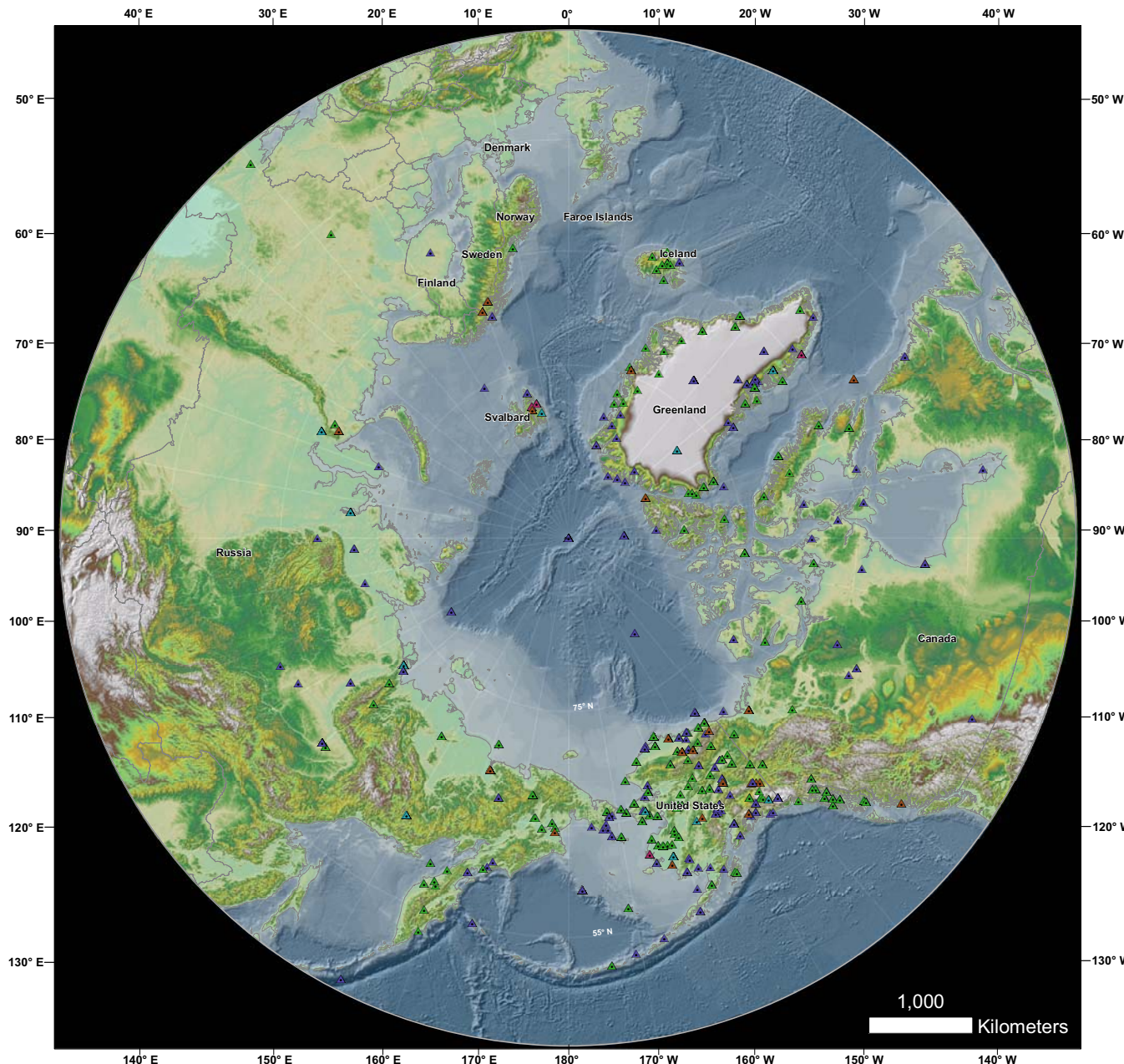


# Arctic Research Sites Funded by the National Science Foundation (NSF) Office of Polar Programs (OPP), for the period 2008-2011

This map was created for CH2MHill Polar Services (CPS), who provides logistic support services to the National Science Foundation's (NSF) Office of Polar Programs (OPP) Arctic section. This map will be used in future CPS Planning meetings to help plan for logistical support for the coming years. This map also provides useful information which identifies gaps in the NSF Arctic Research Program. This allows researchers and program managers the ability to make suggestions for future NSF funding.

