

2024-2025 **Report**



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SIKU: Empowering Indigenous Communities Through Technology





It has been another exciting year expanding our programs to new regions and Indigenous communities, and continuing to build digital infrastructure that supports Indigenous data sovereignty and self-determination. SIKU supports Indigenous communities leading their own projects across the north, now with over 100 active projects on SIKU!

A major highlight this year was the launch of SILA for SIKU our set of new climate and weather tools and services on SIKU, which is supporting a leading role for Indigenous communities in climate change research using their own knowledge systems and terminology, while helping centralize services and increase accessibility for land users.

Interested to get involved? Contact us to learn more!



Lucassie and the SIKU team showcase the launch of SILA for SIKU at the Arctic Change conference in Ottawa, Dec 2024



35,000 150+
users communities and growing!

125,000+ +

New Weather Services on SIKU!

The launch of weather tools and services on SIKU in December 2024 marked a major milestone, enhancing how land users access critical information for travel and safety.



- Brand-New Weather Tab
- Marine Forecasts
- Indigenous Terminology Profiles for Ice, Snow, and Weather
- _11_ **SmartICE Community Data**
- Windy Weather Maps
- Northern Lights Forecast
- Current Weather Conditions, Hourly & Daily Forecasts

Improved Trip Planning

SIKU now brings weather, marine and ice safety services together in one place along with satellite imagery, maps. This is key for supporting situational awareness and trip planning for community members, and helps link real-time environmental data to users posts.

Let us know what you think. We always welcome ideas for improvements and new features!



SILA for SIKU

New Weather Posts and Indigenous Terminology!

- New Weather Post Types: The new Weather post type on SIKU supports sharing weather conditions with photos/videos measurements
- New Weather Profiles: Indigenous Environmental Terminology for weather and climate indicators are now available to browse and tag in your posts, and can be updated to include your local Indigenous dialect, or let us know if you have a new profile/indicator you'd like us to add!
- Weather Measurements: Weather posts also include new fields to add detailed measurements to your observations



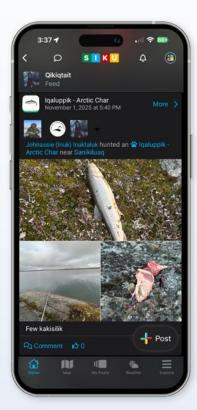




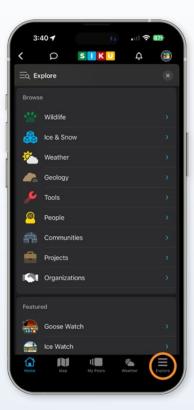
Additional New Features

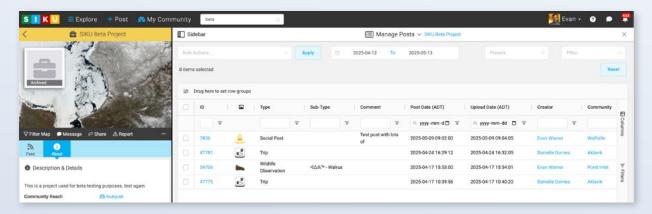
Other Improvements based on your input!

- Dark Mode and Quick Navigation: Interface updates and easy navigation with swipe actions
- · Streamlined App Settings: Now conveniently located in the top right corner
- Simplified Explore Menu: Faster access to community feeds, profiles, and tools

