USA National Report to ISIRA 2021



Lee Cooper, USA ISIRA national representative 19 March 2021

The New York Times

United States Rattles Arctic Talks With a Sharp Warning to China and Russia

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Secretary of State Mike Pompeo on Monday at a meeting of the Arctic Council in Rovaniemi, Finland. Pool photo by Mandel Ngan



His remarks appeared to shock many diplomats and observers, because the Arctic Council's mandate has nothing to do with security issues.

"Everything has been focused on constructive cooperation where you don't bring outside problems in," said Malgorzata Smieszek, a political scientist and a fellow at the International Arctic Science Committee, a nonprofit group. "All of a sudden, the speech today shifted everyone's attention to, 'Are we looking at next conflict in Arctic?' when the real issue here is still climate change. No speech will change that."



Dr. Gosia Smieszek @gosiasmieszek

The biggest risk with that U.S. speech is that it might turn people's attention away from the greatest threat to the #Arctic: #climatechange. NO speech will change that and this is what we need to keep focusing on. Thanks for having me with that @nytimes

Agency Driven Programs

Environmental Protection Agency (EPA)

National Oceanic and Atmospheric Administration (NOAA)

US Fish and Wildlife Service (USFWS) and National Park Service

(NPS)

(Department of the Interior)

EPA: Black Carbon NOAA: Atmosphere, marine mammals, fisheries USFWS: Polar bears and some other migratory wildlife, including waterfowl NPS: cultural exchange and Beringian science

Agency Driven Programs

Environmental Protection Agency (Black carbon)

		A https://www.epa.gov/international-cooperation/black-carbon-diesel-initiative-russian-arctic					
Proceedings of the National Academy of Sciences		🕽 Coronavirus - Maryl 🚦 UTK email 🤎 COVID Vaccine (CO 🔿 Safeway covid vacci 📴 Laura's Arctic puzzl 👂 Web of Science - Pl					
of the United States of America	Keyword, Author, or	An official website of the United States government.					
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Siberian Arctic black carbon sources c	onstrained by	International Cooperation	F) 🕑 🖂				

International Cooperation

v, , and		International Cooperation Home	Black Carbon Diesel Initiative in the Russian Arctic						
		Where We Work							
e for		Resources							
esearch,		Schedule a Visit	Black carbon, also known as "soot," results from the incomplete combustion of organic matter such as fossil fuels and biomass. Black carbon causes significant environmental harm and impacts	Russian Language Content					
AK 99775;			human health in the Arctic. When deposited on snow or ice, it reduces the reflection of sunlight, causing further warming and	For Russian language information on black					
tok,			increasing the rate of melting.	carbon, please see our					
Research			Mobile and stationary diesel engines are among the largest sources of black carbon emissions in the Arctic. Across the diesel sector,	partner site hosted by the World Wildlife Fund (WWF) Russia.					
rstems			substantial black carbon reductions are possible. To address this challenge, EPA led the Black Carbon Diesel Initiative under the						
			Arctic Black Carbon Initiative (ABCI). The ABCI also included initiatives led by the U.S. Forest Service and the U.S. Department of Agric U.S. Department of State.	ulture, with support from the					
2016			EPA engaged with partners from government agencies, U.S. Arctic and Russian universities and non-governmental organizations,	Highlights					
PDF			Russian and Arctic stakeholders, and indigenous communities on a four-step project to reduce diesel black carbon emissions in the	The largest bus company in the Murmansk region					
			Russian Arctic through 2016. Specifically, EPA and its partners:	upgraded its busses					
3C)	_		1. <u>Conducted initial scoping and assessment of primary sources of</u> <u>black carbon in the Russian Arctic</u> ,	to reduce emissions and costs, improve health and comfort for passengers,					
,			2. Developed a baseline emission inventory for black carbon from	and strengthen the					

diesel sources.

