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18	EUROGOOS		41	U Laval	
19	EUROCEAN		42	ONC	
20	UPM		43	NMEFC	
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EXECUTIVE SUMMARY

This document contains the description of the INTAROS online data catalogue, which includes data collections that were not previously available, and of the effort done in INTAROS to make selected in situ and satellite land and terrestrial cryosphere data collections accessible through existing repositories.

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1 Introduction

This document contains the description of the INTAROS online data catalogue (Chapter 2), which includes data collections that were not previously available, and of the effort done in INTAROS to make selected in situ and satellite land and terrestrial cryosphere data collections accessible through existing repositories (Chapter 3). Purpose of the dynamic, web-based catalogue is to give an overview of the present observing capability after exploitation in WP2, and to provide the necessary metadata to allow for the exploration of datasets by users, and for the data usage in the demonstrative applications (WP6).

2 The INTAROS data catalogue

2.1 Purpose and content

The INTAROS data catalogue will contain descriptions of and links to all datasets collected or generated through exploiting existing datasets and/or estimating new parameters within the project. In the first version of the INTAROS data catalogue, released at end November 2018, partners have registered the datasets that are resulting from their work in WP2 (Exploitation of existing observing systems) during the two first years of the INTAROS project. The data catalogue is the tool for displaying the data collected and/or exploited within INTAROS. It is therefore a major component of the IAOS portal described in INTAROS D5.4. The main technical development of the data catalogue is therefore carried out in WP 5 - Task 5.6. Details about the design and implementation is found in D5.4.

Each dataset is described by a set of metadata elements that capture key characteristics of the dataset. The following metadata elements have been defined in the first version of the INTAROS data catalogue:

- Title (mandatory): A descriptive title of the dataset.
- URL (mandatory): A link (URL) to the dataset within the data catalogue.
- Parameter name(s): A list of the parameters contained in the dataset.
- Project/program name(s): The project(s)/program(s) that supported data collection and/or preparation. The funding agency (e.g. European Commission) and the contract number should be included here.
- Observing system name: The name of the observing systems (if any) that collected the measurements on which the dataset is based.
- Description: A short text describing the content of the dataset. The following elements could be included
 - What kind of parameters are included in the dataset.
 - Geographic area (by name) and time period covered by the dataset.
 - Summary of processing to generate the dataset (e.g. with reference to paper or report).
 - Indication of possible use of the dataset (e.g. model validation).
- Tags: Keywords associates with the dataset, e.g. “ocean acoustics”, “sea ice”. These keywords will be used a way to quickly search for data.
- License: What license the data are/will be provided under. A list of commonly used licenses is provided in the data catalogue.
- Organisation: Which organisation the dataset belongs to.
- Visibility: This is a flag controlling the publication of a dataset registration. If the datasets description is not completed yet selecting “private” will ensure the entry is only visible to the metadata editor. When the dataset description has been completed this flag can be changed to “public” to make the description visible to all users.
- Source: a link (URL) to the dataset file(s), e.g. on a Thredds Data Server or a FTP server.
- Version: A number denoting the version of the dataset.

- Principal Investigator: The name of the PI for dataset. Multiple persons can be named.
- PI Email: The e-mail address of the PI
- Data Curator: The name of the person in charge of maintaining the dataset and its metadata.
- Data Curator Email: The e-mail address of the data curator.

One or more links to datasets and/or illustrations of the content can be added to the description. These data resources are described by:

- Name: A title of the graphics or link to the dataset.
- Description: A short description of what the graphics is illustrating, or link is referring to.
- Format: What format the graphic resource is stored in or protocol of the data access link.

2.2 Catalogue

The INTAROS data catalogue is online at <https://catalog-intaros.nersc.no/>. The following shows some illustration of its contents at the time of writing.

Figure 1 shows the home page of the INTAROS data catalogue. This page is comprised of a search component (upper left), short statistics of how many datasets and organisations are registered (middle left) and a general information component identifying the areas and spheres addressed by INTAROS (right). From the home page, users can also get access to Dataset pages, Organisation pages, Group pages (currently not used) and the About page. It also provides a link to the login in page (top right).

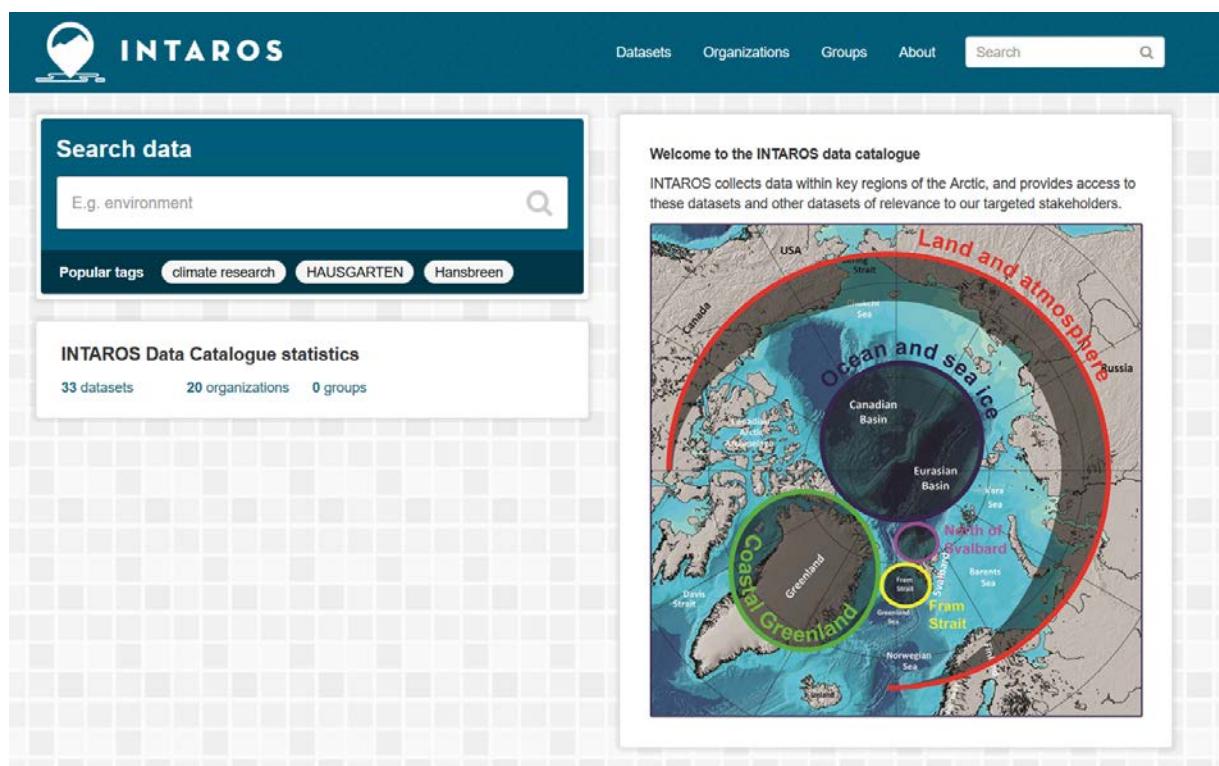
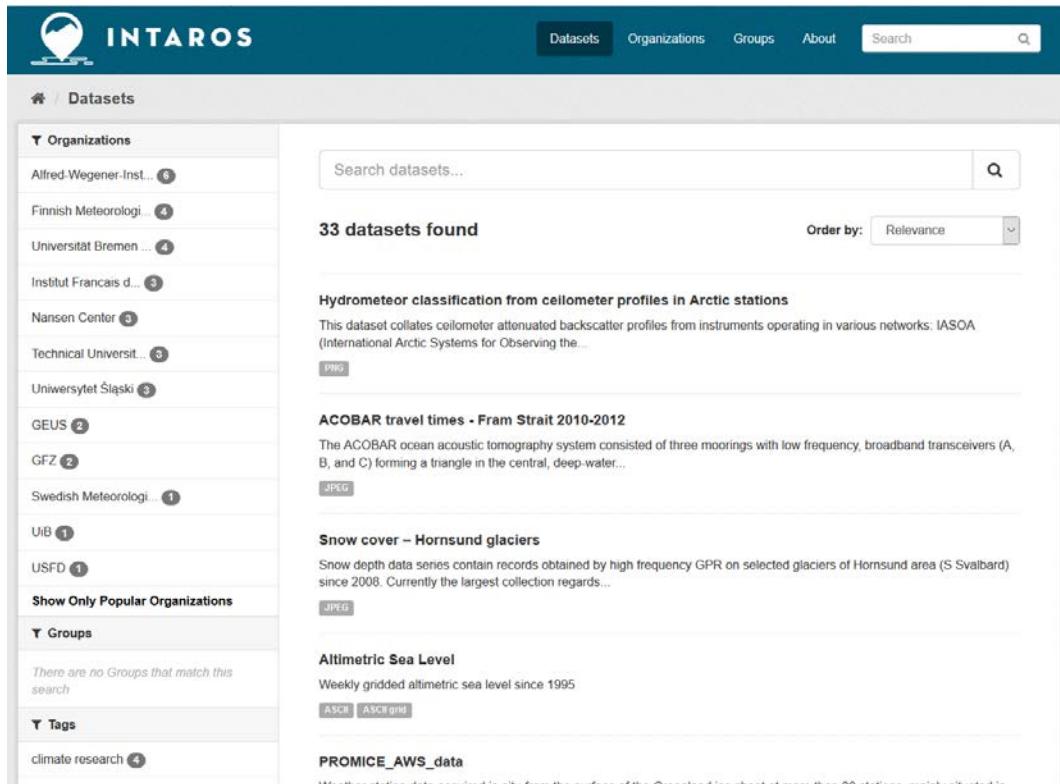


Figure 1: INTAROS Data Catalogue home page.

When entering the Dataset page (Figure 2), users can easily search using free text search or by selecting one of the tags associated with the dataset. It is also easy to select all datasets from a specific organization (Figure 3). After identifying a dataset of interest, the user can view its metadata and proceed to view or download the dataset.



33 datasets found

Hydrometeor classification from ceilometer profiles in Arctic stations
This dataset collates ceilometer attenuated backscatter profiles from instruments operating in various networks: IASOA (International Arctic Systems for Observing the...

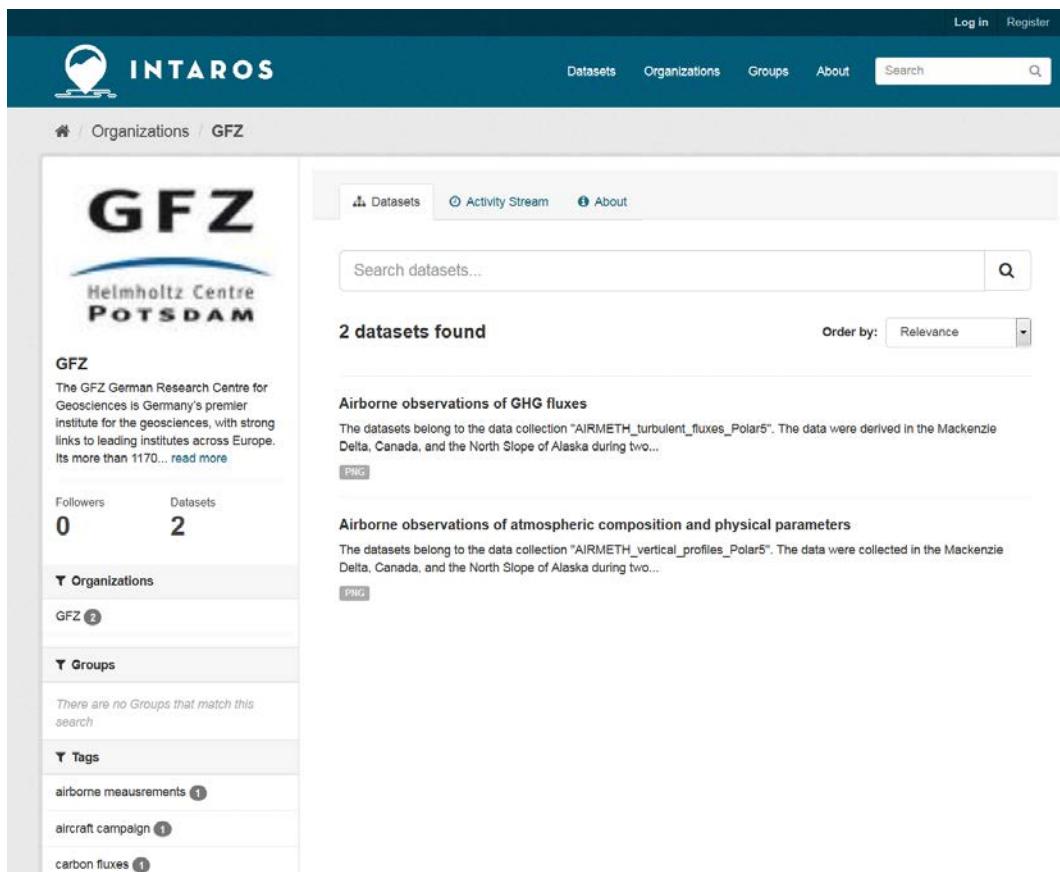
ACOBAR travel times - Fram Strait 2010-2012
The ACOBAR ocean acoustic tomography system consisted of three moorings with low frequency, broadband transceivers (A, B, and C) forming a triangle in the central, deep-water...