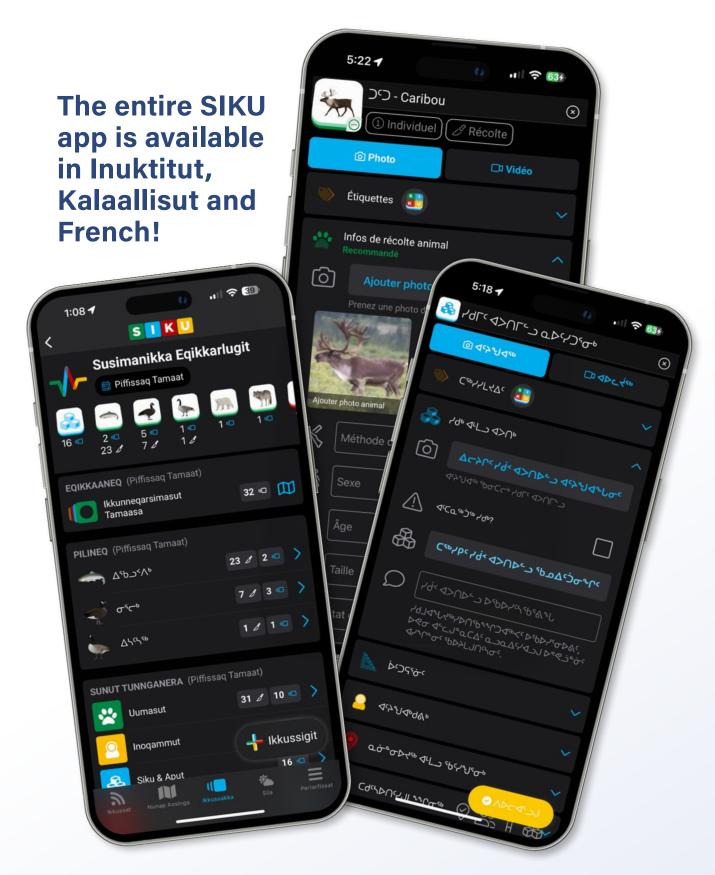








The updated SIKU Post Manager allows project members to manage and export their posts



Contact us if you'd like SIKU to be available in your Indigenous language

"SIKU just upped their game folks. This is by far the best mapping system you can use. Has updated satellite images, can be used offline. Sign up for this free app and make use of it."

- TYRONE RADDI, TUKTOYAKTUK

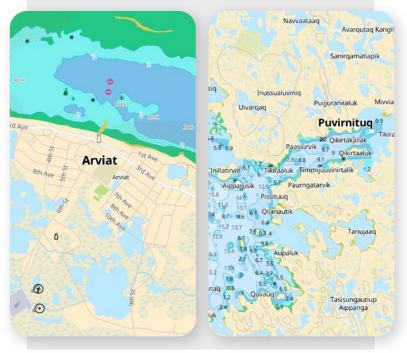


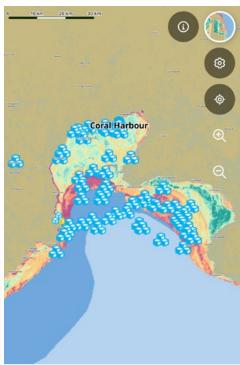
A Decolonial Base Map, Seamlessly Combining Marine and Terrestrial Products



SIKU's Indigenized base map focuses on Indigenous place names & territories, and brings hydrographic and topographic features together in one place for the first time.

This map is only available on SIKU and is free for Indigenous users.





Available map layers include up-to-date satellite imagery. The unique SIKU Ice Map, which is only available on SIKU, combines combines SIKU Ice Posts with Canadian Ice Service charts and satellite imagery to show ice roughness and thickness.

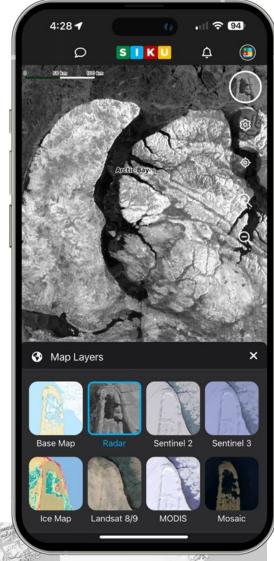
Satellite Imagery on SIKU

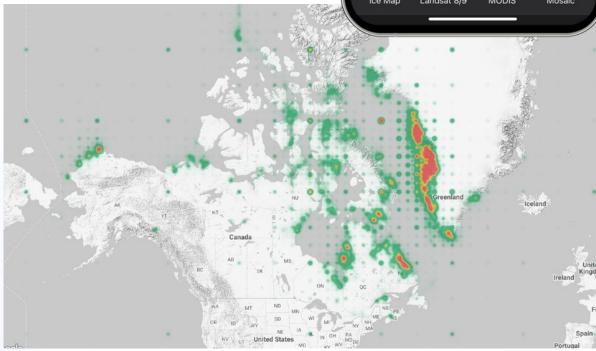
View up-to-date Radar and Visual Imagery

Check community ice conditions regardless of clouds or a lack of daylight with near-real time RADARSAT Constellation Mission (RCM) satellites.