company's market

Patrik Winiger, August Andersson, Sabine Eckhardt, Andreas Stohl, Igor P. Semiletov, Oleg V. Dudarev, Alexander Charkin, Natalia Shakhova, Zbigniew Klimont, Chris Heyes, and Örjan Gustafsson

^aDepartment of Environmental Science and Analytical Chemistry, The Bolin Centre for Climate Research, Stockholm University, 10691 Stockholm, Sweden;

^bDepartment of Atmospheric and Climate Research, Norwegian Institute for Air Research, N-2027 Kjeller, Norway;

^cInternational Arctic Research Center, University of Alaska Fairbanks, Fairbanks, AK 9977

^dPacific Oceanological Institute, Russian Academy of Sciences, 690041 Vladivostok, Russia;

^eInstitute of Natural Resources, Geology and Mineral Exploration, Tomsk National Researce Polytechnic University, 634034 Tomsk, Russia;

^fAir Quality and Greenhouse Gases Program, International Institute for Applied Systems Analysis, 2361 Laxenburg, Austria

- Hide authors and affiliations

model and observation

PNAS February 14, 2017 114 (7) E1054-E1061; first published January 30, 2017; https://doi.org/10.1073 /pnas.1613401114

Edited by Mark H. Thiemens, University of California, San Diego, La Jolla, CA, and approved December 20, 2016 (received for review August 11, 2016)



Significance

A successful mitigation strategy for climate warming agents such as black carbon (BC)



Deep Sea Research Part II: Topical Studies in Oceanography Volumes 181–182, December 2020, 104881



Environmental impacts on walleye pollock (*Gadus chalcogrammus*) distribution across the Bering Sea shelf

Lisa B. Eisner ^a 은 쯔, Yury I. Zuenko ^{b 쯔}, Eugene O. Basyuk ^{b 쯔}, Lyle L. Britt ^a 쯔, Janet T. Duffy-Anderson ^{a ⊠}, Stan Kotwicki ^a 쯔, Carol Ladd ^c 쯔, Wei Cheng ^{c, d} 쯔

- ^a NOAA Alaska Fisheries Science Center, Seattle, WA, USA
- ^b Russian Research Institute of Fisheries and Oceanography, Pacific Branch (TINRO), Vladivostok, Russia
- ^c NOAA Pacific Marine Environmental Lab, Seattle, WA, USA
- ^d University of Washington, Cooperative Institute for Climate, Ocean and Ecosystem Studies, Seattle, WA, USA

Received 25 March 2020, Revised 22 September 2020, Accepted 30 September 2020, Available online 13 October 2020.

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https://doi.org/10.1016/j.dsr2.2020.104881

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Highlights

- Adult walleye pollock moved farther north in the Bering Sea in warm years, 2017–2019.
- Pollock distributions relate to reductions in sea-ice, cold pool extent and currents.
- Adult pollock prefer temperatures of 0–6 °C; age-1pollock tolerate a broader range.
- Continued warming presents possibility of US–Russia stock mixing.
- US–Russia collaborations are key to understanding climate impacts on fisheries.

National Oceanic and Atmospheric Administration

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		Find A Species	Fishing & Seafood	Protecting Marine Life	Environment	Regions	Resources & Services	About Us

INTERNATIONAL AFFAIRS

Bilateral Agreement Between the United States and Russia

The United States and Russia share many important stocks of living marine resources in the North Pacific Ocean and the Bering Sea, so it is important for the two countries to coordinate efforts to conserve and manage marine resources. Marine resources of the Bering Sea include the walleye pollock, which supports one of the largest and most valuable commercial fisheries in the world.

