



NORMAP USE CASES

1. Find relevant satellite products
2. Browse the search results
3. Download satellite data
4. Collocate several satellite products
5. Analyze collocated data online



Use Case Structure

1. User - system interaction table
2. Detailed description of user operations
3. Questionnaire

USE CASE 1: Find relevant satellite products

Goal: To enable users to interactively find information about relevant data.

The screenshot shows the NORMAP Metadata Catalogue Search interface. The header includes the NORMAP logo and a banner photo by Einar Egeland from August 12, 2012. The left sidebar contains navigation links: NORMAP project home, Metadata search, View Basket (0), Help, Subscription, and Login. Below these are search filters: Current search (Clear all), Topics and variables (Cryosphere > Sea Ice), Operational status, Institutions (NERSC Nansen Environmental and Remote Sensing Center), Areas, Map search, Datacollection period (highlighted), Text, and Search.

The main content area is titled "Metadata Catalogue Search" and includes the instruction: "Search for NORMAP data. Use the links on the left hand side to access pages for setting search conditions." Below this is the "Datacollection period" section, which asks the user to enter a date range in "YYYY-MM-DD" format. A date picker is open, showing the month of July 2013. The date picker table is as follows:

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

USE CASE 2: Browse the search results



Goal: To provide simple overview and visualization of individual datasets

NORMAP Banner photo by Einar Egeland. - August 12, 2012

Metadata Catalogue Search

Search for NORMAP data. Use the links on the left hand side to access pages for setting search conditions.

[Search options](#) [Pivot table](#)

Dataset name	Descriptive title for the dataset	Abstract	Datacollection period	Institutions
+ nersc-arctic12km-seaice Show xml RSS Feed Add to basket Visualize 	Sea ice concentration in the Arctic Ocean	Monthly aggregated sea ice concentration in the Arctic Ocean derived with 4 low-frequency algorithms from microwave satellite data (SSM/I, AMSR-E)	1987-11-01 to 2011-12-31	NERSC Nansen Environmental and Remote Sensing Center
+ nersc-arctic25km-seaice Show xml RSS Feed Add to basket Visualize 	Sea ice concentration in the Arctic Ocean	Monthly aggregated sea ice concentration in the Arctic Ocean derived with 7 high-frequency algorithms from microwave satellite data (SSM/I, AMSR-E)	1978-11-01 to 2011-12-31	NERSC Nansen Environmental and Remote Sensing Center
nersc-arctic25km-seaicearea	Sea ice area and extent in	Monthly aggregated sea ice area and extent in the Arctic Ocean calculated from sea ice concentration maps derived with 11 high- and	1978-11-01 to 2011-12-31	NERSC Nansen

USE CASE 3: Download satellite data

Goal: To provide simple download of individual datasets



Norwegian
Meteorological
Institute

Met.no Thredds
THREDDS Data Server

Catalog <http://thredds.met.no/thredds/catalog/cryoclim/met.no/osisaf-nh/catalog.html>

Dataset: [osisaf-nh/osisaf-nh_aggregated_ice_concentration_nh_polstere-100_200910010000.nc](#)

- Data size: 33.21 Mbytes
- ID: [cryoclim/met.no/osisaf-nh/osisaf-nh_aggregated_ice_concentration_nh_polstere-100_200910010000.nc](#)

Access:

1. **OPENDAP:** [/thredds/dodsC/cryoclim/met.no/osisaf-nh/osisaf-nh_aggregated_ice_concentration_nh_polstere-100_200910010000.nc](#)
2. **HTTPServer:** [/thredds/fileServer/cryoclim/met.no/osisaf-nh/osisaf-nh_aggregated_ice_concentration_nh_polstere-100_200910010000.nc](#)
3. **WMS:** [/thredds/wms/cryoclim/met.no/osisaf-nh/osisaf-nh_aggregated_ice_concentration_nh_polstere-100_200910010000.nc](#)
4. **WCS:** [/thredds/wcs/cryoclim/met.no/osisaf-nh/osisaf-nh_aggregated_ice_concentration_nh_polstere-100_200910010000.nc](#)

Dates:

- 2013-10-22T10:16:50Z (**modified**)

Viewers:

- [Godiva2](#) (browser-based)
- [NetCDF-Java ToolsUI](#) (webstart)

USE CASE 4: Collocate several satellite products

Goal: To provide access to several datasets transformed according to the user request of preferred file format, map projection, variables, temporal and spatial resolution and span.