SIKU processes 500-1000 RCM images every day for our users with over 19 Mission map tiles requested last year shown on the map below from across the north!

Visual imagery from Sentinel and MODIS satellites also support access to detailed ice and weather conditions to support situational awareness.







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ARCTIC EIDER SOCIETY

Indigenous-Driven Solutions for Thriving Communities

The Arctic Eider Society is an Inuit-led charity based in Sanikiluaq Nunavut. AES develops SIKU in house to support Indigenous self determination in research, education, and environmental stewardship at-scale.































SIKU Supports Indigenous Data Sovereignty by Design

Guiding Principles and Terms of Use that work for your Privacy and Security



Respect

SIKU is built on Indigenous Knowledge and Governance and is a safe space to share Indigenous Knowledge and hunting stories



Intellectual Property

Never use others' data without permission. You own your own data. Nobody else does - not even SIKU



Integrity

Only create real posts and user accounts. You control how you share your data.



Self-Determination

Supports Indigenous-led Projects, Governance & Monitoring of Lands and Oceans.

Upholding Indigenous Data Sovereignty

Full Ownership, Access, and Control to Secure and Manage your Data



Keeping your Data Safe and Secure

- All your data is stored only in Canada and is backed up on-site to prevent data loss.
- Users and projects have the ability to download their own data at any time.
- The Arctic Eider Society develops and runs SIKU but never owns or shares user data.

SIKU is Not an Open Data Platform

- You always own your own data, and no one can use it without permission.
- While some users choose to share some of their posts with other SIKU users to facilitate knowledge transfer, just because you can see a post does not mean you can use it or share it without permission.



Flexible Post Privacy Settings

- You can choose to keep your posts private, share them with a vetted group of project members, or make them visible to other SIKU users.
- You control location visibility for each post and can change post privacy settings at any time.



Responsible Research

 SIKU requires projects respect Indigenous governance structures and other requirements for licensing, consultation, ethics and community approval letters.



Informed Stewardship



- SIKU's informed project stewardship framework lets you choose if you want to share your posts with projects or not.
- You can easily share posts if you agree to join a project and tag the project on a post-by-post basis., even if you set it in your defaults.

Engage & Manage Your Team







Track & share progress across your team through project feeds



Manage your team, settings, and permissions

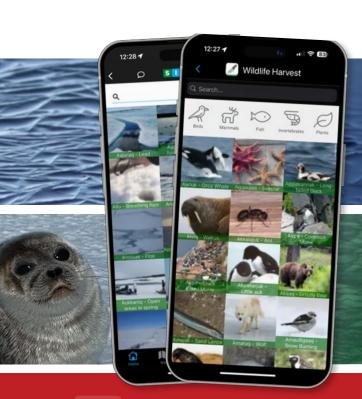




and engagement - Coming Soon

Indigenous Environmental Terminology

Indigenous languages and environmental terminology are at the heart of SIKU's unique approach to self-determination. Taggable terminologies provide Indigenous classification systems for documenting environmental observations that encourage the use of Indigenous Knowledge for systematically and quantitatively documenting environmental change, facilitating knowledge transfer and decolonizing climate research.



Ice Profiles

Tag ice types with users' unique Inuktut dialects to share knowledge about ice safety.

Wildlife Terminology

Search and tag wildlife using numerous Indigenous languages and dialects.

Weather Terminology,

New profiles for weather and Indigenous Knowledge climate indicators.