National

Table of Contents

United States-Russia Agreement on Mutual Fisheries Joint Activities

United States–Russia Agreement on Mutual Fisheries

In 1988, the United States and Russia signed the "Agreement Between the Government of the United States of America and the Government of the Union of Soviet Socialist Republics on Mutual Fisheries Relations," establishing the U.S.-Russia Intergovernmental Consultative Committee. The agreement primarily aims to maintain a fisheries reliationship that benefits both countries. The United States and Russia cooperate on scientific research, consult on issues of fisheries conservation and management beyond their exclusive economic zones and third-party zones, and cooperate to address illegal, unreported, and unregulated fishing activities.

Joint Activities

Fisheries Enforcement Cooperation

Efforts focus on stemming IUU fishing activity along the maritime boundary line in the Bering Sea and on the high seas in the North Pacific Ocean. Strong partnerships continue between U.S. and Russian enforcement agencies.

Living Marine Resources

The United States and Russia cooperate on research and projects on the condition of a number of species, including:

- Bering Sea pollock stocks
- Pacific salmon
- Seabirds
- Steller sea lions
- North Pacific right whales
- Northern fur seals

Arctic Fisheries

Both countries conduct Arctic research and projects on fisheries, ecosystems, and marine mammals. Research focuses on loss of sea ice, ocean acidification, and studies using surface, midwater, and bottom trawls.

In 2013, the United States and Russia signed a joint statement on enhanced fisheries cooperation, which reafilims the 1988 agreement and focuses future cooperation on combating IUU fishing, researching and managing Arctic fisheries, and advancing conservation efforts in the Ross Sea region of Antarctica.

Last updated by Office of International Affairs & Seafood Inspection on 05/23/2019

US Fish and Wildlife Service



2016-2017 Work Plan- English

2016-2017 Work Plan- Russian 2013-2014 Work Plan- English

US-Russia Environmental Agreement

US-Russia Marine Mammal Working Group

Older work plans and project summaries can be found here: Archive

Download Adobe Reader to view PDF files.



Credit: O. Zaporozhets

mutual interest and concern. The Agreement was renegotiated in 1994 to replace the U.S.S.R. with the Russian Federation as signatory in order to continue protecting those important species and their habitats

Russia

wide variety of migratory birds.

Russia's vast terrain stretches from the frozen tundra of

the far north, to the peaks of the Caucasus Mountains to

the southern prairies. It's diverse ecosystems are home to

many unique and amazing animals like Amur tigers, snow

leopards, saiga antelope, and Siberian cranes. There are

Russia and the United States such as the polar bear and a

In 1972, the United States and the Soviet Union signed an

Agreement on Cooperation in the Field of Environmental

Protection to provide a framework under which the two

nations could collaborate on environmental issues of

also many species who's natural ranges span between

For more than 45 years, USFWS - Russia program has worked with Russian conservationists to share wildlife management best-practices and jointly conduct scientific studies. Under this Agremment, we have been able to implement nature conservation efforts through partnerships with federal, state, and local governments, native communities, and non-governmental organizations. Additionally, we have the authority to provide grants and assistance to Russian nature reserves and national parks. These efforts have promoted collaborative management of shared species and bolstered the protection of some of Russia's most iconic wildlife.

Species of Concern



VDL. 70, NO. 3 (SEPTEMBER 2017) P. 287 - 21 https://doi.org/10.14430/arctic4670

Testing for Geographic Variation in Survival of Spectacled Eider (Somateria fischeri) Populations in Chukotka, Russia and the Yukon-Kuskokwim Delta, Alaska Diana V. Solovyeva,¹ Vera Yu. Kokhanova,¹² Melisa Gabrielson¹ and Katherine S. Christie⁴

(Received 8 July 2016; accepted in revised form 4 April 2017)