Colocation parameters

Select products for colocation

Sea Ice concentration, TUD

Sea Ice concentration, Near90GHz

Analyzed Sea Surface Temperature

Select projection type

WGS84, EPSG:4326

Arctic Polar Stereographic, EPSG:3995

Grid width, pix

Grid height, pix

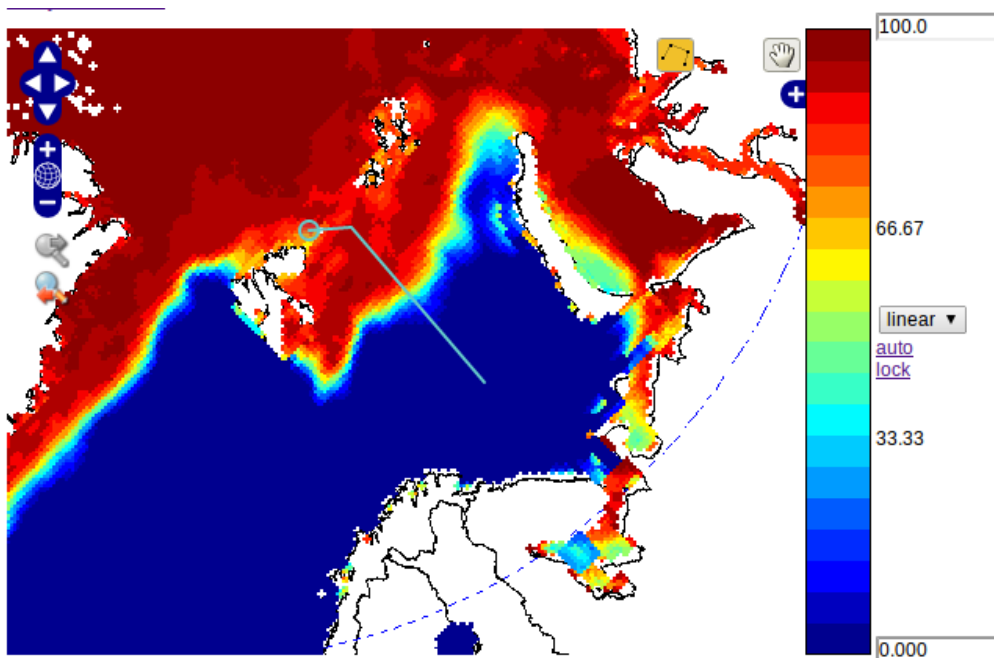
Start date

End date

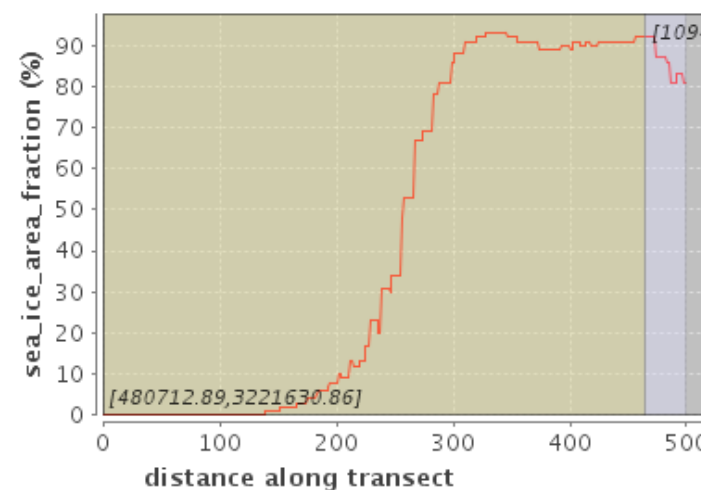
USE CASE 5: Analyze collocated data online