Snow cover – Hornsund glaciers
Snow depth data series contain records obtained by high frequency GPR on selected glaciers of Hornsund area (Svalbard) since 2008. Currently the largest collection regards...

Altimetric Sea Level
Weekly gridded altimetric sea level since 1995

PROMICE_AWS_data
Monthly station data recorded in situ from the surface of the Greenland ice sheet at more than 30 stations, mainly situated in

Figure 2: INTAROS Data Catalogue - Datasets page.

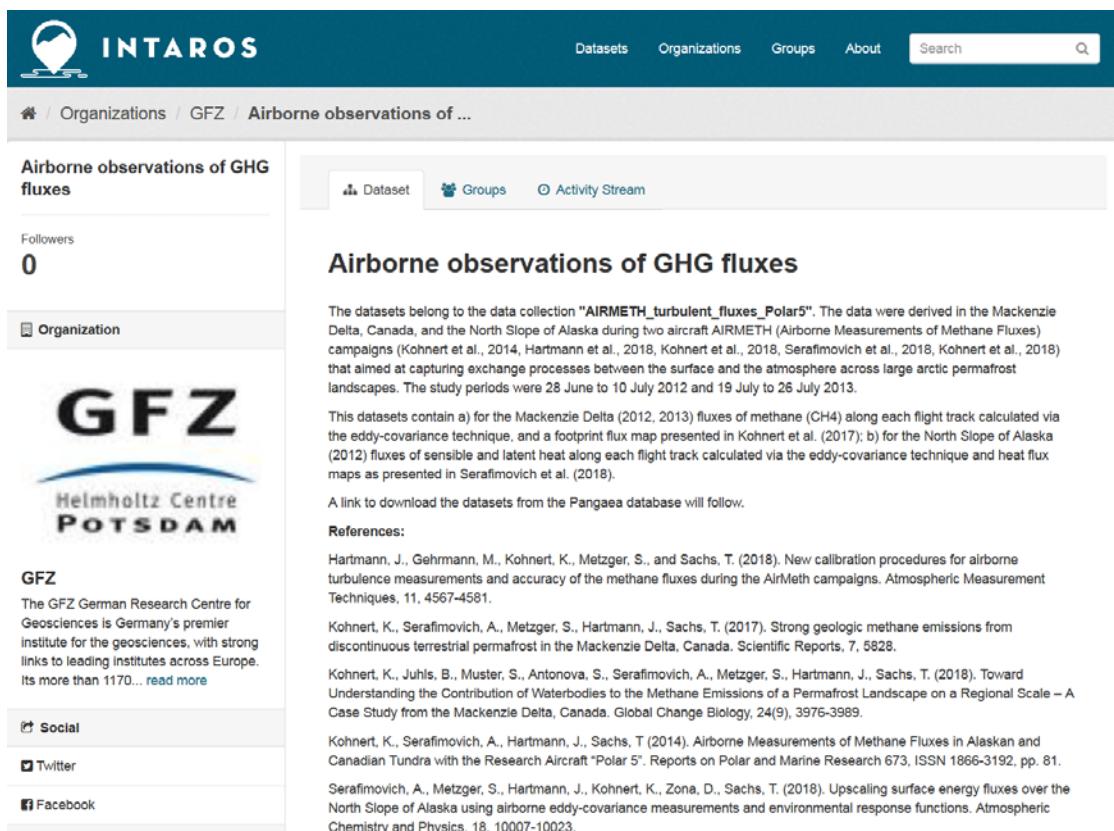


2 datasets found

Airborne observations of GHG fluxes
The datasets belong to the data collection "AIRMETH_turbulent_fluxes_Polar5". The data were derived in the Mackenzie Delta, Canada, and the North Slope of Alaska during two...

Airborne observations of atmospheric composition and physical parameters
The datasets belong to the data collection "AIRMETH_vertical_profiles_Polar5". The data were collected in the Mackenzie Delta, Canada, and the North Slope of Alaska during two...

Figure 3: INTAROS Data Catalogue – Searching all dataset from a given organisation.



The screenshot shows the INTAROS Data Catalogue interface. At the top, there is a navigation bar with links for Datasets, Organizations, Groups, and About, along with a search bar. Below the navigation bar, the page title is "Airborne observations of GHG fluxes" under the organization "GFZ". On the left side, there is a sidebar with sections for Followers (0), Organization (GFZ Helmholtz Centre Potsdam), and Social media links (Social, Twitter, Facebook). The main content area contains a section titled "Airborne observations of GHG fluxes" with a detailed description of the datasets, references, and a link to download them from the Pangaea database.

Airborne observations of GHG fluxes

Followers
0

Organization

GFZ
Helmholtz Centre
POTS DAM

Social
Twitter
Facebook

Airborne observations of GHG fluxes

The datasets belong to the data collection "AIRMETH_turbulent_fluxes_Polar5". The data were derived in the Mackenzie Delta, Canada, and the North Slope of Alaska during two aircraft AIRMETH (Airborne Measurements of Methane Fluxes) campaigns (Kohnert et al., 2014, Hartmann et al., 2018, Kohnert et al., 2018, Serafimovich et al., 2018, Kohnert et al., 2018) that aimed at capturing exchange processes between the surface and the atmosphere across large arctic permafrost landscapes. The study periods were 28 June to 10 July 2012 and 19 July to 26 July 2013.

This datasets contain a) for the Mackenzie Delta (2012, 2013) fluxes of methane (CH₄) along each flight track calculated via the eddy-covariance technique, and a footprint flux map presented in Kohnert et al. (2017); b) for the North Slope of Alaska (2012) fluxes of sensible and latent heat along each flight track calculated via the eddy-covariance technique and heat flux maps as presented in Serafimovich et al. (2018).

A link to download the datasets from the Pangaea database will follow.

References:

- Hartmann, J., Gehrmann, M., Kohnert, K., Metzger, S., and Sachs, T. (2018). New calibration procedures for airborne turbulence measurements and accuracy of the methane fluxes during the AirMeth campaigns. *Atmospheric Measurement Techniques*, 11, 4567-4581.
- Kohnert, K., Serafimovich, A., Metzger, S., Hartmann, J., Sachs, T. (2017). Strong geologic methane emissions from discontinuous terrestrial permafrost in the Mackenzie Delta, Canada. *Scientific Reports*, 7, 5828.
- Kohnert, K., Juhs, B., Muster, S., Antonova, S., Serafimovich, A., Metzger, S., Hartmann, J., Sachs, T. (2018). Toward Understanding the Contribution of Waterbodies to the Methane Emissions of a Permafrost Landscape on a Regional Scale – A Case Study from the Mackenzie Delta, Canada. *Global Change Biology*, 24(9), 3976-3989.
- Kohnert, K., Serafimovich, A., Hartmann, J., Sachs, T. (2014). Airborne Measurements of Methane Fluxes in Alaskan and Canadian Tundra with the Research Aircraft "Polar 5". *Reports on Polar and Marine Research* 673, ISSN 1866-3192, pp. 81.
- Serafimovich, A., Metzger, S., Hartmann, J., Kohnert, K., Zona, D., Sachs, T. (2018). Upscaling surface energy fluxes over the North Slope of Alaska using airborne eddy-covariance measurements and environmental response functions. *Atmospheric Chemistry and Physics*, 18, 10007-10023.

Figure 4: INTAROS Data Catalogue – Viewing (some of the) metadata for a selected dataset.

3 Integration of in situ data collections into existing data repositories

This chapter provides a short description of the steps taken by the partners to make their data openly accessible and integratable into the iAOS. Different institutions have very different levels of data management and data infrastructure maturity, therefore the undertaken work is very diversified. In those cases when the data infrastructure is under building, an outlook of data repositories that will be utilized and a timeline of the work is provided.

3.1 GFZ: airborne observations of GHG fluxes

The datasets belonging to the data collection “Airborne observations of GHG fluxes” will be available via the Pangaea database (<https://www.pangaea.de/>). The collection will contain i) fluxes of heat and greenhouse gases along flight lines and 2) gridded flux maps with a spatial resolution of 100 m. The database on Pangaea will be updated with new datasets and their links will be included in the INTAROS catalogue. Until the link becomes available on the Pangaea website at the beginning of 2019, the data is available via email request to the PI.

3.2 GEUS: surface albedo and ice ablation from the PROMICE network and surface velocity of the Greenland Ice Sheet derived from Sentinel-1 data

A subset of the PROMICE AWS data as well as ice velocity maps are included in the iAOS. The data are available from public repository (<http://promice.org/DataDownload.html>) which requires a simple registration to download. This registration is about to be removed, so a machine-to-machine interface can be established for INTAROS as well as for others with this need.

3.3 UiB and GEUS: earthquake database and catalogue

An earthquake database has been developed with information on earthquake time, location, depth, magnitude, focal mechanism and seismic phase arrivals at different seismic stations. A detailed description of the database is included in the Appendix 4 of this report. The earthquake database is available in QuakeML format (<https://quake.ethz.ch/quakeml/>) through a webservice hosted by University of Bergen. Data can be accessed through the INTAROS catalog (https://catalog-intaros.nersc.no/dataset/seismic_catalog).

3.4 USlaski: Snow cover - Hornsund glaciers

Snow thickness data from Hansbreen, a reference glacier on Svalbard, have been collected by shallow radar soundings from 2008 to 2018. The GPR survey on Hansbreen is regularly carried out approximately along the same tracks. The data and metadata are transferred to the data repository of the Centre for Polar Studies (<http://ppdb.us.edu.pl/geonetwork/srv/eng/catalog.search#/metadata/1be8f239-d91a-4abd-9c3c-e66792bd9c89>). Restricted access is available for snow data (via contact person) and it will be more freely accessible in the future. The database will be edited with further data from other seasons and glaciers.