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This map displays research sites funded by the National Science Foundation (NSF) in the arctic region for the period 2008 - 2011. This data layer can be visualized in the Arctic Research Mapping Application (armap.org). The data set includes location and high-level project information provided to CH2MHill Polar Services (CPS) ([www.polar.ch2m.com](http://www.polar.ch2m.com)) by members of the US Interagency Arctic Research & Policy Committee. Information about fieldwork in the Arctic has been provided by the NSF. CPS compiled project information in the Arctic Research Logistics Support Service (ARLSS) database of scientific field research projects for the Arctic region (45 degrees North Latitude and above). The database encompasses all field research sites supported or coordinated through the Arctic Research Support and Logistics Program at the NSF. The majority of the research projects are funded by the Arctic Sciences Section (ARC) within NSF's Office of Polar Programs (OPP). The database does not include modelling and other similar projects that do not require field research. Each database record includes: investigator name, project title, year, funding agency, funding program, a link to an award description, and other information provided by PIs. The ARLSS database contains over 8000 sites, and is regularly updated. The database is publicly available in variety of formats to address the needs of different user communities (<http://armap.org>).

The Arctic Research Mapping Application (ARMAP) is a suite of online services to provide support of Arctic science. These services include: a text based online search utility, 2D Internet Map Server (IMS); 3D globes and Open Geospatial Consortium (OGC) Web Map Services (WMS). With ARMAP's 2D maps and 3D globes, users can navigate to areas of interest, view a variety of map layers, and explore U.S. Federally funded research projects. Projects can be queried by location, year, funding program, discipline, and keyword. Links take you to specific information and other web sites associated with a particular research project. ARMAP including US research funded by the National Science Foundation, National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, and the United States Geological Survey. Avoiding a duplication of effort has been a primary objective of the ARMAP project which incorporates best practices (e.g. Spatial Data Infrastructure and OGC standard web services and metadata) and off the shelf technologies where appropriate. The ARMAP suite provides tools for users of various levels of technical ability to interact with the data by importing the web services directly into their own GIS applications and virtual globes; performing advanced GIS queries; simply printing maps from a set of predefined images in the map gallery; browsing the layers in an IMS; or by choosing to "fly to" sites using a 3D globe. With special emphasis on the International Polar Year (IPY), ARMAP has targeted science planners, scientists, educators, and the general public. In sum, ARMAP goes beyond a simple map display to enable analysis, synthesis, and coordination of Arctic research. ARMAP may be accessed via the gateway web site at <http://www.armap.org>.



## Legend

### NSF Research Site



#### Year

-  2008
  -  2009
  -  2010
  -  2011
  -  2012
- Sites represent current funded research for 2008 - 2011.

#### Topography

- Value
-  7652 m
  -  1 m
- Source Data - Global Digital Elevation Model (GTOPO30) represents gridded 30 arc seconds (~ 1 Km) elevation for the world. These data were developed by the USGS EROS Data Center in 1996 from a variety of data sources. ESRI Data and Maps version 9.2.

#### Bathymetry

- Value
-  - 11000 m
  -  0 m
- Source Data - Global Digital Elevation Model (ETOPO2) represents gridded 2 minute by 2 minute elevation and bathymetry for the world. These data were derived from the National Geophysical Data Center (NGDC) ETOPO2 Global 2' Elevations data set from September 2001. ESRI Data and Maps version 9.2.

