



## ◀ Data Products & Services

## Tools at NSIDC

NSIDC develops a variety of tools to accomplish different tasks. The Search, Order, Browse category contains tools to help users access, view, or order data that NSIDC offers. The [Data](#) tools are available to users of NSIDC and other scientific data to help them view and analyze data. [Development Tools](#) were created by programmers at NSIDC and are offered to software developers. If you have questions, please [contact NSIDC User Services](#).

## Data

Data tools help users extract and read data from formats such as HDF, display data within packages such as Research System's IDL, or assist in the geolocation of gridded products. These tools are available to download and use in existing programs or projects.

- [EASE-Grid Geolocation Tools](#): Tools include IDL routines and map projections for geolocation and conversion tools to use with EASE-Grid data sets.
- [IMCORR Software](#): IMCORR software uses two images and input parameters and matches small subscenes from the two images.
- [MODIS Swath-to-Grid Toolbox \(MS2GT\)](#): This set of software tools reads HDF-EOS files containing MODIS swath data and produces flat binary files containing gridded data in a variety of map projections. MS2GT consists of three perl programs that make calls to several standalone IDL and C programs. For help, please [contact NSIDC User Services](#).
- [AMSR-E Swath to Grid Toolkit \(AS2GT\)](#): Use this suite of

## Search, Order, Browse Tools

Use these data interfaces to access, view, or order data that NSIDC distributes.

- [Search 'N Order Web Interface \(SNOWI\)](#): Search and order data from NSIDC and other Distributed Active Archive Centers (DAACs).
- [MODIS SNOWI](#): Search and order MODIS gridded snow and ice products from NSIDC.
- [Polar Spatial Query \(PSQ\)](#): Search for orbit and scene data.
- [Graphical Interface for Subsetting, Mapping, and Ordering \(GISMO\)](#): Order gridded data from NSIDC.
- [World Glacier Inventory](#): Search the inventory of glacier names and numbers.
- [Online Glacier Photograph Database](#):

software tools to subset and grid L1B and L2A AMSR-E swath data. These tools make it easy to process data into custom grids with any temporal or spatial resolution. AS2GT is not a standalone toolkit, but is part of the NSIDC Passive Microwave Swath Data Tools (PMSDT). When you download the software, you get AS2GT as part of the larger package that will also allow you to work with some forms of SSM/I and SMMR data. For help, please [contact NSIDC User Services](#).

- [Hierarchical Data Format - Earth Observing System \(HDF-EOS\)](#): NSIDC created this site to answer common questions about HDF-EOS and to provide simple methods for working with the HDF-EOS format.
- [HDF-EOS Imaging Tool \(EOS IT\)](#): This interface has two modes. One mode opens, geolocates, and visualizes multiple swath or grid products in separate but dynamically linked windows. Another mode allows users to examine individual bits from data fields. (Users must have IDL 5.6 installed to run EOS-IT.)

Search the database of glacier photographs.

- [Sea Ice Index](#): Search monthly archives for sea ice extent and browse images.
- [Global Lake and River Ice Phenology](#): Search for freeze and thaw data and general information.

## Development Tools

Development tools are small applications that NSIDC programmers created for internal use and are now making available to others in the software development community. These tools form the "building blocks" of many of the other tools that we provide. The tools are not related to particular data sets, and can be used in other programs. For help, please [contact NSIDC User Services](#).

- [Jaz Panel](#): A java applet that can specify geographic area of interest as part of an HTML forms interface.
- [Mapx](#): An object-oriented geographic coordinate transformation library available in both C and Java.
- [Spheres](#): A java package for doing spherical trigonometry. It includes a java implementation of the backtrack orbit search algorithm.

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