ABSTRACT. Information on variation in survival among expergabically distinct breading populations can produce valuable ingitta about the population dynamics or a species. The Valuos Kukakwim Diata usa population of Spectracelle Elders in Alaaka decreased precipitously between the 1959s and 1990s. Causes for this decline are unknown but my be attributed to so franda survival poblicities of Spectracelle Elders in the Value Kukakwim Diata usa population of Spectracelle Elders in anvival poblicities of Spectracelle Elders on Keiggals Island in the Value Kukakwim Diata. José Alawa Agrocche su solito el decimale appear et anoval (a) and the spectra modelle approxement of the spectra modelle Agrocche su solito el decimale appear et anoval (a) and respire probability (c) from markerselight data. We candid a vehicle Russian and Ataskan mob-populations differed in their survival rates, b) whether survival avaid annually, and c) whether Russian and Ataskan mob-populations differed in their survival rates, b) whether survival avaid annually, and c) whether least reted in survival and vehicing usarvival avaid as supported models with annually varying marvival at between the two breeding areas when mean survival across years was compared, and we did so that atrong evidence for a Appenche Island. Our finding of of difference in marking. Sample are constraint precluded estimates of nanual narvival and Appenche Island. Our finding of of difference in marking. Sample are constraint precluded estimates of nanual narvival and Appenche Island. Our finding of of difference in marking.

Key words: Spectacled Eider; Somateria fischeri; Kigigak Island; Ayopechan Island; annual survival rate; recapture probabilities

RESUME: Les données en matière de variations de survie chez des populations nicheneus plorgraphigement distinctes popurent donner un relevioux aperce de da synamique des populations d'une cipete. La sous-population d'étéres à hanties du della Vidan-Kuskokwim, en Ataka, a chuzi d'arquipement entre les années 1950 et les années 1950, Nal ne conatt les causas de ca déchine mais elles portantes litter attribubbles au fable survie des 1950 et les années 1950, Nal ne conatt les escates de ca déchine. Une se les années de la des la

Mots clés : eider à lunettes; Somateria fischeri; île Kigigak; île Ayopechan; taux de survie annuel; probabilités de recapture

Traduit pour la revue Arctic par Nicole Giguère.

¹ Institute of Biological Problems of the North TEB RAS, Portrayop Scr., IS Algodan, 65060, Russin ² Former address: Herma Start Prological University, Malk River Embandment, 48, St. Petersburg, 191195, Rassin ² Corresponding under Former address: U.S. Feith and Willi Service, "Values Dela NWR, Banz Highway, Box 346, Bethel, Malada 9959, U.S. meissiaghteriological, End university, Park Problems, Park Park, Park, Park Park, Par



National Park Service Shared Beringia Program

https://www.nps.gov/subjects/beringia

Call for new proposals, 2021, due 21 April

Involving a Russian specialist or partner as a project collaborator

Conducting a portion of the project in Russia Fostering cultural, scientific, educational, or familial exchanges between Russia and the United States related to the Beringia area

Compiling, translating (either Russian-to-English or English-to-Russian), and disseminating research results and other materials that could be beneficial to others

Products include translations, pubished studies, cultural and Indigenous knowledge exchange

MATERIALS AND STUDIES ON THE ARCHAEOLOGY OF THE NORTHERN FAR EAST AND ADIACENT TERRITORIES

Ruslan S. Vasil'evskii and Alexander I. Lebedintsev

Translated by Richard L. Bland NPS.gov / Home / Projects & Research / New Projects (2018-2023)

New Projects (2018-2023)

Explore our current projects below

For more information, contact Peter Neitlich, Shared Beringian Heritage Program Project Manager (peter_neitlich@nps.gov) or Evguenia Anichtchenko, Outreach Coordinator (evguenia_anichtchenko@nps.gov).