Indigenous Place Names

Cree lands. IPNs are popular

The Indigenous **Environmental Terminology** (IET) Team

to share and cross-reference

Gain Insights & Visualize Data



Map Filtering

Generate real-time maps of project activities or outcomes



Analysis & Reporting

Real-time graphs and time series to support reporting and decision making



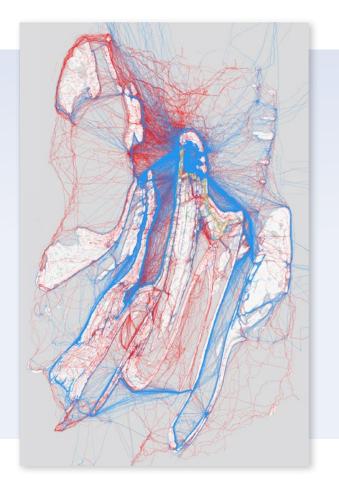
Post Manager

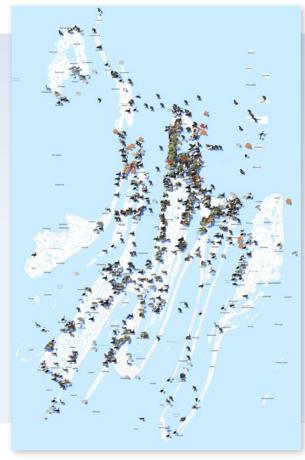
Dynamic dashboards, queries, and filtering



QA &QC

Tools to support quality assurance/control





Reporting & Accountability

Use SIKU to support your full project life-cycle from data collection to project outcomes and deliverables



Assessment

Social return on investment, surveys, and evaluation



Communication

Engage community support outreach with blogs, press, and publications



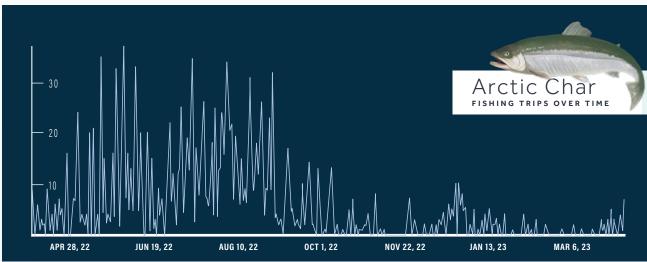
Impact Measurement

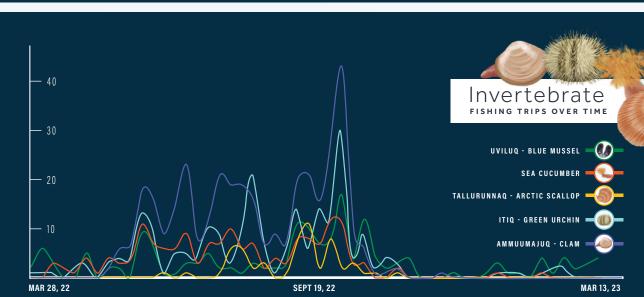
Generate key performance indicators (KPIs) to track progress