3.5 USlaski: Front positions of tidewater glaciers in Hornsund (S Svalbard)

Ice front position of the tidewater glaciers in Hornsund examined in following periods: 1899–1936–1960/1961–1976–1990–2001–2005–2010. For the period 1899–1990, several archival maps of varying accuracy were used, sometimes difficult to assess. For the period 1976–2010 multispectral and radar satellite images were used. The data (vector format) and metadata are transferred to the

data repository of the Centre for Polar Studies:

<http://ppdb.us.edu.pl/geonetwork/srv/eng/catalog.search#/metadata/05e2c69a-5645-4488-bc88-630beb03a462>

3.6 USlaski: Front velocity of tidewater glaciers in Hornsund

Glacier velocities derived from displacements of four stakes (Z, R, T, U) installed close to the front of three glaciers (Hansbreen, Storbreen, Hornbreen) in Hornsund (Svalbard). Stakes positions measured in 2013-2015 by different GPS techniques. The data and metadata are transferred to the data repository of the Centre for Polar Studies:

<http://ppdb.us.edu.pl/geonetwork/srv/eng/catalog.search#/metadata/37a59a98-835f-4f98-ab39-52c8d9cb7290>

3.7 IGPAN: Snow observations at the Polish Station in Svalbard

Snow data from Hornsund Station used to be available via the GLACIOTOPOCLIM Database. As this database no longer exists, IGPAN is working on opening it again. Possibly it will be re-opened and accessible at the end of November/ beginning of December 2018. IGPAN is considering to make the data machine-to-machine interoperable by constructing the spatial data infrastructure (SDI) using GeoServer. GeoServer is an open source software for sharing geospatial data. The SDI will provide services based on Open Geospatial Consortium OGC compliant standards. As for now, data remains available only via personal contact with Tomasz Wawrzyniak (tomasz@igf.edu.pl) or, in the case of diurnal data, from eklima.no.

3.8 FMI: In situ snow observations from the Sodankylä supersite and Interface between satellite snow products and iAOS

FMI is setting up a spatial data infrastructure (SDI) using GeoServer, an open source software for sharing geospatial data. Geoserver offers inspire compliant metadata. The SDI will be based on one backend, two front end servers and a dedicated database, to provide a stable and operational service. FMI is using virtual servers that can be easily adjusted or expanded based on demand. The SDI will provide services based on Open Geospatial Consortium (OGC) compliant standards, such as Web Feature Service (WFS), Web Map Service (WMS), and Web Coverage Service (WCS). The in-situ observations from the Sodankylä supersite will be available using the WFS service, satellite and snow products will be available from WMS and WCS services.

3.9 SMHI: interface between the Arctic-HYCOS hydrological data and iAOS

The Arctic-HYCOS observing system provides daily and monthly gauged river discharge data from a selection of stations operated by the national hydrological services (NHS) in the Arctic Council member states (Canada, Denmark, Finland, Iceland, Norway, Russian Federation, Sweden and United States of America). The observation system is established by the Arctic-HYCOS project (<https://hydrohub.wmo.int/en/projects/Arctic-HYCOS>). The Global Runoff Data Centre (GRDC, <http://www.bafg.de/GRDC>) serves as a focal point redistributing historical data and station metadata, whereas provisional and (when available) near-real-time data should be provided directly by the NHS. GRDC provides the station metadata and historical archive data as compressed files on the following ftp services (accessed 2018-11-26):

- ftp://ftp.bafg.de/pub/REFERATE/GRDC/catalogue/grdc_arctichycos_stations.zip
- ftp://ftp.bafg.de/pub/REFERATE/GRDC/ARC_HYCOS/arc_hycos_day.zip
- ftp://ftp.bafg.de/pub/REFERATE/GRDC/ARC_HYCOS/arc_hycos_mon.zip

SMHI has developed a set of scripted functions using the R programming language (<https://www.r-project.org/>) to download, extract, search, reformat, and export the data provided by GRDC. The R

functions are available at <https://github.com/dgustafsson/arctic-hycos-iaos-utils>. The Arctic-HYCOS station metadata can be filtered by river and country, and exported to several formats (tab-separated ascii text files, ESRI shapefiles, KML files). The river discharge data can be exported into several formats (The original text-format provided by GRDC, a csv format, a text-format used by the hydrological model HYPE).

3.10 USFD and MPG: metadata catalogue of all Arctic terrestrial fluxes and environmental data products

The Alaska data are provided through the “Arcticdata” repository. A catalogue with an inventory of the entire Arctic has been created that is available through the “Fluxnet” and “Ameriflux” repositories. Data access is available after user registration.

4 Appendix: Seismological monitoring in the Arctic

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²Geological Survey of Denmark and Greenland (GEUS), Denmark

An earthquake catalog is developed for the Arctic region based on all available earthquake catalogs covering at least parts of the Arctic. The catalog accommodates around 121000 events of mostly earthquake and explosion origin. Other event types, such as landslides and volcanic events, are also reported in the database. The catalog includes focal mechanism solutions for the larger earthquakes (~630 in total).

In addition, a catalog of seismological monitoring capability is developed for stations north of the Arctic Circle based on information from international databases. According to the compilation, considering all temporary deployments, 488 stations associated with 19 networks have been operating in the Arctic.

In the following sections we describe the different properties of the catalog.

4.1 Event catalog

Data from the ISC (International Seismological Centre: <http://www.isc.ac.uk/>) database have been extracted for the time period from 1960 to the end of February 2016 (which is the last full month reviewed by the ISC). Around 121000 events were reported north of Arctic Circle (65°N-90°N). Events from local and regional networks are also added to this selection. Recordings are classified in our database based on two properties: distance¹ (d) and event type. Events are distinguished as local ($d < 1000$ km), regional ($1000 < d < 3000$) or distant, and they are marked in the catalog by L, R or D, respectively. The majority of events are labeled as L, which shows that most of events are recorded by local networks. In total, 106000 local, 13500 regional and 1500 distant events are included in the database.

The event type describes whether the event is e.g. an earthquake or an explosion. Table A1 summarizes the abbreviations used for event types in the database. Explosions (E or P) are the most frequent event types in the catalog (~80000 in total) and most of the remaining events are earthquakes (Q or blank). The other types are rarely seen.

The geographical distribution of events (Figure A1) indicates that explosions (red dots) are mostly located in Scandinavia, while earthquakes (blue dots) are distributed in different parts of the Arctic. The Mid Atlantic Ridge is clearly delineated by the seismicity. Most earthquakes are relatively small ($M < 3.5$), but the dataset also includes large earthquakes such as the 21. February 2008 M6.0 Storfjorden (Svalbard) earthquake and a series of four $M \geq 6.0$ earthquakes in the Jan Mayen Fracture Zone since 2004.

¹ Maximum recorded event-station distance.

Table A1: Different event types together with their abbreviations in the catalog.

Event type	Abbreviation in the catalog
Known and confirmed earthquakes	Q
Known and confirmed explosions	E
Probable explosions	P
Known and confirmed landslides	L
Probable glacial events	G
Mostly earthquakes	[blank]

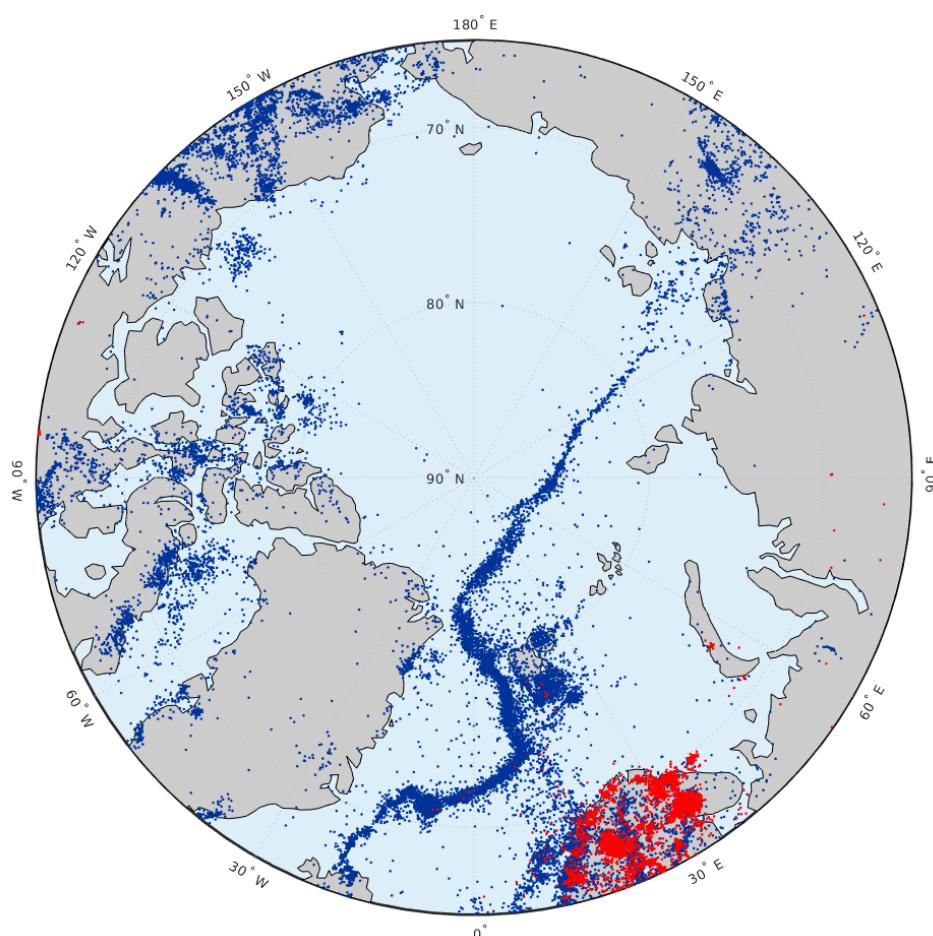


Figure A1: Geographical distribution of events in the Arctic. Blue: Earthquakes. Red: Explosions.

Apart from explosions, the network of seismic station in the Arctic region also records other types of natural events that are not related to tectonism. These events include glacial earthquakes, which are events related to the calving of outlet glaciers (Tsai and Ekström, 2007), and landslides. Figure A2 shows the locations of the glacial earthquakes in the database, which are mostly in accordance with the locations of outlet glaciers. The majority of these are located using a traditional earthquake location technique based on body wave travel times, but due to the complex seismic signal, large uncertainties are associated with their locations. The map therefore includes a number of glacial earthquakes that are not located near an outlet glacier. The database contains 326 glacial earthquakes from the period NOV 2010 to DEC 2017, including the glacial earthquakes presented by Ekström et al. (2003) and Rial et al. (2009).

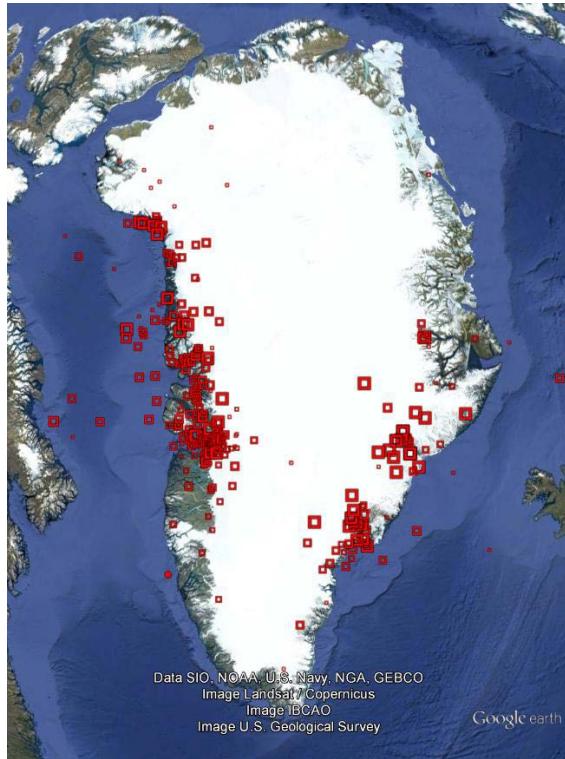
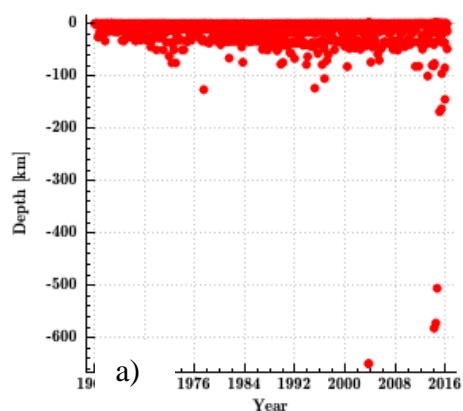


Figure A2: Locations of glacial earthquakes.