University (Virginia Tech)

Center (NORTAC)

Alaska Department of Fish and Gan







Aleut International Association



Portland State University

Understanding Shared

Wildlife Conservation Society





Western Washington University



Mapping the Bering Se

Aleut International Association



Museum of the Aleutians



Navigating the New Arctic

U.S. National Science Foundation (NSF)

NNA Project Locations

https://www.arcus.org/nna



Arctic Robust Communities-Navigating Adaptation to Variability <u>https://sustainability-</u> innovation.asu.edu/research/project/arctic-robust-communities-navigating-adaptation-to-variability/

The Circumpolar Active Layer Monitoring Network (CALM V): Long-term Observations on the Climate-Active Layer-Permafrost System https://www2.gwu.edu/~calm/

Interactions of Environmental and Land Surface Change, Animals, Infrastructure, and Peoples of the Arctic (planning project; no fieldwork) https://ungarlab.uark.edu/arctic-research/

Rain on Snow and Extreme Precipitation Events Across the Arctic and their Impacts on Social-Ecological Systems https://nsidc.org/rain-on-snow



https://www.nsf.gov/awardsearch/ Active Awards with Search term: Russia

U.S. National Science Foundation grants

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	nont Fc ICER aborati: EAR	Inti Global (11/01/2020 01/05/2021 GeoRISM 03/15/2020 03/06/2020	Paul Arthur CA Claire Buch CA	EvREsearc Continuing Maria Uhle 10/31/2021 Catifornia I: Standard G Jennifer W: 02/28/2023	\$87,067.00 \$38,334.00	paul@evre 18041 Blue Pacific Pali CA chucholz/8: 1200 E Cali PASADEN, CA	902722902 617902836' GEO 911250600 626395621(GEO	7313 1679, 7313, 50.00	This award supports U.S. researchers parti- Island arcs are chains of volcanic islands the			
34055 Beim	nant Fc OPP	ARCSS-Ar 05/15/2015 05/12/2015	Linda Fern: VA	Virginia Co Standard G Erica Hill 04/30/2022	\$402,256.00	Imfernande P.O. Box 9/ RICHMON VA	232980568 904828677; GEO	5219 1079 50.00	This award provides support to U.S. research	hers participating in a project competitively	selected by a 14-country initiative	e on global change re
	PID: WI OPP R Phase IIP	ANS-Arctic 02/15/2021 02/08/2021 SBIR Phase 02/15/2021 02/04/2021	Robert Pick MA Gordon Jar NM	Woods Hol Standard G Marc Stieg 01/31/2022 MOLTEN 5 Standard G Elizabeth N 01/31/2022	\$117,429.00 \$256.000.00	rpickart@w 183 OYSTE WOODS H MA orderviewol 590 MONT SANTA FF NM	025431041 508289354; GEO 875016172 505670023; ENG	5280 1079, 7914 50.00 5371 8037, 8611, 50.00				
49148 Colla	aborati EAR	GeoPRISM 03/15/2020 03/06/2020	Emily Coop CA	University - Standard G Jennifer W: 02/28/2023	\$311,203.00	cooperdo@ University Los Angele CA	900890001 213740776; GEO	50.00	Island arcs are chains of volcanic islands the	at form at subduction zone plate boundaries	where one plate is being dragged	beneath another, rec
	erDARI AGS erstanr OPP	AERONOA 03/01/2017 02/11/2019 ANS-Arctic 01/15/2018 01/05/2018	Simon She NH Allan Clark Fl	Dartmouth Continuing Zhuangren 02/28/2022 Elorida Stat Standard G Marc Stied 12/31/2021	\$443,097.00 \$499.986.00	simon.sher.OFFICE OF ANOVER NH actarke/25th 874 Traditir TALLAHAS FL	037551421 003646300; GEO 323064166 250644528/ GEO	1521, 4202, 1521, 4202, \$0.00 5280 1079 \$0.00	The proposed project involves the construct The Bering Strait is a narrow ocean gap bety			