Visualization

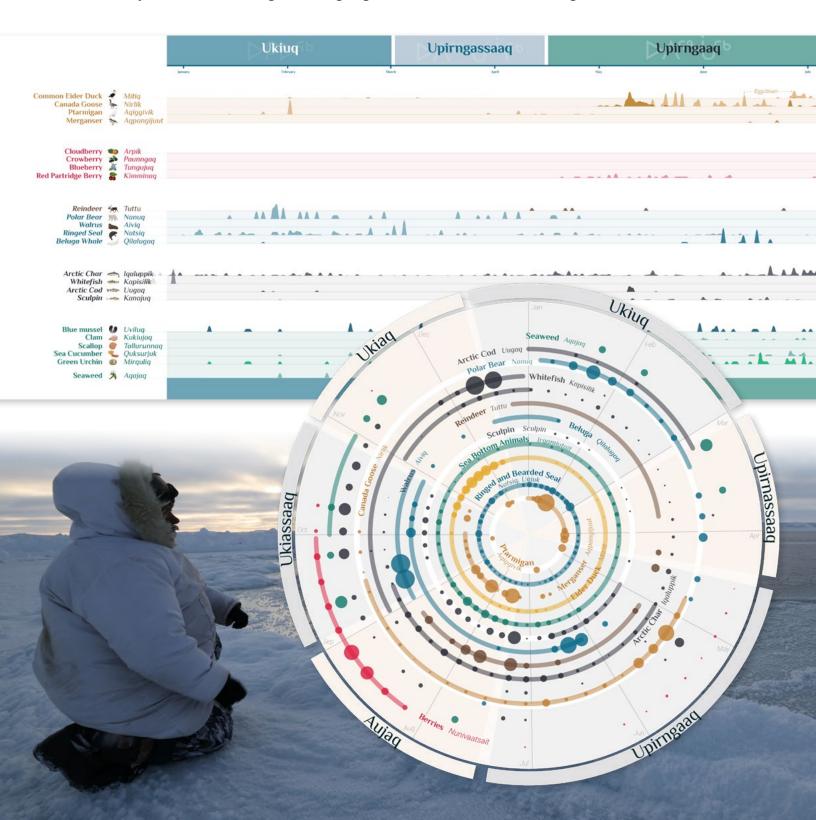
Indigenous frameworks to share and assess outcomes





Visualize Data Using an Indigenous Lens

Projects on SIKU are generating big outcomes for wildlife management



Outcomes to Empower Indigenous Equity in Decision-making and Policy



Policy

Indigenous Knowledge incorporated into policies



Decision Making

Decision making for sovereignty of Indigenous organizations



Equity

Empowerment across the table from industry, academia, and governments



Funding/Economy

Demonstrate impact and accountability to increase Indigenous investments



What We Offer



Project Onboarding

Support for your team to get started moving from priorities to action!



Ongoing Support

Funding & support to expand and keep your project running



Network

Join our network of Indigenous projects and users to exchange knowledge and ideas



Support for training your trainers and members on tools and features



Candice Sudlovenick

SIKU Outreach and Training Programs Manager

We're excited to announce that Candice is back working for AES in a senior management role to support training and outreach for SIKU projects at scale!



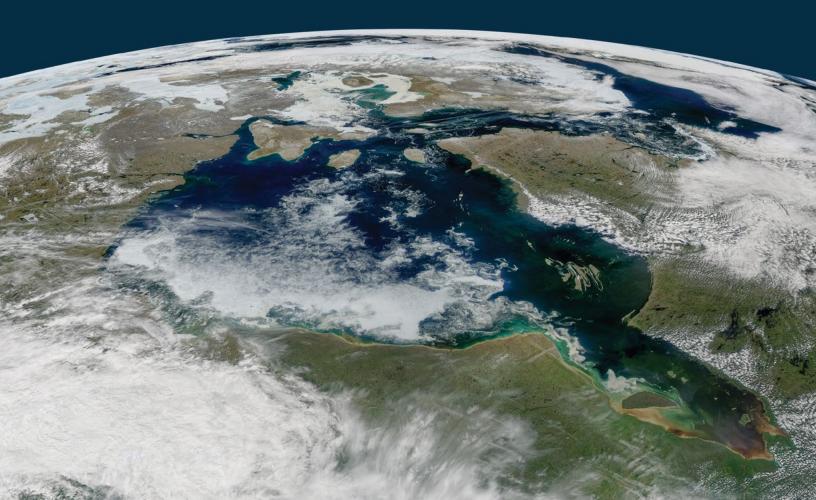
April 1 2023 - March 31 2024

Contact us at info@siku.org to set up your community project on SIKU!

Projects at Scale

SIKU demonstrates self-determination at scale by showing the impact of investing in Indigenous communities across the North to systematically and quantitatively document large scale climate trends and indicators.