Furthermore, several landslides have been recorded by the seismic networks, including two significant events in Greenland. The first landslide occurred 21. NOV 2000 in West Greenland (Dahl-Jensen et al., 2004) and the second on 17. JUN 2017, also in West Greenland (Clinton et al., 2017). Both these landslides generated tsunamis.

The temporal distribution of events with depth (Figure A3) shows that most events are occurring at depths less than 50 km. The deep earthquakes might be mislocated (due to lack of information), considering that it is not expected to have such deep events in this region from a geological/ tectonic point of view. Note that we fixed the depths of explosions to 0 km except for the cases where additional information exists (relevant sectors or local networks may provide extra information on the depth of known explosions).

SEISAN: Hypocenter depth over time



SEISAN: Hypocenter depth over time

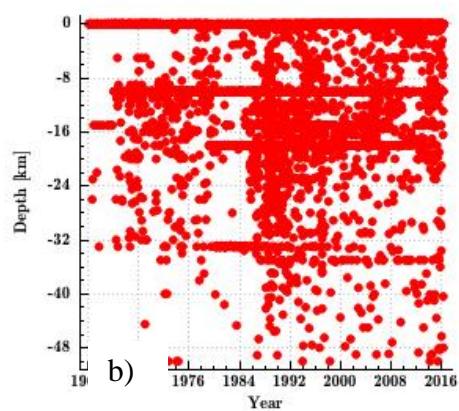


Figure A3: Temporal distributions of events with depth. a) all depths. b) Focused on top 50 km.²

²

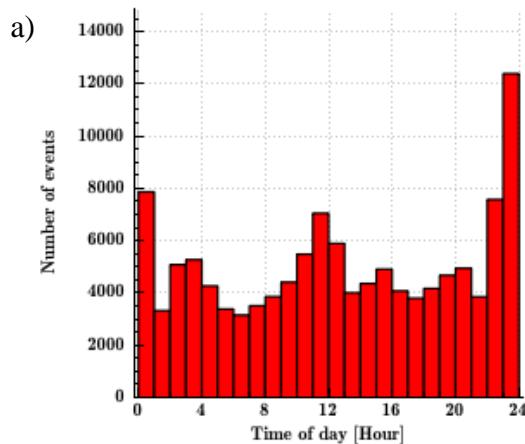
Seisan software is used for all statistical analysis (Ottemöller et al., 2011).

Apart from the 0 km depth of explosions, other horizontal lines at specific depths in Figure A2b do not seem natural. Insufficient data coverage, poor crustal models and processing methods are most likely responsible for these artifacts.

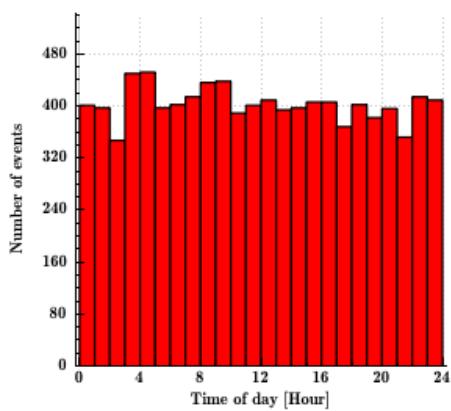
The time of day distribution of events in the database (Figure A4a) shows peaks at midday and midnight, indicating that more events occur at these times. According to information from the mining sector and the local monitoring networks, e.g. SNSN³, most of the explosions are done at midday or midnight. Plotting the time of day distributions of earthquakes and explosions separately confirms this observation (Figure A4b and c).

The annual number of earthquakes is magnitude dependent and gives us a general idea about the seismicity rate of our study area. Different magnitude scales are used in the catalog and by considering all types, at least one magnitude value is assigned to most of the events. The magnitudes in the database range from ML=0.1 to Mb=6.9. The yearly distribution of natural events (non-explosions) in three ranges of magnitudes is shown in Figure A5. The number of detected events has increased over time, especially since the mid-1980s. The most significant change is seen for smaller events ($M < 3$), owing to improved monitoring at the high latitudes (see monitoring network section).

SEISAN: Time of day distribution



b) **SEISAN: Time of day distribution**



c) **SEISAN: Time of day distribution**

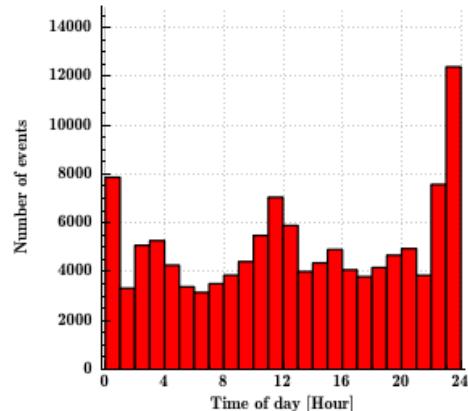


Figure A4: Time of day distribution of the events. a) All events: shows the midday and midnight peak. b) Only earthquakes: shows even distribution during day. c) Only explosions: shows explosions are mainly made during specific hours of the day.

³ Swedish National Seismic Network

The annual number of earthquakes is magnitude dependent and gives us a general idea about the seismicity rate of our study area. Different magnitude scales are used in the catalog and by considering all types, at least one magnitude value is assigned to most of the events. The magnitudes in the database range from ML=0.1 to Mb=6.9. The yearly distribution of natural events (non-explosions) in three ranges of magnitudes is shown in Figure A5. The number of detected events has increased over time, especially since the mid-1980s. The most significant change is seen for smaller events ($M < 3$), owing to improved monitoring at the high latitudes (see monitoring network section).

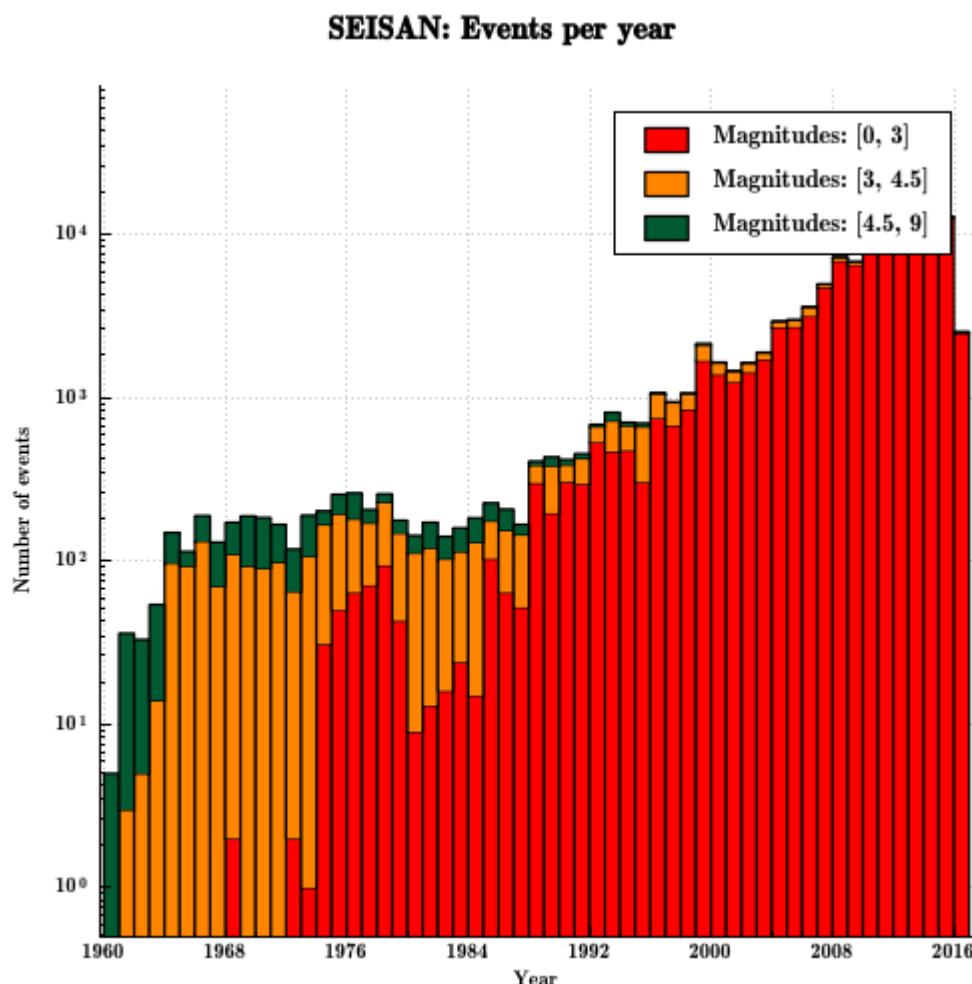


Figure A5: Annual distribution of events for 3 magnitude ranges: $M < 3$, $3 < M < 4.5$ and $M > 4.5$.

The Gutenberg–Richter (GR) law (Gutenberg and Richter, 1956) conveys the relationship between the magnitudes of earthquakes and the total number of events by a logarithmic relationship:

$$\log N = a - bM$$

N is the number of earthquakes with magnitude greater than M . This relation provides us information on the overall level of seismicity in a region, as well as on the magnitude distribution of events. The parameters a and b are derived empirically from the observed seismicity.

Figure A6 shows the magnitude distribution of earthquakes in the Arctic region, which can be used to derive the parameters of the GR law. The change of slope in the histograms for events with magnitudes smaller than around 4.0 indicates that the dataset is incomplete below this magnitude.

SEISAN: Gutenberg-Richter relation

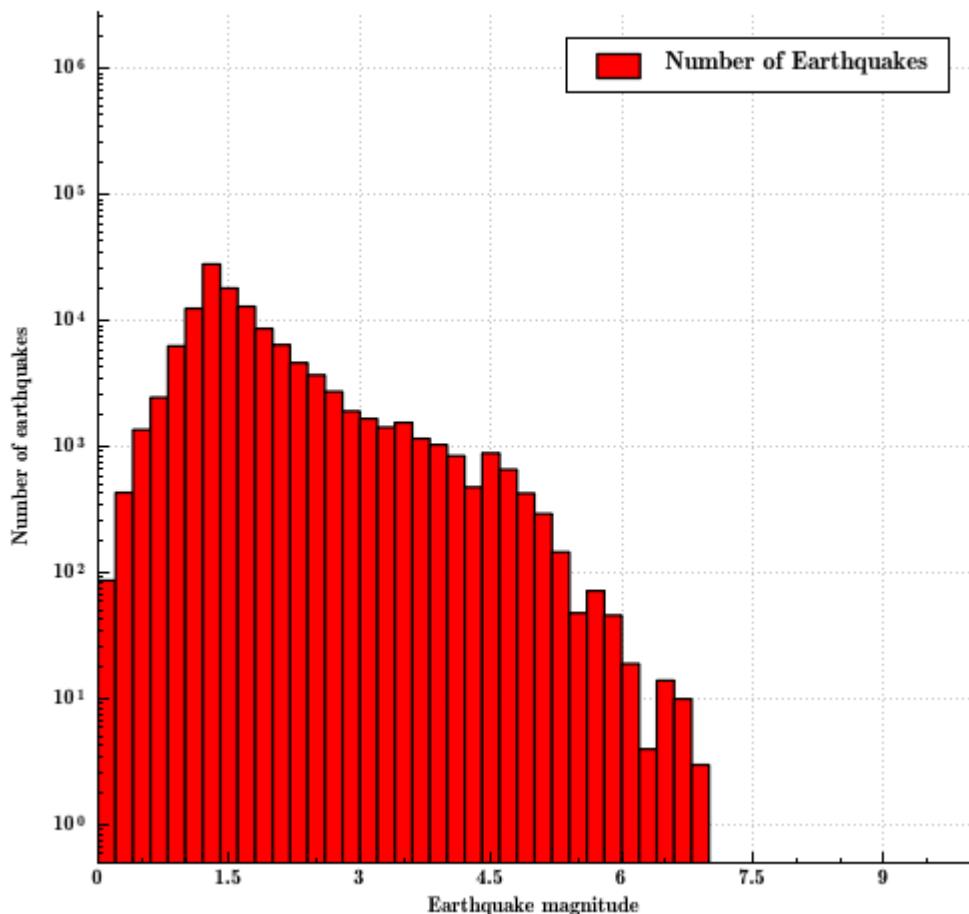


Figure A6: Magnitude distribution of events in the database.

