

Mini-observatory now streaming data from Arctic waters

December 17 2012

(Phys.org)—After a year and a half in development with the Government of Nunavut and the community of Cambridge Bay, a new mini-observatory is now streaming continuous data from the Arctic seafloor.

In August 2012, the Nunavut Research Institute granted a five-year research license to the University of Victoria's Ocean Networks Canada—which manages the world-leading VENUS and NEPTUNE Canada observatory networks—for the first year-round cabled undersea monitoring system of the northern environment.

"This specially designed scaled-down version of our seafloor networks off the coast of [Vancouver Island](#) will support longer-term science-based understanding of the dramatic changes taking place in [Arctic waters](#)," says Dr. Kim Juniper, the associate director of science for NEPTUNE Canada, as he introduced the system at the annual [Arctic](#) Net conference held this year in Vancouver. "These changes include the historic receding of the northern sea ice and its impact on [marine ecosystems](#)."

In September, hurrying to beat the oncoming winter ice, the observatory's engineering and systems team were able to complete the final installation at Cambridge Bay with assistance from community organizations and individuals, as well as vital support from the Nunavut government.

Following a two-month commissioning period, the miniature cabled

ocean observatory and companion surface [weather station](#) are reporting continuous data to the archive system at the University of Victoria. The information streaming from the instruments—including an underwater camera, ice profiler and sensors measuring temperature, depth and salinity—is freely available over the internet

In the months ahead, education, science and operations staff will be working with Cambridge Bay schools to develop educational programs and support collaborative projects with the coastal [Arctic research](#) community.

UVic's Ocean Networks Canada Observatory—made up of the VENUS and NEPTUNE Canada cabled undersea networks—is changing the way we study the oceans, providing scientific evidence on a wide range of critical issues, and developing new world-leading technologies. Ocean Networks Canada is a national facility supported through funding from the governments of Canada and British Columbia.

www.oceannetworks.ca

Cambridge Bay backgrounder: tinyurl.com/bqac8dd

Provided by University of Victoria

Citation: Mini-observatory now streaming data from Arctic waters (2012, December 17) retrieved 25 April 2024 from <https://phys.org/news/2012-12-mini-observatory-streaming-arctic.html>

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