88 2.5 Million+











USERS

POSTS

COMMUNITIES

UNIQUE VIEWS

* reflects overall challenge numbers from 2020 to 2025









The East Hudson Bay/James Bay Community-Driven Research Network

2024 was the ten year anniversary of the Community-Driven Research Network that connects inter-jurisdictional programs across Sanikiluag, Inukjuak, Umiujag, Kuujjuaraapik and Chisasibi. The communities came together at the new Qikiqtait Center in Sanikiluaq to help share knowledge and plan next steps for ongoing collaboration. As one of the Arctic Eider Society's first programs, the collaboration between these communities helped create direct the AES including development of the prototype data platform that eventually led to SIKU in 2019 - It's amazing what we can accomplish when we work together with our neighbours!





Nunavut Project Highlights



Our partnership with the Nunavut Arctic College's Environmental Technology Program in Igaluit is key to supporting the nextgeneration of Inuit project leaders and community researchers with tools for managing projects. Our annual workshops and training support data collection for student projects and allow students to make suggestions for future features on SIKU.

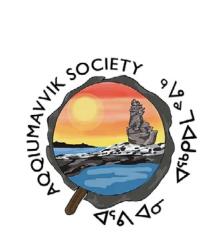


Training in Grise Fiord in Nov 2024 supported the BOSANOVA project linking community-based monitoring of Arctic cod across Nunavut and Greenland as this species shifts its distribution northward.





In Taloyoak, the Aqvigtuug Guardians and Umarullririgut Association are using SIKU to record observations of wildlife and environmental indicators to support creation of the Aqviqtuuq Indigenous Protected and Conserved Area.



Aggiumavvik Society

Aggiumavvik has been working with SIKU for many years including using survey tool for their goose nest mapping project and were the first community to get their bathymetry onto the SIKU Map!

Sapujiyiit

The Foxe Basin Kivalliq North Sapujiyiit Guardians of the Sea Society operates in Chesterfield Inlet, Coral Harbour and Naujaat and uses SIKU for their Guardians program to document ice conditions, wildlife observations, shipping activity and other knowledge in support environmental and climate monitoring in the region.





The Issatik Hunters and Trappers Organization in Whale Cove is using SIKU for their Frontline Workers program for polar bear monitoring, and is expanding to record other wildlife and environmental indicators to support the HTOs management activities.



Simeonie Voisey and Lu-Anna Saumik make a SIKU Geology Post during a workshop in Whale Cove in July, 2024.

Nunavik Project Highlights





Alec Niviaxie is the Regional Project Coordinator with Anguvigag, based in Kuujjuaraapik, Nunavik and leads the Anguvigag Monitoring Project with SIKU. His role supports projects across Nunavik, including workshops, training and ongoing support. Alec is also a Canadian Ranger, Search and Rescue volunteer and long-time member of the AES East Hudson Bay/James Bay CDRN. Get in touch to receive Alec's support with your Nunavik project!



Nunavik Sentinels

The Montreal Insectarium is using SIKU for their Nunavik Sentinels program, training youth in biodiversity monitoring and documenting insect biodiversity of Northern regions.

Arctic Beaver Project

SIKU is being used in Nunavik to track invasive species through the Arctic Beaver Project, run by Anguvigaq and Makivvik.





Imarilijiit Project

SIKU is being used for the community-based ice-thickness monitoring on the bay, lakes and rivers near Kangigsualujjuag.



Nunavik Marine Region Seabirds Survey

SIKU is being used to conduct seabird surveys in Inukjuak and Ivujivik.

Natsiq Project

Community members in Inukjuak, Kangiqsujuaq, Kuujjuaq, Tasiujaq and Aupaluk are using SIKU to track seal sampling.



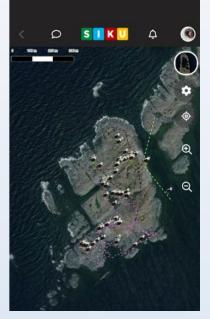


The Arqvilliit Indigenous Protected and Conserved Area Establishment Project

Inukjuak, Akulivik, and Puvirnitug are using SIKU to record traditional, local, and scientific knowledge about Arqvilliit, working to establish an IPCA.