	nant Fc ICER	Inti Global (11/01/2016 02/08/2019	Oran Youn; CA	University Continuing Maria Uhle 10/31/2021	\$49,018.00	young@bre Office of ReSanta Barb CA	931062050 905893418I GEO	7313 1679, 7313, \$0.00	This award supports U.S. researchers partie	ipating in a project competitively selected b	ry a 14-country initiative on global	change research thr
	nont Fc ICER N: Eves OPP	Intl Global (01/15/2017 02/19/2020 AON-Arctic 09/01/2016 07/20/2017	Dmitry Stre DC Lilian Aless ID	George Wa Continuing Maria Uhle 12/31/2021 Regents of Continuing Roberto De 08/31/2021	\$316,258.00 \$499.090.00	Nikolay Shi strelets@gr 1922 F Stre Washingtor DC Peter Pulsi alessa@uk Office of Sc MOSCOW ID	200520096 202994072/ GEO 208443020 208885665: GEO	7313 1679, 7313, \$0.00 5293 9150 \$0.00		hers participating in a project competitively environmental observations (e.g., citizen so	 selected by a 14-country init ience) no cohesive set of best pra	ative on global char clices or correspor
	aborati EAR	Tectonics, 09/15/2016 06/10/2019	Eric Sandy MO	University Continuing Paul Raterr 08/31/2021	\$192,366.00 \$271.672.00	sandvole@ 115 Businer COLUMBI/ MO	652110001 573882756/ GEO	1572, 1574 9150 90.00 1572 1574 9150 90.00	This project uses the Greater Caucasus Mo	untains in southern Asia as a natural laborat	lory to study the early stages of mo	ountain building. Usi
	aboratir EAR port of IOCE	Tectonics, 09/15/2016 07/22/2019 INTERNAT08/01/2014 07/16/2020	John Nabel OR Enrique Cu NJ	Oregon Sta Continuing Paul Raterr 08/31/2021 Rutgers Ur Continuing Kandace Bi 07/31/2021	\$271,672.00 \$385,384.00	nabelek@cOREGON : Corvallis OR enrique@m 33 Knightst Piscataway NJ	973318507 541737493; GEO 088543925 848932015(GEO	5419 50.00	This project uses the Greater Caucasus Mo This award provides partial funding for U.S.			
	aborati EAR	Tectonics, (09/15/2016_06/13/2019 Linguistics, 08/01/2017_07/09/2020	Kevin Mack MI Sophia Mal MA	Michigan S Continuing Paul Raterr 08/31/2021	\$276,010.00 \$410,715.00	mackeyke) Office of Sp East Lansir MI Niarwen X smalamudi 415 SOUTI WALTHAV MA	488242600 517355504(GEO 024532728 781736212: SBE	1572, 1574 9150 50.00	This project uses the Greater Caucasus Mo			
7667 Doct	toral Di BCS	Cult Anthro 08/15/2019 08/26/2019	Karen Strat NY	Brandeis U Standard G Tyler Kend 05/31/2022 CUNY Gra Standard G Jeffrey Mar 07/31/2021	\$20,160.00	Liang Wu karen.stras 365 Fifth Ai New York NY	100164309 212817752: SBE	1311, 7495, 1311, 7495, 30.00 7605 1390, 9179 30.00	We live in a world where material goods an	f products are moving at an ever-increasing	speed and scale. In the United St	ates, approximately
	stigatin BCS aborati SES	ASSP-Arcti 07/15/2018 09/15/2018 LSS-Law A 08/01/2019 07/27/2020	Lenore Gre IL Timothy Fr NY	University Continuing Joan Malin 12/31/2021 Columbia L Continuing Reggie She 07/31/2022	\$439,932.00 \$61,048.00	Ming Xiang grenoble@) 6054 South Chicago IL tmf2@colu 2960 Broad NEW YOR NY	006372612 773702866: SBE	5221, 7719 1079, 1311, \$0.00 1372 \$179 \$0.00	It is well-known that when speakers of differ	ent languages are in contact with one anothe	r, the structures of these language	es can and do change