Goal: To provide advanced visual representation of multiple transformed datasets

A: Extracting point or transect data from collocated datasets

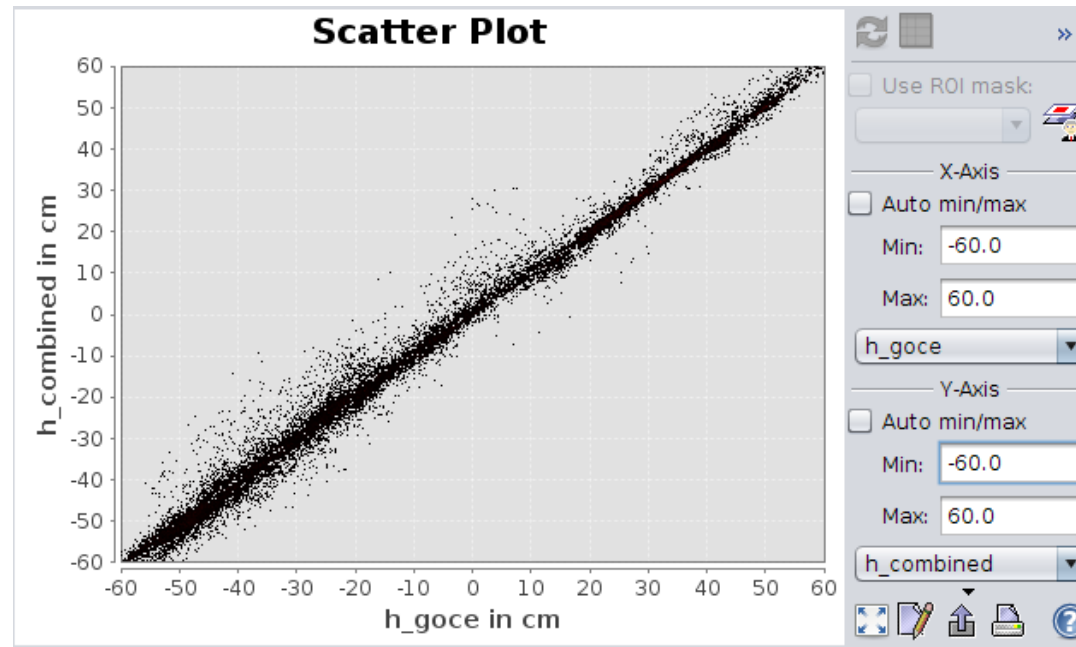


Transect for sea_ice_area_fraction



USE CASE 5: Analyze collocated data online

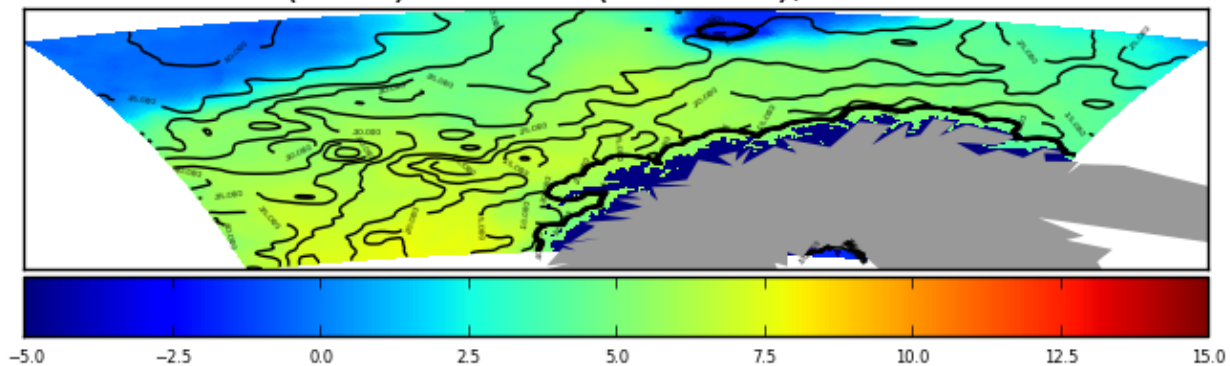
B: Comparison of data from collocated datasets using scatter plot



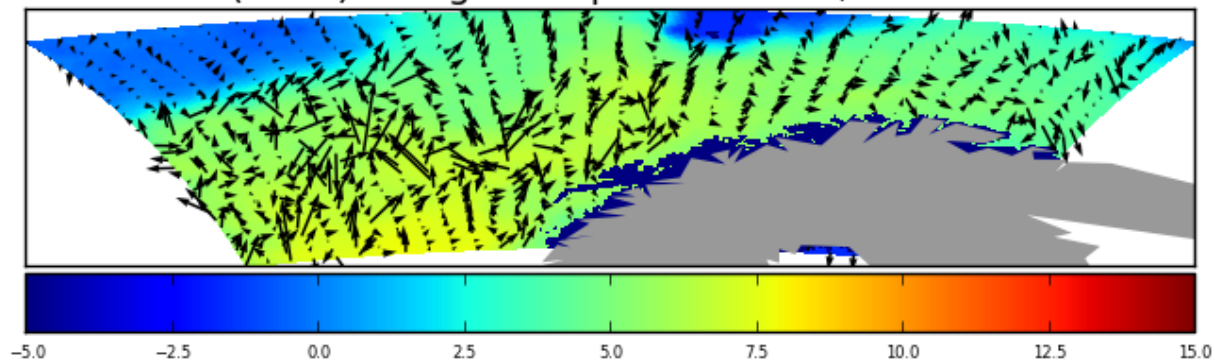
USE CASE 5: Analyze collocated data online

C. Visualization of overlaid data

SST (color) and SSH (contours), 2010-12-15



SST (color) and geostrophic currents, 2010-12-15



Thank you for cooperation

with  *!*