Nest survey tools on SIKU help community members systematically monitor sites for eiders, terns, geese and other species.

Nunatsiavut

SIKU projects are also being run in partnership with the Nunatsiavut Government and Nunatsiavummiut who are interested in joining the Community-Led project in the communities of Nain, Hopedale, Postville, Makkovik, and Rigolet.

Community members share climate monitoring data and are contributing to regional climate priorities.

SIKU training workshops are held in the region to train and add Nunatsiavummiut to the Nunatsiavut project on SIKU. Ongoing support for project members is provided by the Nunatsiavut SIKU Outreach Coordinator. In-person Open Houses and workshops are held in each community throughout the year.







SIKU workshops are taking place in the five Inuit communities within the Nunatsiavut Land Claim Area.



Gillian Edmunds is the Nunatsiavut SIKU Outreach Coordinator. Gillian is a member of the Labrador Inuit Land Claims Agreement and has Inuit and Settler Ancestry. Her home community is Postville (KipukKak), Nunatsiavut. She provides SIKU training to harvesters in all five Inuit communities in the region. She also supports the Nunatsiavut Imappivut Marine Plan project on SIKU. In addition to working with Labrador Inuit, she also works with the Innu Nation's Guardians in the communities of Natuashish and Sheshatshiu Labrador. She's a recent graduate of Memorial University of Newfoundland (and Labrador), with a Bachelor of Arts degree in geography.

Get in touch to receive Gillian's support with your Nunatsiavut and Nitissinan projects!

First Nations

This year, ten projects in First Nations communities were added to SIKU and partnership discussions took place with 13 First Nations organizations and one Métis organization.

Through new partnership needs this has enabled further SIKU features, including the inclusion of First Nations' languages on SIKU, including:

- 24 Dene dialects in settings
- 90 wildlife profiles in Secwepmectsín
- 24 wildlife profiles in Kaska Danezage





For example, the Kwanlin Dün First Nation currently has two projects on SIKU focusing on environmental protection and wildlife, while the Lakes Secwepemc Foodland Conservation Society is using SIKU to gather baseline information around their territory from harvesting to human impact observations. Similarly, the Aullaviat Anguniarvik Guardians use SIKU for their work within the Yukon North Slope.

Community profiles were added for the Secwépemc Territory (BC), and Tahltan Territory (N.BC). Map features of cabins and settlement lands in the Yukon are being worked on to be displayed on the SIKU basemap.



SIKU staff participated in the Unama'ki Salmon Ceremony in June 2025 in support of their monitoring programs using SIKU.

James Bay

The Mushkegowuk Council is using SIKU for community-driven research, environmental monitoring, and self-determination. SIKU Coordinator Briana Chevrier was hired in 2024, who has been promoting SIKU and providing training and support for communities interested in using SIKU.

SIKU was updated to better support Cree programs by adding Omushkegowuk and Eeyou communities, local place names, and weather and wildlife terms.







Training programs with Mushkegowuk Council's marine and terrestrial programs in 2024/5

Innu Nation

The Innu Nation Guardians and Innu Parks staff are using SIKU in support of the Akami-Uapishku-KakKasuak Mealy Mountains National Park Reserve and for stewardship more generally around Natuashish and Sheshatshui, as well as with the Innu Nation Students on Ice expedition with the support of Innu place names and wildlife profiles added on SIKU.





Sanikiluaq Inuit Nunangat SIKU Coordinator

Based at the Arctic Eider Society's headquarters in Sanikiluag, Lisi Kavik-Mickiyuk supports Inuit-led priorities, consultation, outreach and training with SIKU tools and services both locally, regionally and at international events and conferences, including press and media communications. She supports regional Indigenous coordinators and programs and anchors her support and advice in the capacity built from the ground up at home in Sanikiluag with AES and SIKU. Reach out to learn more and get support for SIKU in your region!