4.2 Focal Mechanisms

The focal mechanism of an earthquake describes the deformation in the earthquake source region. Focal mechanisms are derived from observing the direction of the first arriving seismic waves (P waves) and P- to S-wave amplitude ratios, or from waveform inversion to determine the moment tensor of the event. In addition to analyses of earthquake sources, focal mechanisms are commonly used to discriminate between earthquakes and explosions.

The database includes about 630 events (red dots in Figure A7) with either focal mechanism or moment tensor information extracted from available catalogs. The smallest is of moment magnitude (Mw) 3.5, the largest is Mw=6.9. The amount of information available for each event depends on the reporting agency. Most events have both a moment tensor and a fault plane solution, a smaller group of events have fault plane solutions only. For some events, solutions are provided by more than one agency, other events are reported by one agency only. In our database, Global Centroid-Moment-Tensor (GCMT: <https://www.globalcmt.org/>; Ekström et al., 2012), National Earthquake Information Center (NEIC: <https://earthquake.usgs.gov/earthquakes/>) and Zurich Moment Tensors (ZUR_RMT: <http://seismo.ethz.ch/en/home/>) are the agencies most frequently reporting focal mechanisms and/or moment tensor solutions. There are reports from other agencies for smaller, local events. In addition to available online information, we add focal mechanisms from the Baffin region (Baffin Bay, Baffin Island and the northernmost part of the Labrador Sea) provided by researchers at Natural Resources Canada (NRCan).

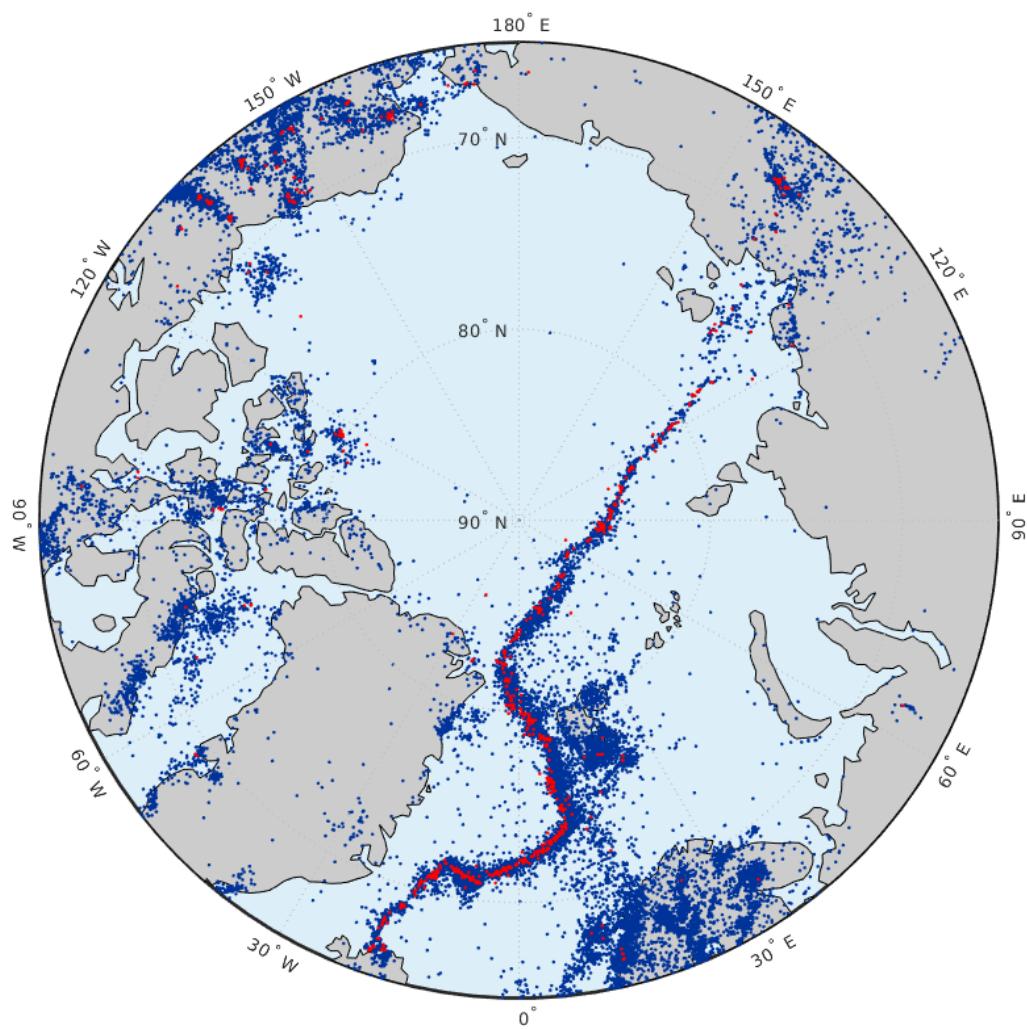


Figure A7: Geographical distribution of events in the Arctic. Red: Earthquakes with focal mechanism/moment tensor solution.

Appendix 4A provides a list of events with focal mechanism and/or moment tensor solution in the database. Some events have more than one solution. To compare these solutions, we create an illustrative table presenting the complete moment tensor, the double couple component of the moment tensor and the focal mechanism for each event and agency. Figure A8 displays an extract of the table (see Appendix 4B for the complete table). Each column is labeled with relevant information and each row corresponds to one event and is named after its ID in the bulletin. Empty sections are where there is no information reported from the agency.

Event-ID	MT GCMT	MT(DC) GCMT	FPS GCMT	MT NEIC	MT(DC) NEIC	FPS NEIC	MT ZUR_RMT	MT(DC) ZUR_RMT	FPS ZUR_RMT	MT OTHER	MT(DC) OTHER	FPS OTHER
10612667												
8227775												
8096077												
8096020												
9570780	○	○	○									
8083696												
8083675												
8079895	○	○	○									
8079880	○	○	○	○	○	○	○	○	○	○	○	○
8030010	○	○	○									
7996876	○	○	○									
7720457	○	○	○									
7706655	○	○	○									
7553484	○	○	○									
7396413	○	○	○									
7551682	○	○	○	○	○	○	○	○	○			
7365085	○	○	○	○	○	○	○	○	○	○	○	○
7363181												
7363157	○	○	○	○	○	○	○	○	○	○	○	○
7144086												
7143863	○	○	○									
7382123												
7491908												
7489263	○	○	○	○	○	○	○	○	○	○	○	○
7489192												
7489189												
7485778												
7482452	○	○	○	○	○	○	○	○	○			
7481728	○	○	○									
7481727	○	○	○									

Figure A8: Focal mechanism and moment tensor solution table for some events. Each color is associated with a specific agency: Blue: GCMT, Red: NEIC, Yellow: ZUR_RMT. First column of each agency is displaying full moment tensor solution (MT), second column is the double couple

component of the moment tensor (MT(DC)) and the last column is the focal mechanism solution (FPS).

Most of the reported focal mechanisms are in agreement with the reported moment tensor solutions within the same agency. However, there are some exceptions e.g., event ID:70732294 (Figure A9)



Figure A9: Available MT/FPS for event ID: 70732294. The gray box show inconsistency between MT(DC) and FPS for an event reported by GCMT.

There is also a high level of consistency between solutions from different agencies, except for a few events, e.g. event ID:1737916 (Figure A10).



Figure A10: Available MT/FPS for event ID: 1737916. The gray box show inconsistency for MT(DC) and FPS between GCMT and NEIC .

4.3 Monitoring Networks and station catalog

In addition to the event database, a catalog of seismological monitoring capability is developed for stations north of the Arctic Circle based on information from international databases. According to the compilation, considering also temporary deployments, 488 stations, associated with 19 different networks, have been operating in the Arctic. The catalog includes locations of the seismic monitoring stations, their call code and the operating network code. For each station, information is included on the time period of operation, whether the station is currently open, whether data is freely available or restricted and the restriction period (if known). The catalog is available in Appendix 4C. A map showing all stations, and those currently active and open, is displayed in Figure A11.

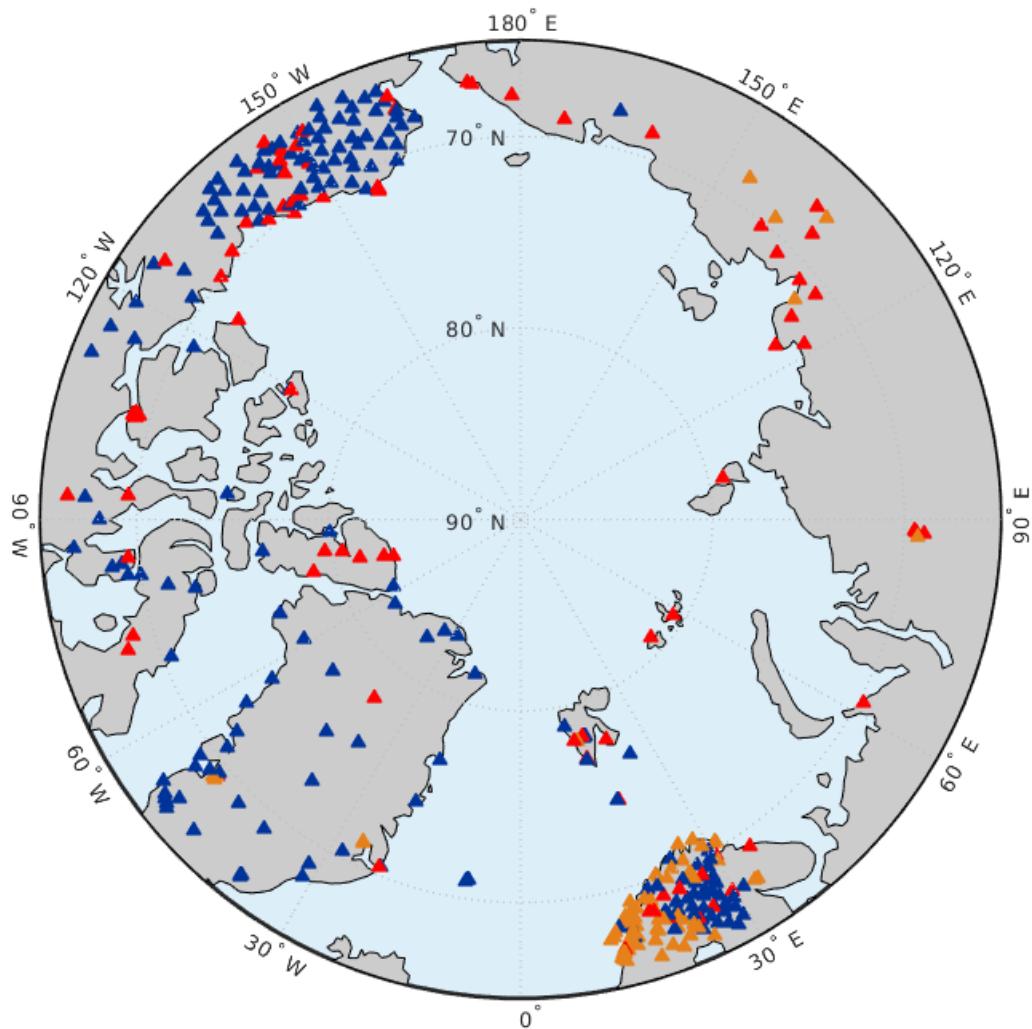


Figure A11: Map of seismic stations in the Arctic. Red: No data is currently being sent (usually station closed), Orange: Restricted/unavailable data, Blue: Data is being sent.

