

AINA NEWS

Canadian Polar Data Workshop IV

We are pleased to announce that the Canadian Polar Data Workshop IV, hosted by the Canadian Consortium for Arctic Data Interoperability (CCADI) and its partners, will be held 22–25 February 2022, in Victoria, British Columbia, at the Delta Marriott Hotel. The workshop will include plenary talks and presentations followed by working meetings and hackathons.

Since 2015, the Canadian Polar Data Workshop has been a forum for supporting and advancing polar data initiatives in Canada. Structured to reach specific outcomes, these workshops have helped to develop Canada's national polar data strategies and to further national objectives in the areas of data discovery, federated search, data interoperability, knowledge transfer, and Indigenous data sovereignty. The first three workshops resulted in significant progress toward Canada's leadership in global polar data initiatives, notably the summary reports, contributions to the Arctic Observing Summit, and the realization of the CCADI partnership.

The Arctic Institute of North America is a proud member of the CCADI initiative and has supported the Canadian Polar Data Workshop since its inception. We look forward to seeing you at Canadian Polar Data Workshop IV!

Kluane Lake Research Station: Summer Field Season 2021

The 2021 summer field season at the Kluane Lake Research Station (KLRS) was 28 weeks long, from 25 March to 6 October. During this time, KLRS supported almost 2000 user days, of which 75% were represented by researchers. In total, KLRS welcomed researchers from 13 universities from Canada and the United States, and 35 junior researchers (mostly graduate students). From Yukon, the station hosted two high school groups, the Yukon Conservation Corp. and the Yukon Boys and Girls Club. Half of our users at the station this summer were visiting for the first time.

Joining the established personnel of Harry Penn (station manager), Matt Ayre (station manager), and Bob Reich (executive chef) were Luc Pinard and Sydney MacKinnon, who came on as operations support. Luc

was responsible for general maintenance around KLRS and has substantially enhanced facilities, including new workspaces in the Steele Lab and a remodel of the Wood Building. Sydney provided support in the mess hall, assisted Bob with food provisioning, and ensured that the research station's COVID-19 safety protocols and hygiene standards were achieved.

KLRS continued to update facilities in 2021. The wash house has been remodelled and the ten accommodation cabins have been renovated and maintained. The wi-fi infrastructure has received further enhancements, allowing researchers to enjoy the ability to host and join video conferencing platforms from the station. The research station continues to receive its power from the extensive solar system and battery bank. This summer, Daniel Sambor, a Stanford University PhD candidate in mechanical engineering, installed several monitors and sensors at KLRS to monitor and collect data on the amount of solar energy created and power consumed. His findings will form the basis of a future energy efficiency strategy for KLRS.

The COVID-19 pandemic prevented researchers from travelling to KLRS. This was challenging for researchers who depend on the maintenance and continuous operation of instrumentation. In 2021, KLRS focused on enabling instrumentation housed at the research station to send data to repositories and archives stored at home institutions around North America. These data streams include the KLRS weather system, seismic data, and power system data. More streams will be added in 2022 along with an online, publicly available dashboard for accessing and viewing the data in close to real time.

Since May 2021, the Ag1054 Project at KLRS has been growing and harvesting fresh produce and distributing it around local communities and businesses. The 40-ft shipping container that houses an array of hydroponic growing trays and LED lights and is commercially known as a Cropbox can grow up to 2830 plants at one time. The project is now producing over 30 kg of fresh produce each week, including leafy greens and herbs.

The goals of KLRS for 2022 include a review of the research station's food sources with a critical assessment of their sustainability and environmental impact. In addition, the research station has projects underway to enhance renewable energy generation and explore options of biofuel usage.