Presentations and Conferences

SILA for SIKU Launch

International Arctic Change Conference -Ottawa, Ont.

In December 2024, AES launched SILA for SIKU, our latest climate and weather feature set as a special events at the conference, where more than 1700 attendees were invited. Led by co-founder and AES chair Lucassie Arragutainag as well as Lisi Kavik-Mickiyuk, Joel Heath and members of the Outreach and Training team presented to a large group and live streamed the event on social media. Several other presentations were given during the conference including a co-chaired session with partners on how they've been using SIKU to deliver their own projects.



Nunavut Premier P.J. Akeeagok stops for a chat with AES cofounder Lucassie Arragutainaq at the AES booth during the ArcticNet's fifth International Arctic Change Conference.

Indigenous Mapping Workshop

- Regina, SK

AES has been a part of the Indigenous Mapping Workshops for quite a few years now. The workshop in Saskatchewan provided information about SIKU for use in mapping and project management, as well as facilitating a number of workshops for participants that demonstrated the unique map features and other available tools.



SIKU Outreach coordinator Neomi Jayaratne (far right) and Inuit Nunangat Programs Manager Lisi-Kavik Mickiyuk (front) held SIKU workshops with participants of the Indigenous Mapping Workshop in October 2024.

Additional conferences and presentations:

- Arctic Research Consortium of the United States
- 2024 Canadian Hydrographic Conference
- 2024 Hakai Biodiversity Beyond Borders Symposium
- 2025 Unama'ki Institute of Natural Resources (UINR) Salmon Symposium
- International Conference on Arctic Research Planning

Publication/Press Highlights

Alessia C. Guzzi, Jens K. Ehn, Christine Michel, Jean-Éric Tremblay, Joel P. Heath, Zou Zou A. Kuzyk; Influence of altered freshwater discharge on the seasonality of nutrient distributions near La Grande River, northeastern James Bay, Québec. Elementa: Science of the Anthropocene 12 January 2024. https://online.ucpress.edu/elementa/ article/12/1/00133/203330/Influence-of-alteredfreshwater-discharge-on-the

West Coast Today (Scotland) (2024) "A student's incredible experience in Canada, with a surprising Scottish connection." www. westcoasttoday.co.uk/leisure/a-students-incredibleexperience-in-canada-with-a-surpiring-scottishconnection

Hoag, Hannah. (2024). Inuit-developed app is helping Indigenous communities harness data to make their own decisions. Canadian Geographic. https://canadiangeographic.ca/articles/on-thissocial-network-sea-ice-traditional-foods-and-wildlifeare-always-trendingutm campaignreprintutm sourcecanadiangeographic/

Maloney, Val. (July 2024) Combining Indigenous knowledge and deep learning to support safer on-ice travel. Waterloo News. https://uwaterloo.ca/ news/eweal-combining-indigenous-knowledge-anddeep-learning-support

Maloney, Val. (Sept. 1, 2024) Combining Indigenous knowledge and deep learning to support safer on-ice travel. The Good Men Project. https:// goodmenproject.com/featured-content/combiningindigenous-knowledge-and-ai-to-support-safer-onice-travel/

McEwen, L., & Csoba DeHass, M. (March 2025). A framework for leveraging 3D heritage preservation and Indigenous place-based learning in the Arctic. Polar Geography, 1–21. https://doi.org/10.1080/1088937X.2025.2471764

Stall-Paquet, C. (2025, March). SIKU means "sea ice" in Inuktitut. Air Inuit magazine. https://www. airinuit.com/en/about-air-inuit/inuit-magazine

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Amélie Grégoire Taillefer (April 2025), Insect Monitoring in Nunavik. Northern Horizons. https:// siku.org/data/i68e3e64dc8bff.pdf













Phone: (613) 416-9607 Fax: (613) 701-0326 Web: siku.org Email: info@siku.org

Building 410, No. 234 Sanikiluaq, NU XOA OWO



FUNDERS

















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Arctic Eider Society (2025). SIKU 2024-2025 Annual Report. Sanikiluaq, NU.