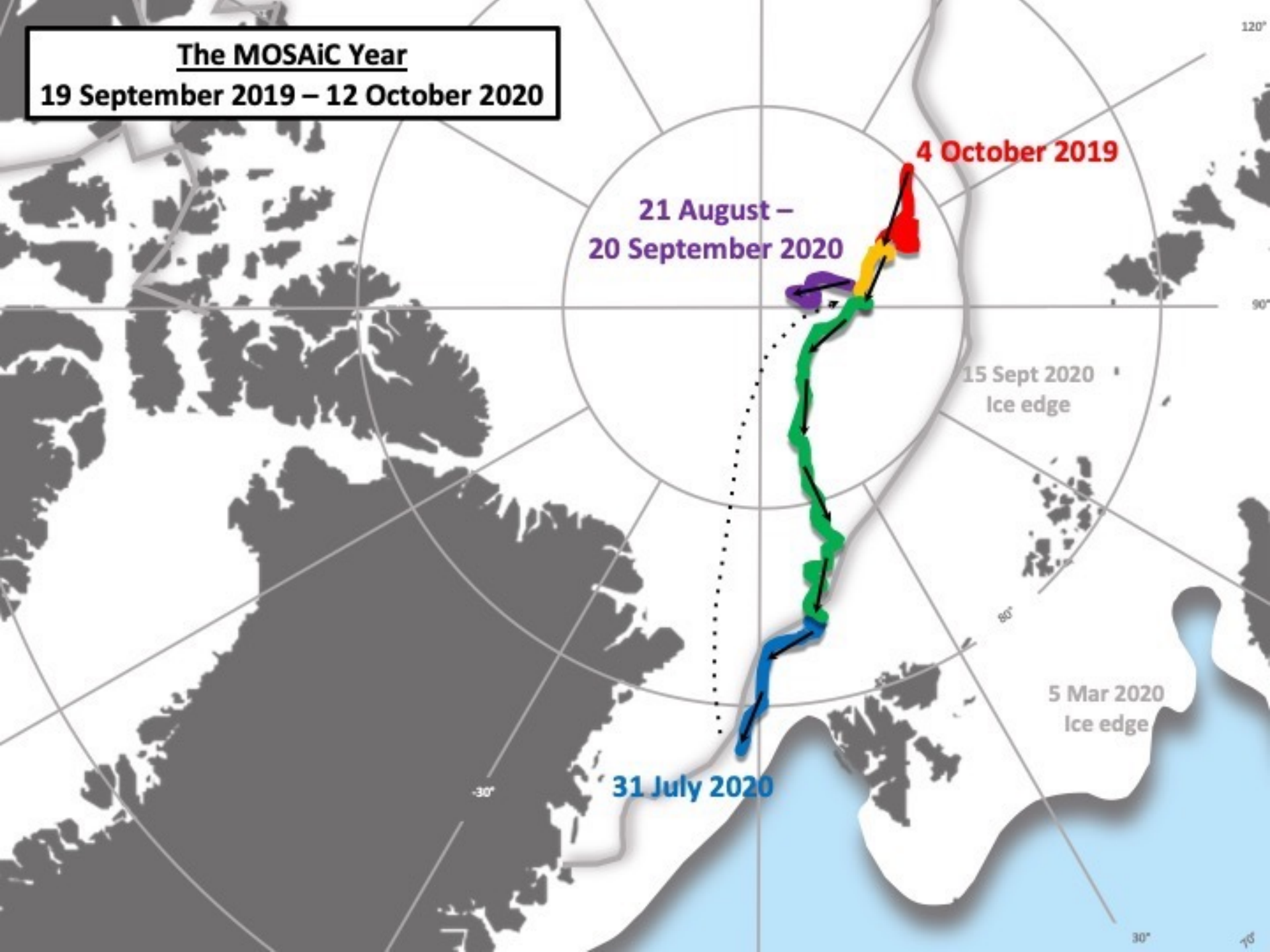
Impacts of COVID-19 on Arctic Research

- The primary goals remain the health and safety of our program participants and preventing the introduction of COVID-19 to communities or research stations in the Arctic.
- Toolik Field Station and Utqiagvik can support a limited number of researchers. Assistance with remote measurements and sampling is available upon request.
- A few scenarios are being evaluated to determine feasibility regarding Greenland operations for the coming year
- Anyone going to the field with NSF support must follow a quarantine and testing protocol developed by the Arctic support contractor and comply with all institution, state, regional, local, and tribal travel requirements.
- Research on vessels is proceeding following strict testing and quarantine protocols.



