

USA Country Report

ISIRA Advisory Meeting
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Collaborative Research: The Polaris Project II: Amplifying the Impact

Paleoclimate Analysis of a Miocene Arctic Forest from the Kolyma River Basin, Northeastern Russia

RCN-SEES: Building a Research Network for Promoting Arctic Urban Sustainability in Russia

Assessing Knowledge, Resilience & Adaptation and Policy Needs in Northern Russian Villages Experiencing Unprecedented Climate Change

Collaborative Research on Carbon, Water, and Energy Balance of the Arctic Landscape at Flagship Observatories in Alaska and Siberia

Surface Energy Budgets at Arctic Terrestrial Sites: Quantifying Energy and Momentum Fluxes and their Associated Physical Processes

Developing Indigenous Research Methodologies in the Arctic (IRM-A): Examining the Impacts of Settlement on Socialization and Youth Experience in Siberia and Alaska

Collaborative Research: Sensitivity of Circum-Arctic Peatland Carbon to Holocene Warm Climates and Climate Seasonality

RUI: Collaborative Research: Fire regime influences on carbon dynamics of Siberian boreal forests

RCN-SEES Arctic-FROST: Arctic Frontiers Of SusTainability: Resources, Societies, Environments and Development in the Changing North

Study of Environmental Arctic Change" (SEARCH)

Climate-Ecosystem Interactions and Ocean Exploration

Tiksi International Hydrometeorological Observatory

Collaborative Research: IPY: Arctic Great Rivers Observatory (Arctic-GRO)

Bering Sea Sub Network: A Distributed Human Sensor Array to Detect Arctic Environmental Change

AON: Thermal State of Permafrost (TSP) in North America and Northern Eurasia: The US Contribution to the International network of Permafrost Observatories (INPO)

Nansen and Amundsen Basin Observational System (NABOS-II)

Northern Eurasia Earth Science Partnership Initiative (NEESPI)

Changes of Land Cover and Land Use and Greenhouse Gas Emissions in Northern Eurasia: Impacts on Human Adaptation and Quality of Life at Regional and Global Scales

Assimilation of tower and satellite-based methane observations for improved estimation of methane fluxes over northern Eurasia
Eurasian Railway Measurements of greenhouse, ozone-depleting, and air quality gases in TRans-Siberia Observations of the Chemistry Into the Chemistry of the Atmosphere (TROICA).

Boreal zone forest type and structure from EOS data sets

Wildfire, Ecosystems, and Climate: Examining the relationships between weather, extreme fire events, and fire-induced land -cover change in the changing climate of Siberia

Wildfire Impacts on Carbon Stocks and Exchanges in Forests of Central Siberia: Quantifying Effects of Fire Intensity, Fire Severity, and Burning Conditions

Collaborative Research: Synthesis of Arctic system carbon cycle research through model-data fusion studies using atmospheric inversion and process-based approaches

Diagnosis and prognosis of changes in lake and wetland extent on the regional carbon balance of northern Eurasia

Quantifying Changes in Northern High Latitude Ecosystems and Associated Feedbacks to the Climate System

Collaborative Research: Degrading off-shore permafrost as a current and potential source of atmospheric methane

Collaborative Research: The East Siberian Arctic Shelf as a Source of Atmospheric Methane: First Approach to Quantitative Assessment

The Japan-Kamchatka-Alaska Subduction Processes (JKASP)”

Shared Beringian Heritage Program

The Alaska Volcano Observatory

The U.S. Fish and Wildlife Service

Stanford University

The International Arctic Research Center (IARC)

International Volcanological School

Bilateral Cooperation on Black Carbon Emission in the Russian Arctic

Arctic Contaminants Action Program (ACAP)