1294 Colla	aborati SES	LSS-Law A 08/01/2019 07/27/2020	Jordan Gar IL	Northweste Continuing Reggie She 07/31/2022	\$277,631.00	jordan.gans 750 N. Laki Chicago IL	006114579 312503795! SBE	1372 9179 50.00	Scholars and policymakers agree that stron	legal institutions are essential for economi	c development and democratic go	wernance, yet efforts
	lochem CHE aborati AGS	Chem Stru 08/15/2015 07/27/2020 Almospheri 09/01/2020 07/23/2020	Malcolm D OH Rainer Voll CO	Bowling Gr Continuing, Richard Jol 07/31/2021 University - Standard G Sylvia Edgr 08/31/2022	\$540,000.00 \$1,991,148.00	forbesm@t302 Hayes Bowling Gr OH Jose Jimer rainer.volk: 3100 Marin Boulder CO	434030230 419372248 MPS 903031058 903492622 GEO	9102 9990 90.00 524 90.00	With this award, the Chemical Structure, Dy This field campaign includes test flights to c	mamics and Mechanisms B (CSDM-B) Pro wtify instrumentation not previously flown of	ogram of the Division of Chemistry n the NSF/NCAR Guilstream V re	is funding Profess
7262 Colla	aborati [,] AGS	Atmospheri 09/01/2020 07/23/2020	Suresh Dh: NY	Clarkson U Standard G Sylvia Edgr 08/31/2022	\$100,000.00	sdhaniya@ 8 Clarkson Potsdam NY	36761401 315268647! GEO	¶524 \$0.00	This field campaign includes test flights to o	rtify instrumentation not previously flown o	n the NSF/NCAR Gulfstream V re	esearch aircraft. It al
	nont Fc ICER aboratir SES	Intl Global (09/15/2015 07/01/2019 Economics 08/01/2017 08/07/2017	Dmitry Stre DC Amanda Gr VT	George Wa Continuing Maria Uhle 08/31/2021 Middlebury Continuing Nancy Lutz 07/31/2021	\$178,297.00 \$113,971.00	Nikolay Shi strelets@gr 1922 F Stre Washingtor DC agregg@m 14 OLD CH MIDDLEBLVT	200520086 202994072/ GEO 057536000 202443500/ SBE	7313 1679, 7313, \$0.00 1320 1320, 9150, \$0.00				
8887 Colla	aborati SES	Economics 08/01/2017 08/07/2017	Steven Nat MA	Williams C Continuing Nancy Lutz 07/31/2021	\$110,266.00	Steven, E.N 880 Main S Williamsto MA	012672600 413597435; SBE	1320 1320, 9250 \$0.00	This research studies the legal and institutio	nal foundations of industrial and financial de	velopment. The particulars of com	mercial, contract, e
1936752 Colla 16769 Colla	aborati OPP aborati OPP	AON-Arctic 07/15/2020 06/18/2020 AON-Arctic 07/15/2020 06/18/2020	Marion Bre AK George Klir MI	University Continuing Roberto De 06/30/2025 Regents of Continuing Roberto De 06/30/2025	\$747,179.00 \$110,946.00	Katey Walt msbrethart West Ridg: Fairbanks AK gwk@umic 3003 South Ann Arbor MI	997757880 907474730' GEO 481091274 734763643! GEO	5293 1079 50.00 5293 1079 50.00	The Arctic is warming faster than other part	of the world and it has the potential to amp	lify global warming. The amplifica	tion comes from that
1545913 PIRE	E: Pron OISE aborati BCS	ASSP-Arcti 04/01/2016 03/12/2019 Geography 06/01/2016 05/15/2020	Robert Ortt DC Jatin Dua MI	George Wa Continuing Maija Kukla 03/31/2022	\$3,020,646.00 \$19,578.00	Nikolay Shi rorttung@g 1922 F Stre Washingtor DC idua@umic 3003 South Am Arbor MI	200520086 202994072/ O/D 481091274 7347636438 SBE	5221, 7742 1079, 5914, \$0.00 1352, 1390 1352, 1390, \$0.00	Abstract Arctic PIRE: Promoting	Urban Sustainability in the Arctic 	As Arctic ice continues to melt, h	umans will enter the