4.4 Relocation of Catalog

Using the traditional location methods, location uncertainties may be underestimated due to unmodelled heterogeneities in the Earth. Furthermore, unfavorable network geometries (unbalanced global seismic monitoring) results in location bias. A location algorithm, iLOC (Bondár and Storchak, 2011), has therefore been developed by ISC to account for correlated error structure. The algorithm has been applied to the entire ISC database using all IASPEI standard phases with ak135 travel time predictions (Kennett et al., 1995), leading to improvement in the event location parameters, especially in determination of depth and more accurate formal uncertainties.

iLOC uses the median of reported hypocentre parameters (latitude, longitude, depth and origin time) from different agencies or the solution from the prime agency as starting point for the procedure. Then phases are reidentified based on initial parameters, and finally time measurement errors for each phase are calculated. Instead of ak135, the Jeffrey Bullen (JB) velocity model (Jeffreys and Bullen, 1940) or any other 1D local model can be introduced to the program. The Regional Seismic Travel-Time (RSTT) model is another travel-time model (Myres et al., 2010) which is developed to be used in routine seismic analysis, such as iLOC. The model parameterization in RSTT is a global tessellation of nodes where interpolation of the velocity profiles at each node generates a 3D crust and laterally variable

upper-mantle velocity. According to Myers et al. (2010), travel-time residual variance and epicenter errors are considerably reduced by using RSTT compared to ak135.

We have used iLOC to relocate our database and we took advantage of RSTT. Only events in regional distance (here $R < 15^\circ$) and with sufficient phase information can be located with iLOC. The number of iLOC locations in our database is shown in Figure A12, where red is the total number of events per month and blue is the number of events that could be relocated using the iLOC routine (~35% of the events).

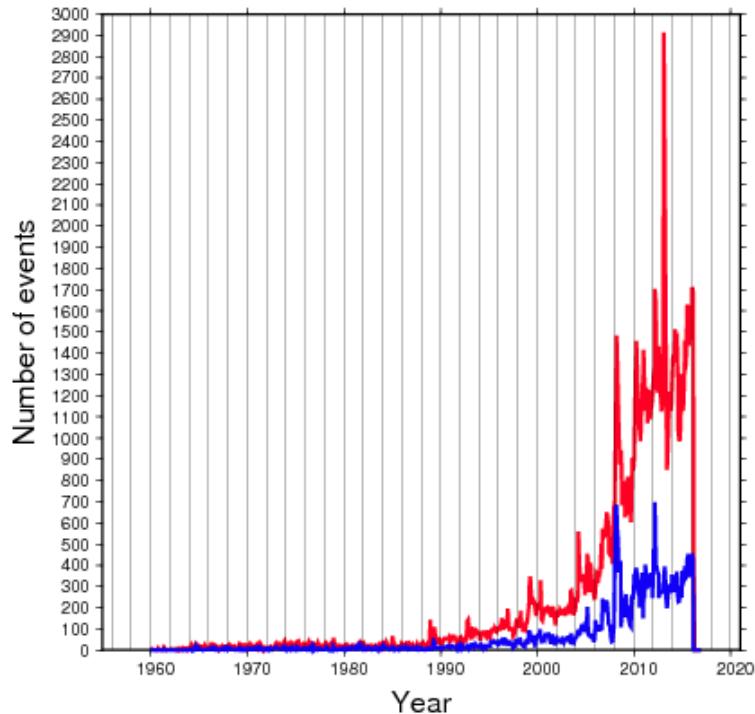


Figure A12: The number of iLOC locations in our database. Red: total number of events/month, Blue: the number of events with iLOC location/month.

Events with hypocenter solutions reported by ISC and calculated from iLOC, are plotted with both solutions in Figure A13. Looking at iLOC locations, the seismicity clusters more tightly, hence providing better information about seismically active structures.

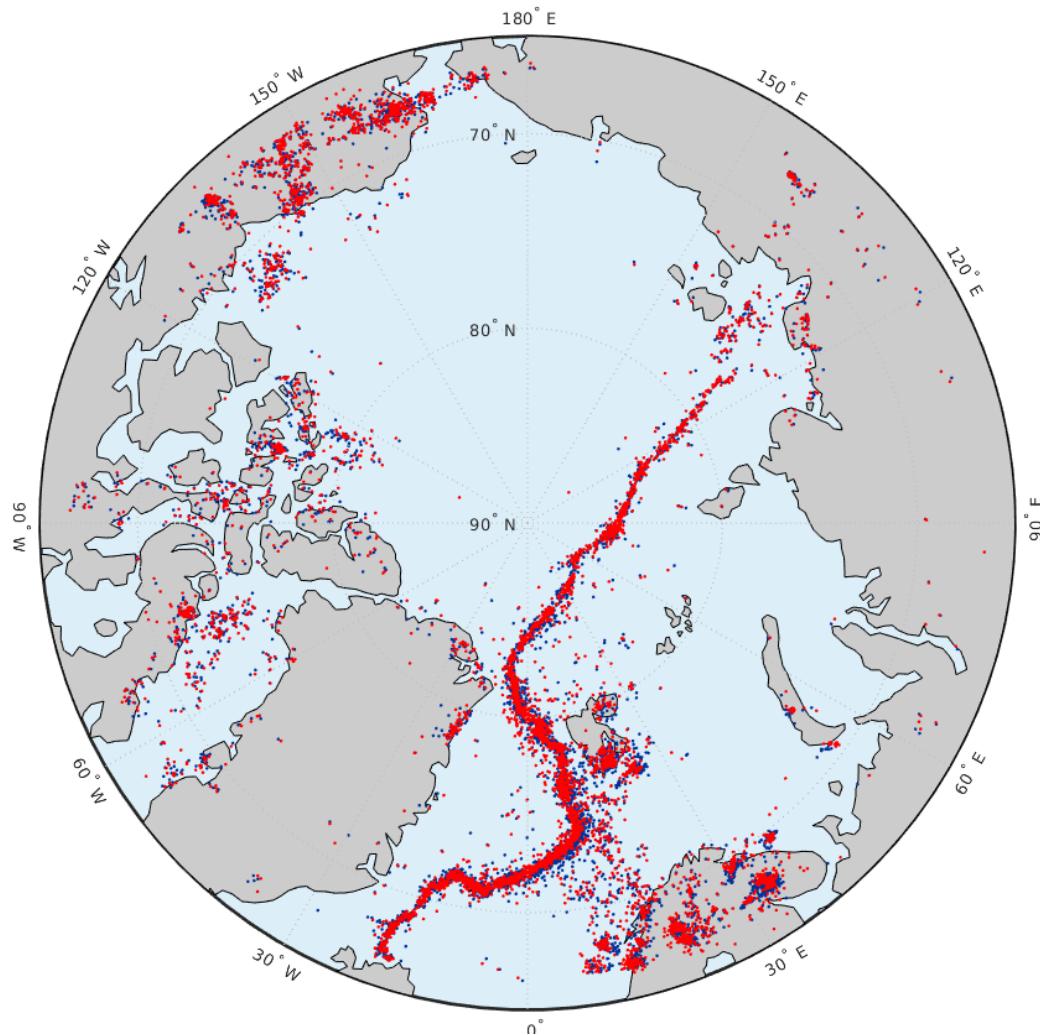


Figure A13: ISC locations (blue) compared to iLOC solutions (red).

4.5 References

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4A List of individual events with focal mechanism/moment tensor solution

Event ID	Date	Time	Latitude (°)	Longitude (°)	Magnitude (Mw)
718969	1976-01-13	13:29:24.50	66.33	-16.29	6.3
700235	1977-04-23	14:49:09.10	75.228	134.3789	4.9
698203	1977-05-07	02:13:32.70	71.754	-1.808	5.4
689432	1977-12-23	11:15:44.00	72.023	-0.501	5.2
687246	1978-01-04	14:52:09.30	85.738	-23.828	5.2
685956	1978-02-01	18:05:35.80	79.899	0.819	5.1
686093	1978-02-05	16:07:10.20	78.41	-108.09	5.1
668098	1979-03-13	19:21:30.90	74.749	8.566	5
663488	1979-06-15	23:19:45.30	86.401	36.417	5
664174	1979-06-27	08:50:32.10	69.96	-97.27	5
655921	1979-11-20	17:36:01.20	71.192	-8.03	5.8
650592	1980-02-01	17:30:27.40	73.04	122.6149	5.3
649794	1980-03-19	01:48:58.20	83.455	114.9729	5
634511	1980-12-25	11:37:27.50	66.434	-17.732	5
623494	1981-07-12	01:27:56.30	67.707	-161.199	5.5
608937	1981-11-20	20:59:13.40	79.541	3.564	5.3
596988	1982-06-11	11:41:48.80	85.642	87.328	5.3
597037	1982-06-12	00:15:09.40	85.718	85.925	5.5
584706	1983-01-15	06:43:58.00	73.168	5.723	5.2
573793	1983-06-10	02:13:32.70	75.76	121.22	5.6
562401	1983-12-05	20:54:22.40	73.776	8.702	4.9
561991	1984-01-29	16:14:43.70	71.41	-1.72	5.5
553235	1984-05-17	07:56:00.30	79.68	1.29	5.7
549961	1984-07-30	12:16:52.10	71.65	-12.05	5.7
539653	1984-11-22	13:52:55.40	69.11	140.13	5.1
533878	1985-01-07	21:53:15.90	71.16	-7.32	5
532243	1985-02-14	05:04:06.00	66.37	-149.98	5.2
529595	1985-03-09	14:08:04.38	66.239	-150.029	6.1
521136	1985-07-25	17:45:05.70	84.16	-0.58	5.1
521149	1985-07-25	22:03:30.70	85.06	109.3	4.9
518589	1985-08-21	16:38:08.90	71.88	-1.61	5.3
519203	1985-08-30	19:01:46.10	67.66	-18.62	5.1
513374	1985-10-15	19:52:03.30	85.68	84.93	5.2
513386	1985-10-15	22:29:50.90	85.71	83.57	5
513489	1985-10-17	08:39:31.40	75.65	6.46	5.2
509883	1985-12-31	06:57:23.80	73.02	4.63	5.4
493572	1986-06-20	07:00:07.70	81.7	122.63	4.9
483175	1986-10-08	00:09:28.10	80.3	-3.07	5.2
475059	1987-02-22	01:22:32.00	78.76	125.59	5.4
473364	1987-03-30	03:13:44.70	74.4	-133.12	5.2
461848	1987-07-11	06:15:56.60	82.34	-18.21	5.5