National Plan of Action for the Protection of the Arctic Marine Environment

Summary

39 projects in total

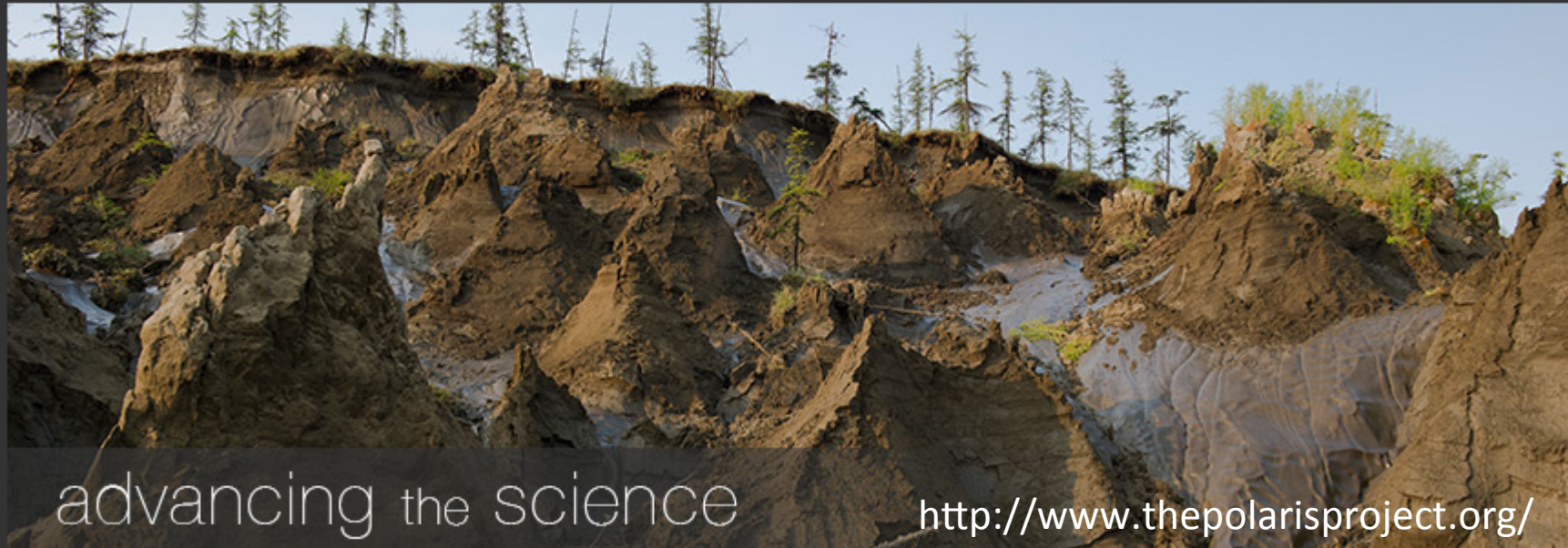
The US National Science Foundation (NSF) currently funds 10 projects

U.S. Interagency or International Research Frameworks

1. *“Study of Environmental Arctic Change” (SEARCH)*
2. *“Arctic Observing Network” (AON)*
3. *“Northern Eurasia Earth Science Partnership Initiative” (NEESPI)*
4. *“The Japan-Kamchatka-Alaska Subduction Processes” (JKASP)*

Other U.S. organizations and agencies

1. U.S. National Park Service: *“Shared Beringian Heritage Program”*
2. CRDF Global
3. The Alaska Volcano Observatory
4. The U.S. Fish and Wildlife Service.
5. Stanford University
6. University of Alaska Fairbanks
7. United States Environmental Protection Agency (EPA)



Collaborations

“Paleoclimate Analysis of a Miocene Arctic Forest from the Kolyma River Basin, Northeastern Russia” - Includes an educational unit for Polaris introducing students to the study of Tertiary Arctic forests

“Collaborative Research on Carbon, Water, and Energy Balance of the Arctic Landscape at Flagship Observatories in Alaska and Siberia” - Involves field work at the Northeast Science Station in Cherskiy

“Collaborative Research: IPY: Arctic Great Rivers Observatory (Arctic-GRO)” - sampling in the Kolyma

LAKES



Kirill Tretyakov, Yakutsk State University and Claire Griffin, Clark University.