0625 Colla	aborati DMS	FOUNDAT 05/01/2016 04/18/2016	Julia Knight IN	Regents of Standard G Jeffrey Mar 05/31/2021 University - Standard G Tomek Bar 04/30/2021	\$100,000.00	knight.1@n 940 Grace NOTRE D/ IN	465565708 574631743; MPS	1268, 7298 5914, 5928, \$0.00	Scientific interest in infrastructure has tried the This award will support activities of a resear	ch network of mathematicians working in c	omputability theory. This project	will facilitate collabo
12889 Colla 12655 ASU	aborati AGS IS: And OPP	AERONON 05/01/2014 05/14/2020 ARCSS-Ar 05/01/2015 03/24/2020	Landis Dav MA Andrey Pet IA	Charles St Continuing Zhuangren 04/30/2021 University Standard G Erica Hill 04/30/2021	\$83,616.00 \$209.367.00	dalandis@x 555 Techn: Cambridge MA Jessica Gr. andrey.petr Research a Cedar Fall: IA	021393563 617258276' GEO 506140001 319273321' GEO	1521 4444, OTH \$0.00 5219 1079, 9150 \$0.00	This project by a consortium of six institution	is describes an initiative, named QBUS, to	participate in the international QB5	50 cubesat network.«
0006 Test	fing an : OCE	Petrology a 03/15/2020 03/09/2020	Susanne St NY	Columbia L Standard G Daniel Mct 02/28/2023	\$290,011.00	smstraub@2960 Broad NEW YOR NY	100276902 212854685 GEO	1573, 1620 1304, 1573, 50.00	This project explores high latitude volcanic a	ctivity. It is hypothesized that the volcanic a	ctivity is linked to cyclic variations	s in Earth?s climate,
	aborati SES aborati SES	AIB-Acctbit 02/15/2021 01/04/2021 AIB-Acctbit 02/15/2021 01/04/2021	Bryn Roser NY Ora John R WI	Cornell Uni Standard G Jan Leighle 01/31/2023 University - Standard G Jan Leighle 01/31/2023	\$339,122.00 \$191,599.00	brr59@con 373 Pine Trithaca NY reutero@uv P O BOX 3 Milwaukee WI	148502820 907255501+ SBE 532010340 414229485: SBE	120Y 096Z, 9178, \$0.00 120Y 096Z \$0.00	Under what conditions do voters withdraw o Under what conditions do voters withdraw o	r withhold their support from governments a withhold their support from governments a	and how do economic and pandem and how do economic and pandem	c stressors affect p ic stressors affect r
	LRUS - OPP	ARCTIC R 09/15/2013 11/30/2018	Nicole Mis: AK	University Standard G Colleen Str 05/31/2021	\$1,891,151.00	Anne Jense mnisarti@: West Ridg: Fairbanks AK	997757880 907474730 GEO	5202, 5205, 1079, 5205, \$0.00		ergens) is one of many species affected by	recent environmental change in th	e Arctic. Much atter

Awards



- Collaborative Research: Hydrologic and Permafrost Changes Due to Tree Expansion into Tundra <u>https://www.k-state.edu/media/newsreleases/2017-</u> 09/sheshukov92217.html
- Taimyr Reindeer Migration Reanalysis (TAMARA) https://www.nsf.gov/awardsearch/showAward?AWD_ID=1504934
- Collaborative Research: Tracking Carbon, Water, and Energy Balance of the Arctic Landscape at Flagship Observatories in Alaska and Siberia. <u>https://www.nsf.gov/awardsearch/showAward?AWD_ID=1936752</u>
- Arctic Great Rivers Observatory,

Possibly upcoming: Synoptic Arctic Survey Meeting at Shirshov Institute of Oceanology, Moscow following ASSW 2019

