

Data Now Streaming From Cambridge Bay ^[1]

Submitted by Rory Lattimer Fri, 2012-12-14 00:00



[2]

After a year and a half in development with the Government of Nunavut and the community of Cambridge Bay, a new community observatory is now streaming continuous data from the Arctic seafloor.

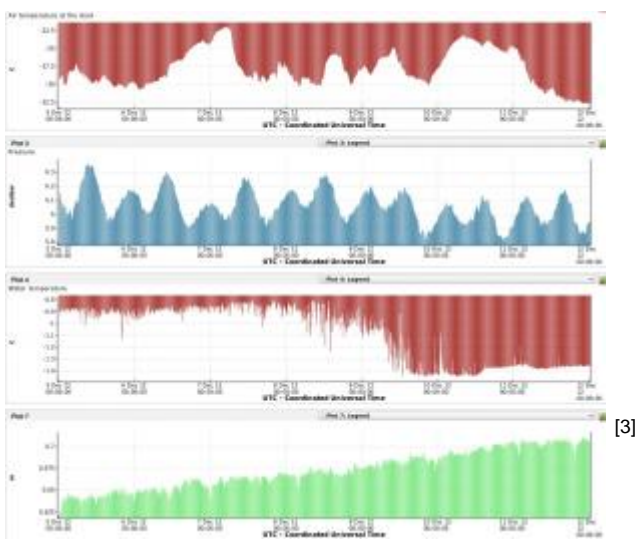
In August 2012, the Nunavut Research Institute granted a five-year research license to Ocean Networks Canada to install and operate the first year-round cabled undersea monitoring system of the northern waters.

?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. (Thanks to Beth and her class from Killinick High School for visiting with our team: Ryan Flagg, Martin Hoffman, Ryan Key)

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.

The graph below shows several parameters from one week of constant data from early December 2012.



Plot #1 shows the temperature at the dock: it hovers around -30°C . Plot #2 indicates the change of pressure with the tides, indicating that the ice still heaves. Plot #3 illustrates another unfamiliar site: negative water temperatures! Plot #4 shows the increase in ice thickness. Since it started to form, the ice layer appears to have grown at a regular average of approximately 1 cm per day.

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.

[Cambridge Bay Observatory Backgrounder](#) [4].

Tags:

- [Cambridge Bay](#) [5]
- [community observatory](#) [6]
- [Arctic](#) [7]
- [Nunavut](#) [8]
- [Nunavut Research Institute](#) [9]

Categories:

- [Data Highlights](#) ^[10]
- [News Release](#) ^[11]
- [Success Stories](#) ^[12]

```
// FIXES AMPERSAND IN BREADCRUMB var ONC_breadcrumb =  
document.getElementById("breadcrumb"); if (ONC_breadcrumb) { var ONC_innerHTML =  
ONC_breadcrumb.innerHTML; ONC_innerHTML = ONC_innerHTML.replace("&", "&");  
ONC_breadcrumb.innerHTML = ONC_innerHTML; }
```

Highlights

- [Audio](#)
- [Data](#)
- [Learning](#)
- [Science](#)
- [Video](#)

Reading Room

- [Active Research](#)
- [Backgrounders](#)
- [FAQs](#)
- [Glossary](#)
- [News Briefs](#)
- [News Stories](#)
- [Newsletters](#)
- [Publications](#)

Cool Stuff

- [Apps](#)
- [Digital Fishers](#)
- [iBooks & e-Pubs](#)
- [Live Video](#)
- [Maps](#)
- [Images](#)

- [State of the Ocean](#)

Data & Tools

- [Apps](#)
- [Data Plots](#)
- [Data Search](#)
- [Data Policy](#)
- [Data Help](#)
- [OPeNDAP Web Services](#)

Opportunities

- [Calendar](#)
- [Educator Opportunities](#)
- [Global Partnerships](#)
- [Industry Network](#)
- [Jobs](#)
- [Staff List](#)
- [Technology Services](#)
- [Workshops](#)

Sites & Instruments

- [Arctic Sites](#)
- [Northeast Pacific Sites](#)
- [Salish Sea Sites](#)
- [Notice to Mariners](#)

Follow Us



[Sign up for our newsletter](#)

Feedback

Send us your questions and comments *

How could we improve this page?

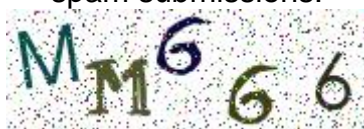
Your Name

Your Email *

Your Location

CAPTCHA

This question is for testing whether or not you are a human visitor and to prevent automated spam submissions.



What code is in the image? *

Enter the characters shown in the image.



[About Us](#) | [Contact Us](#) | [Media Relations](#) | [Legal Notices](#)

© Ocean Networks Canada. All rights reserved. 2474 Arbutus Road, Victoria, BC, V8N 1V8
| 1.250.472.5400

```
(function () { var d = new Date; var year = d.getFullYear();  
document.getElementById("copyright-date").innerHTML = year; })();
```

Source URL: <http://www.oceannetworks.ca/data-now-streaming-cambridge-bay>

Links:

- [1] <http://www.oceannetworks.ca/data-now-streaming-cambridge-bay>
- [2] http://farm8.staticflickr.com/7372/9495778079_351235decb_z.jpg
- [3] http://farm4.staticflickr.com/3767/9495778063_fd025eaac8.jpg
- [4] <http://www.oceannetworks.ca/cambridge-bay-mini-observatory-backgrounder>
- [5] <http://www.oceannetworks.ca/article-tags/cambridge-bay>
- [6] <http://www.oceannetworks.ca/article-tags/community-observatory>
- [7] <http://www.oceannetworks.ca/article-tags/arctic>
- [8] <http://www.oceannetworks.ca/article-tags/nunavut>
- [9] <http://www.oceannetworks.ca/article-tags/nunavut-research-institute>
- [10] <http://www.oceannetworks.ca/article-categories/data-highlights>
- [11] <http://www.oceannetworks.ca/article-categories/news-release>

[12] <http://www.oceannetworks.ca/article-categories/success-stories>