The MOSAiC Year

19 September 2019 – 12 October 2020



By the Numbers

20 Nations

7 Icebreakers/ships

>60 Institutions

>400 field participants

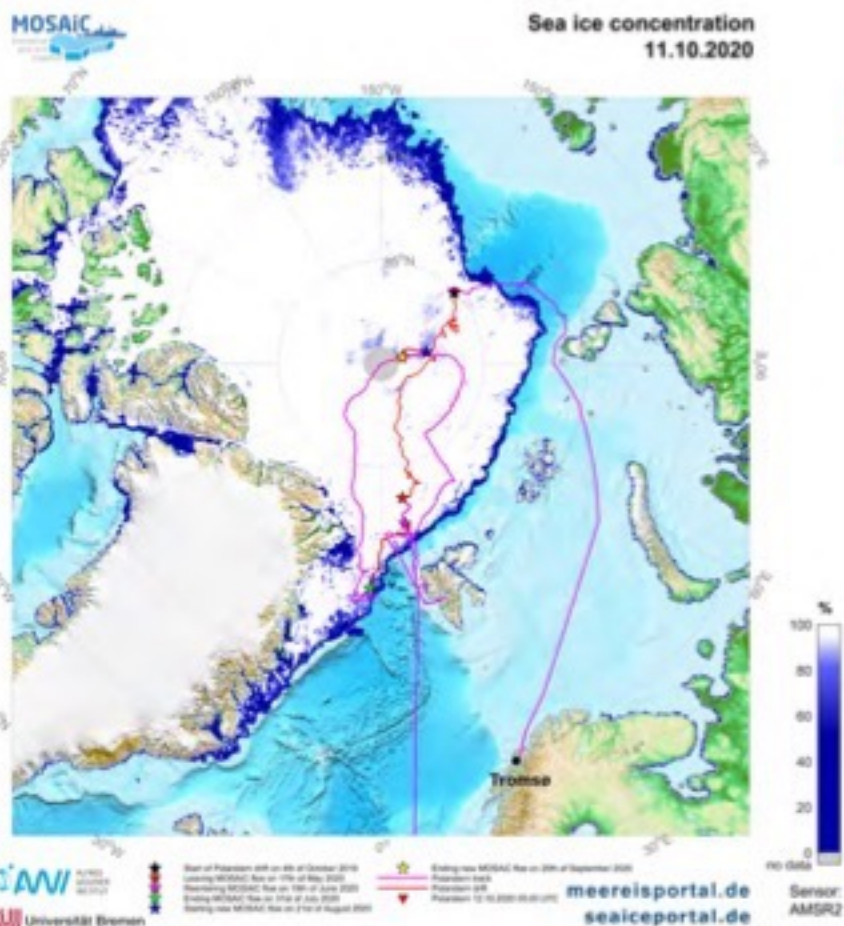
>\$165M total

>\$40M US



Actual Drift Trajectory and Resupply

The MOSAIC Expedition had five (5) legs [Sept. 2019 through Oct. 2020]. Six support vessels plus KBA TO aircraft assisted with DN set-up and crew exchange.



Start of MOSAIC expedition – **Polarstern** departs Tromsø on 20 September 2019; **Akademik Federov** departs Tromsø on 21 September 2019; **Akademik Federov** returns on 28 October 2019.

- **Leg 1:** 20 September 2019 to 13 December 2019
Kapitan Dranitsyn [11/27/19 – 1/1/20] Tromsø
- **Leg 2:** 13 December 2019 to 24 February 2020
Kapitan Dranitsyn [1/29/20 – 3/31/20] Tromsø
Assisted with fuel by **Admiral Makarov**
- **Leg 3:** 24 February 2020 to 4 June 2020* (KBA)
R/V Sonne and R/V Maria S. Merian
[5/18/20 – 6/15/20] Bremerhaven
- **Leg 4:** 4 June 2020 to 12 August 2020 **Akademik Tryoshnikov** [8/3/20 – 8/24/20] Bremerhaven
- **Leg 5:** 12 August 2020 to 12 October 2020*
* MOSAIC Expedition leaves ice floe 20 Sept. 2020, Polarstern arrives Bremerhaven, Germany.

<https://www.meereisportal.de/en/>



Northwest Passage Project (NPP) - Free Screening of Documentary Film “Frozen Obsession”

The 60-minute version of the film will be screened unless otherwise noted.

- Florida International University – Thursday, February 4, 6pm EST
- California State College Channel Islands – Monday, February 8, 6pm PST
- City College New York – Thursday, February 11, 4pm EST
- Virginia Commonwealth University and Richmond Virginia Environmental Film Festival – Friday, February 12, 6:30pm EST (Note: The full 100-minute version of the film will be screened at the film festival).
- Penn State University – Tuesday, February 23, 5pm EST
- University of Rhode Island – Thursday, February 25, 3pm EST
- Alaska Sea Life Center – Monday, March 1, 5pm EST
- Smithsonian National Museum of Natural History, Film – week of March 1
- Smithsonian National Museum of Natural History, Panel – Thursday, March 4 at 5pm EST



<https://northwestpassageproject.org/the-documentary/>



Thank You! Any Questions?



Photo by Bill Schmoker (PolarTREC 2010), ARCUS



<https://www.supportvesselsofalaska.com/>



<https://inter-j01.dfo-mpo.gc.ca/fdat/vessels/81>



UAF-CFOS, Photo by Mark Teckenbrock

