



## Seeking Knowledge From the Seas

### Enabling Greater Understanding of our Ocean Ecosystems

**Project Name:** Platform for Ocean Knowledge Management (POKM)

**Project Lead:** Dalhousie University, Halifax, Nova Scotia

**CANARIE Contribution:** \$ 1.7 M

**Other Participant:**

- Ocean Tracking Network (OTN), Dalhousie University, Halifax, Nova Scotia

**What is POKM?**

Human survival is directly linked to stable oceanic life. The Platform for Ocean Knowledge Management (POKM) lets marine scientists unlock the mysteries of the deep by enabling access to vast sources of data and the tools to explore them.

Sensors that observe and monitor our oceans are scattered around the globe and generate a massive amount of marine-life and ocean data. POKM allows the seamless and efficient collection, exploration and sharing of massive amounts of this data, thus realizing a range of ecological, educational and economic benefits.

POKM uses CANARIE's high-speed network to enable researchers from around the world to acquire and dive into large volumes of data, helping them understand the many mysteries of our oceans.

**Value to Research and to Canada:**

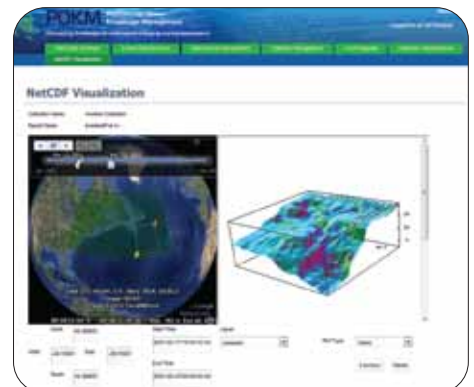
- Allows researchers to predict marine life migration patterns that impact Canada's fishing industry
- Provides advance warning of natural disasters such as coastal flooding
- Enables collaborative international research into world sustainability problems such as global warming, marine species' extinction and preservation of natural resources

**Did you know?**

Oceans cover 70% of the earth's surface and contain 80% of all life.



This powerful platform enables visualization of two distinct data sets. Shown here, marine mammal migration overlaid on an ocean temperature map.



Another screen-capture from the POKM system. This one shows "mesh" for the Sea Surface Temperature for a selected area.