Event ID	Date	Time	Latitude (°)	Longitude (°)	Magnitude (Mw)
458916	1987-08-03	07:37:35.30	87.35	66.97	5
458188	1987-09-22	22:05:18.70	76.02	134.5	5.5
450547	1987-12-13	21:05:03.80	74.02	-91.99	5.4
446843	1988-01-01	14:36:12.40	74.39	129.14	5.1
443717	1988-03-21	23:31:21.68	77.601	125.451	6.5
441540	1988-04-25	20:09:29.20	78.49	5.51	5.4
417897	1988-12-13	04:01:49.30	71.08	-7.78	6
408163	1989-04-23	19:21:10.40	67.3	-157.02	5.4
401584	1989-06-09	12:19:41.50	70.99	-3.69	5.6
394219	1989-08-05	06:55:56.70	75.72	133.9	5.3
392706	1989-09-17	12:01:39.10	79.03	2.2	5
388662	1989-10-03	23:10:56.50	80.24	121.66	5.5
388898	1989-10-07	01:25:09.00	79.04	4.04	5.1
386045	1989-11-04	18:04:10.90	72.04	1.77	5.5
386049	1989-11-04	18:17:20.10	72.13	1.32	5.3
387170	1989-11-17	04:05:26.20	80.57	122.17	5.7
375469	1990-03-13	00:32:56.00	73.08	136.66	5.3
370547	1990-05-27	21:49:35.80	73.86	7.78	5.7
350207	1990-11-11	07:06:34.40	74.8	8.04	5.3
340867	1991-02-07	06:04:25.30	66.28	-148.44	5.1
340095	1991-03-30	12:58:43.10	71.41	-8.08	5.1
328651	1991-06-11	07:16:33.00	84.45	107	5.5
324680	1991-07-02	21:24:11.40	73.47	12.36	5.2
318364	1991-09-01	06:51:07.90	78.77	2.74	5.6
316817	1991-10-17	17:47:02.30	86.79	62.58	5.2
306036	1992-01-04	00:56:59.20	67.11	-94.42	5.3
304207	1992-02-17	00:01:56.61	79.191	124.482	5.9
286176	1992-06-08	09:30:16.30	81.22	121.13	5.1
283093	1992-07-20	07:46:46.74	78.562	5.523	6.6
276881	1992-08-11	04:03:48.50	79.88	-3.07	5.5
272255	1992-09-09	13:08:58.30	76.12	6.19	6.1
272407	1992-09-10	14:54:34.60	76.7	4.69	5.2
253933	1993-01-21	13:43:17.70	78.74	125.3	5.5
247558	1993-02-12	10:52:08.40	78.85	125.97	5
249164	1993-02-23	11:56:30.50	86.95	56.68	5.1
217765	1993-07-02	04:11:11.30	71.81	-12.31	5.7
219256	1993-07-12	05:05:38.80	72.64	0.56	5.3
213254	1993-08-10	19:36:27.80	83.13	-30.16	5.6
209599	1993-09-23	20:04:03.80	78.16	6.5	5.1
201250	1993-10-05	21:28:06.00	78.32	125.93	5.2
190819	1994-01-26	12:07:20.30	79.47	3.93	5.2
184697	1994-02-08	03:27:59.40	66.3	-19.22	5.5
161355	1994-08-22	12:41:22.80	71.26	-6.35	5.3
155437	1994-09-10	01:24:12.10	83.77	-3.01	5.2

Event ID	Date	Time	Latitude (°)	Longitude (°)	Magnitude (Mw)
113013	1995-03-09	07:04:26.00	78.78	1.46	5.1
87121	1995-08-03	01:16:42.60	80.3	-3.92	5.2
91548	1995-08-31	08:20:54.40	69.59	-147.73	5.1
72995	1995-10-02	01:35:53.40	66.56	178.8	5.2
73714	1995-10-04	09:17:33.40	75.87	6.24	5.3
62274	1995-12-08	07:41:17.30	72.28	3.28	5.5
963636	1996-05-11	04:38:40.05	80.578	-2.271	5.6
971336	1996-06-22	16:47:12.91	75.82	134.619	5.7
981772	1996-08-20	00:11:00.34	77.86	7.564	5.1
993566	1996-10-24	19:31:53.93	66.986	-173.229	6
1017977	1997-03-24	06:56:17.80	67.08	-174.16	5.1
1022593	1997-04-19	15:26:33.48	78.445	125.821	5.5
1055796	1997-12-02	00:02:08.10	71.63	-2	5.3
1058542	1997-12-13	07:02:09.50	71.26	-9.34	5.6
1082895	1998-03-21	16:33:11.00	79.888	1.856	6.1
1083379	1998-03-23	19:30:18.20	71.54	-5.24	5.3
1094068	1998-04-23	03:37:01.80	79.46	2.59	5.2
1312494	1998-10-18	22:09:20.20	86.14	75.35	5
1334059	1998-12-16	09:28:37.10	70.51	-14.53	5.1
1435298	1999-01-01	09:28:11.10	80.15	-111.56	5.1
1437397	1999-01-07	18:13:41.47	67.768	141.306	5.2
1444631	1999-01-28	22:52:46.80	85.26	85.27	5.3
1447294	1999-02-01	04:52:43.00	85.67	86.26	5.2
1447394	1999-02-01	09:56:39.80	85.61	85.17	5.6
1447431	1999-02-01	11:56:00.80	85.571	87.141	5.7
1454367	1999-02-19	19:10:03.60	85.79	88.55	5.3
1455210	1999-02-22	08:02:13.80	86.28	73.39	5.2
1456509	1999-02-25	15:35:18.70	85.76	86.36	5.3
1536948	1999-03-01	17:46:48.40	85.96	84.04	5.4
1538021	1999-03-04	07:52:49.80	85.84	88.45	5.5
1538796	1999-03-06	07:21:48.70	85.84	83.14	5.1
1541709	1999-03-13	01:26:34.80	85.73	84.22	5.4
1544062	1999-03-19	08:00:35.60	85.21	84.52	5.1
1544756	1999-03-21	15:24:05.40	85.64	83.74	5.3
1547313	1999-03-28	08:28:26.60	83.88	-1.22	5.1
1547552	1999-03-28	21:33:44.00	85.19	85.85	5.8
1618870	1999-04-01	10:47:52.50	85.52	81.62	5.3
1623138	1999-04-13	02:09:25.70	73.21	6.65	5
1628193	1999-04-26	13:20:08.50	85.61	84.43	5.2
1680164	1999-05-18	20:20:19.80	85.55	84.51	5.5
1665454	1999-06-07	16:10:37.80	72.68	4.36	5.5
1665458	1999-06-07	16:35:52.70	72.99	4.07	5.5
1665515	1999-06-11	23:54:51.40	85.6	83.7	5
1665582	1999-06-18	19:47:23.20	85.52	82.02	5

Event ID	Date	Time	Latitude (°)	Longitude (°)	Magnitude (Mw)
1805049	1999-07-01	02:07:03.90	70.16	-14.36	5.5
1654209	1999-07-01	02:08:04.30	70.52	-14.57	5.6
1654211	1999-07-01	03:20:48.10	69.89	-15.63	5.2
1654404	1999-07-08	19:25:14.10	85.74	83.36	5.1
1654918	1999-08-02	06:40:57.60	85.69	84.13	4.9
1654948	1999-08-03	13:55:43.20	72.18	1.17	5.3
1655024	1999-08-08	13:45:45.30	85.84	82.15	5.1
1655494	1999-08-26	05:03:08.30	71.68	-2.34	5.2
1727743	2000-02-03	15:53:12	75.271	10.195	5.3
1728450	2000-02-12	09:05:06	79.89	0.438	5
1728748	2000-02-15	18:37:19	72.75	5.139	4.2
1734778	2000-04-26	03:21:26.50	84.45	108.84	5.4
1735664	2000-05-21	19:58:47	71.19	-8.263	6
1802948	2000-05-22	17:39:31	79.04	4.015	4.6
1735724	2000-05-24	01:10:50	71.224	-8.783	5.4
1735762	2000-05-25	04:09:00	71.201	-7.332	5.1
1746752	2000-06-13	16:01:44	70.919	-13.381	4.3
1746762	2000-06-14	10:46:39	70.896	-13.389	4.5
1736738	2000-06-21	14:56:25	70.787	-13.594	5.3
1737468	2000-07-07	18:35:44	70.859	-13.003	4.8
1814536	2000-07-08	06:53:43	70.919	-13.314	4.7
1737526	2000-07-09	02:18:30	70.751	-13.715	5.2
1747332	2000-07-14	06:01:08	70.942	-13.099	4.7
1737804	2000-07-14	16:34:44	71.131	-13.071	4.9
2402206	2000-07-17	04:54:51	71.073	-13.217	4.1
1737916	2000-07-17	08:18:46.70	70.77	-12.96	5.1
1737930	2000-07-17	22:03:25	70.994	-13.135	4.8
1738446	2000-07-29	22:30:13	70.795	-13.378	4.8
1755380	2000-08-11	06:34:14	70.966	-6.372	4.4
1739576	2000-09-01	16:32:46	85.178	13.976	4.9
1748045	2000-09-02	06:33:01	72.561	4.096	4.2
1910841	2000-09-02	06:58:14	72.678	3.575	5
1748048	2000-09-02	08:04:19	72.65	3.976	4.4
1910967	2000-09-06	01:37:25	84.762	4.229	4.4
1740060	2000-09-18	07:42:10	85.278	11.771	4.4
1740253	2000-09-25	03:21:07	71.552	-11.081	4.6
1748448	2000-09-30	09:29:49	86.847	51.843	4
1740423	2000-10-01	15:05:24	68.905	-16.497	4.9
1912584	2000-10-24	02:28:12	80.358	-1.673	4.5
1741556	2000-11-13	21:24:13.60	81.12	-116.43	5
1743480	2000-12-31	01:45:06.50	82.01	116.83	5
1763384	2001-01-10	07:49:38	67.663	-18.698	4.9
1763671	2001-01-25	10:01:52	85.949	30.747	4.9
1763833	2001-02-01	08:59:45	73.442	7.859	4.4

Event ID	Date	Time	Latitude (°)	Longitude (°)	Magnitude (Mw)
1763837	2001-02-01	10:57:21	73.55	7.257	4.6
1763839	2001-02-01	15:20:57	73.481	7.855	4.4
2040973	2001-02-04	06:55:54	76.334	6.934	4.8
1917183	2001-06-08	21:56:17	73.068	5.78	4.6
1915678	2001-07-16	14:09:29	79.514	4.188	5.1
1998023	2001-07-17	17:33:35	82.39	-5.265	4.8
1954476	2001-07-19	12:01:34	70.979	-6.338	4.8
2954000	2001-07-27	03:24:03	74.893	9.923	4.4
1939507	2001-07-30	20:01:09	70.908	-13.046	4.6
1939511	2001-07-30	21:23:45	71.031	-13.154	4.5
1939533	2001-07-31	00:33:06	71.142	-12.978	4.6
1939535	2001-07-31	02:07:23	71.064	-13.169	4.6
1939551	2001-07-31	13:17:57	70.871	-13.84	4.8
1939557	2001-07-31	19:26:03	71.074	-13.051	4.7
1955331	2001-08-01	03:12:46	71.144	-12.877	4.6
1955335	2001-08-01	09:20:08	71.077	-13.027	4.7
1955341	2001-08-01	21:17:53	71.1	-13.299	4.4
2963200	2001-08-02	14:06:44	71.102	-13.098	4.1
1955347	2001-08-02	14:19:21	71.209	-13.202	4.5
1955349	2001-08-02	16:43:58	71.104	-12.869	4.4
1955353	2001-08-02	22:17:56	71.219	-13.086	4.4
1955367	2001-08-04	22:05:41	71.07	-13.096	4.3
2963234	2001-08-05	23:29:39	71.492	-12.884	4.3
1970250	2001-08-14	19:35:37.90	76.45	-107.03	5.2
2051704	2001-08-16	07:08:22	72.618	2.707	4.9
2051752	2001-08-17	02:53:40	71.814	-2.542	4.6
2051756	2001-08-17	02:58:45	71.749	-2.631	4.7
2013504	2001-08-26	18:28:23	79.863	2.671	5.4
2331828	2001-11-08	02:00:05	72.395	2.236	4.7
2347411	2001-11-16	16:19:36	74.884	8.236	5
2418840	2001-12-05	11:52:04	73.368	6.8	4.8
2496582	2001-12-08	06:44:22	80.848	0.768	5.3
2429100	2001-12-12	19:44:17	72.646	4.835	4.9
2987728	2002-01-23	11:20:08	80.133	-1.492	4.5
2891473	2002-02-09	21:48:04	75.277	7.791	4.7
2969492	2002-04-05	22:09:54	67.858	-18.107	4.7
2969805	2002-04-08	03:55:37	73.76	8.545	4.7
2969807	2002-04-08	04:17:38	73.832	7.93	4.5
3028499	2002-05-03	11:20:51	86.005	31.595	5.7
3030331	2002-05-03	15:33:34	85.972	31.149	5.5
3255159	2002-05-05	03:39:39	73.677	8.649	4.3
3153782	2002-05-27	06:58:48	78.439	8.129	4.9
3182478	2002-05-28	15:39:01	86.276	37.177	5.1
3220642	2002-07-10	14:13:10	73.127	5.174	4.8

Event ID	Date	Time	Latitude (°)	Longitude (°)	Magnitude (Mw)
3220697	2002-07-16	14:47:02	70.832	-14.219	4.6
3528381	2002-08-17	11:29:10	74.363	10.204	4
3801702	2002-08-31	22:14:36	82.838	-3.6	4.3
3369371	2002-09-09	23:13:59	74.695	9.095	4.5
3370399	2002-09-11	04:50:32	83.136	-6.078	5.5
3370401	2002-09-11	05:39:56	83.013	-6.454	5
3370403	2002-09-11	07:15:49	83.038	-6.278	4.9
3370405	2002-09-11	10:43:33	83.106	-6.467	5.1
3470549	2002-09-12	02:14:02	83.073	-6.214	4.7
3370415	2002-09-12	07:40:02	83.076	-6.611	4.8
3369377	2002-09-16	18:48:26	66.938	-18.456	6
3443452	2002-09-28	02:36:37	71.847	-1.847	4.8
3485792	2002-10-12	03:46:47	71.572	-3.094	4.9
6533903	2003-01-09	19:29:22	74.68	8.797	4.8
6534874	2003-01-11	10:40:45	79.297	2.953	4.4
6543528	2003-01-25	14:45:03	85.522	14.237	4.6
6586299	2003-02-13	02:21:08	81.641	-3.424	5.1
6621789	2003-03-26	06:30:26	71.401	-4.726	4.5
6697823	2003-04-22	08:35:00	76.746	7.398	4.8
6927581	2003-06-04	11:36:23	75.154	16.726	4.6
6937556	2003-06-14	19:33:23	85.368	9.88	4.6
6940790	2003-06-18	21:42:59	72.07	15.525	4.5
6941267	2003-06-19	12:59:24	71.122	-7.577	5.4
6991277	2003-07-04	07:16:44	76.372	23.282	5.5
7064130	2003-08-18	02:42:30	78.416	7.655	4.8
7067474	2003-08-21	23:31:49.10	68.88	-147.23	5.4
7073294	2003-08-30	01:04:42	73.273	6.421	5
7073579	2003-08-30	12:03:08.50	66.436	13.497	
7116099	2003-09-02	09:31:45	80.988	-3.958	4.7
7128398	2003-09-16	23:20:22	76.312	23.359	4.5
7132177	2003-09-22	09:09:24	70.476	-15.201	4.5
7132507	2003-09-22	20:45:16	80.314	-1.828	5.2
7135166	2003-09-26	04:35:16	83.63	-4.043	5.2
7152142	2003-10-07	02:36:54	79.141	2.329	4.9
7162593	2003-10-20	20:44:22	72.479	3.223	4.3
7176164	2003-11-04	17:10:56	71.791	-1.484	4.3
7176460	2003-11-05	01:08:02	71.8	-2.078	4.6
7185109	2003-11-16	14:45:45	78.416	7.582	4.4
7188772	2003-11-21	06:10:16	80.814	-1.596	4.5
7200908	2003-12-07	09:16:12.60	74.31	134.84	5.1
7237264	2004-01-19	07:22:52.90	84.52	105.23	5.5
7245541	2004-01-30	22:20:32	78.359	8.002	4.6
7330023	2004-04-14	23:07:39	71.067	-7.747	5.9
7338725	2004-05-04	00:15:51	85.173	12.84	4.5

Event ID	Date	Time	Latitude (°)	Longitude (°)	Magnitude (Mw)
7342970	2004-05-14	08:28:59	71.849	-1.523	4.7
7355754	2004-06-12	05:25:48	79.497	4.757	4.3
7360413	2004-06-25	15:49:18	85.59	21.385	4.7
7374334	2004-07-21	11:25:44	78.467	7.005	4.8
7374585	2004-07-22	05:39:28	78.483	7.96	4.2
7387103	2004-08-09	09:31:00	79.496	3.523	4.7
7405177	2004-09-25	23:04:04	83.742	-2.433	4.4
7417617	2004-10-11	09:52:47	75.678	7.069	4.3
7417629	2004-10-11	10:06:06	75.985	7.437	4.5
7418407	2004-10-14	10:17:46	81.658	-4.152	4.6
7442517	2004-11-27	06:38:29	76.169	7.528	5.1
7448715	2004-12-15	06:47:04	81.527	-3.797	5
7464362	2005-01-25	22:21:58.50	69.82	138.34	5.1
7738874	2005-03-06	05:01:14.80	84.95	99.81	5.3
7738912	2005-03-06	05:21:41.70	84.94	99.217	6.3
7739014	2005-03-06	08:24:46.60	84.95	99.67	5.1
7478596	2005-03-07	03:44:29.80	81.53	120.4	5.3
7479389	2005-03-10	00:28:26.40	85.24	93	5.5
7481528	2005-03-16	01:14:08	81.284	-4.46	4.6
7481727	2005-03-16	11:08:45.10	85.21	91.26	5
7481728	2005-03-16	11:10:29.30	85.21	94.41	5
7482452	2005-03-18	04:24:51.75	85.286	91.168	5.3
7485778	2005-03-27	18:06:10	73.924	8.742	4.4
7489189	2005-04-02	06:06:42	78.63	6.497	5.2
7489192	2005-04-02	06:34:32	78.488	7.203	5
7489263	2005-04-02	12:52:36	78.607	6.098	6.1
7491908	2005-04-11	12:12:57	71.89	-1.62	4.4
7382123	2005-05-23	20:18:27	72.218	0.051	4.8
7143863	2005-06-16	10:18:01	81.689	-4.643	5
7144086	2005-06-18	19:55:43	82.456	-5.755	5
7363157	2005-07-06	08:24:41	69.004	-16.637	5.5
7363181	2005-07-06	18:08:03	68.797	-16.934	4.6
7365085	2005-07-25	16:02:07	71.111	-7.432	5.4
7551682	2005-08-06	04:02:32.96	85.263	97.163	5.4
7396413	2005-08-13	23:23:21.70	79.45	3.67	5
7553484	2005-08-30	20:53:49.90	71.84	-1.23	5
7706655	2005-11-07	01:49:38.40	71.65	-11.98	5
7720457	2005-11-12	17:01:37.30	68.97	-17.05	5.1
7996876	2005-12-17	01:14:55.40	84.06	0.42	4.8
8030010	2006-01-11	15:13:42.70	76.41	6.2	4.8
8079880	2006-02-05	08:17:01.37	66.297	-142.686	5.5
8079895	2006-02-05	16:43:32.30	66.44	-142.23	5.1
8083675	2006-02-06	08:43:37.76	66.311	-142.765	4.2
8083696	2006-02-07	09:09:28.85	66.292	-142.555	4.3

Event ID	Date	Time	Latitude (°)	Longitude (°)	Magnitude (Mw)
9570780	2006-02-14	00:39:49.60	84.25	0.72	5.4
8096020	2006-02-16	12:28:32.00	66.93	-135.83	4.1
8096077	2006-02-18	13:01:35.75	66.278	-142.3	4.1
8227775	2006-02-21	23:15:01.11	66.191	-142.312	4.4
10612667	2006-03-29	03:37:05.90	66.261	-142.367	4.3
8228730	2006-04-03	11:55:38.10	82.21	-6.21	4.7
8564935	2006-04-24	15:16:34.80	81.99	119.13	5
8321114	2006-04-24	17:01:51.70	82	119.08	5.3
10698146	2006-04-28	13:41:52.00	78.49	6.64	4.7
10698329	2006-05-09	10:15:32.30	71.78	-7.01	4.6
9131275	2006-05-12	02:08:32.10	85.94	27.88	4.7
10698672	2006-05-28	13:23:29.30	74.03	13.63	5
10699029	2006-06-21	01:33:25.90	82.79	-5.86	4.8
10699148	2006-06-29	08:07:30.50	84.44	29.09	4.6
10699162	2006-06-30	02:43:35.00	73.98	8.68	5.1
10699243	2006-07-04	18:48:22.80	79.51	3.07	4.8
10699244	2006-07-04	18:53:40.80	79.65	2.87	4.6
10699672	2006-07-30	07:16:56.50	72.16	0.61	5.3
10699808	2006-08-09	22:31:13.50	78.46	7.64	5.1
10699885	2006-08-13	19:03:07.40	71.45	-4.05	5
10699888	2006-08-13	19:43:09.70	71.38	-4.06	4.7
8652467	2006-08-27	02:58:23.05	66.273	-142.319	4.5
8652468	2006-08-27	03:20:06.06	66.259	-142.292	4.5
11121394	2006-09-01	23:44:51.01	66.277	-142.315	4.4
10701217	2006-11-02	22:48:10.60	72.31	1.01	5
10701219	2006-11-02	22:52:39.70	72.14	0.75	4.9
10380585	2007-01-06	08:58:35.95	66.737	-135.796	3.9
11498184	2007-02-07	22:40:59.30	69.82	-15.68	4.6
11498194	2007-02-07	23:00:29.90	69.79	-15.78	4.8
11509674	2007-02-25	09:13:54.70	73.37	7.21	4.9
11509983	2007-02-25	20:13:43.80	73.33	6.96	5.1
11510030	2007-02-25	21:53:13.60	73.26	6.76	5.4
11510071	2007-02-25	23:12:27.10	73.29	6.8	4.9
11694343	2007-03-10	17:03:37.86	74.256	8.713	5.6
11700491	2007-03-20	17:03:38.70	72.16	0.86	4.9
11921778	2007-04-10	16:34:23.99	69.616	-144.623	4.5
11936118	2007-04-28	05:20:30.16	69.643	-144.818	4.9
12677298	2007-06-10	18:06:07.69	66.27	-142.314	4.4
12765095	2007-07-08	13:45:50.37	68.378	-124.475	4.1
13251879	2007-10-29	04:45:44.60	68.4	-18.18	4.8
13258683	2007-11-03	15:35:31.99	66.326	-135.481	4.7
13276034	2007-11-28	12:58:18.02	66.185	-135.546	4.1
13277032	2007-11-29	22:27:38.54	66.438	-142.202	4.7
13280442	2007-12-01	13:11:23.60	73.58	8.07	4.8

Event ID	Date	Time	Latitude (°)	Longitude (°)	Magnitude (Mw)
13280517	2007-12-01	14:58:55.60	73.63	7.96	4.8
13283717	2007-12-06	10:52:33.10	71.33	-9.26	5.4
13290314	2007-12-15	22:45:38.57	66.258	-142.193	4
13326826	2008-01-03	13:53:10.78	66.322	-142.405	3.8
13332107	2008-01-10	22:50:40.30	82	-5.6	5.1
13334996	2008-01-15	06:35:14.50	70.24	-15.15	5
13335008	2008-01-15	06:55:28.00	70.15	-15.25	5
13335012	2008-01-15	07:00:54.80	70.4	-15.07	4.9
13336534	2008-01-17	19:46:41.50	68.06	-136.24	5
13214489	2008-02-21	02:46:17.90	77.02	19.28	6.1
13486638	2008-03-11	19:42:28.90	69.538	-146.806	4.3
10869561	2008-04-08	02:45:15.00	66.24	-135.34	4.6
10826978	2008-04-13	13:41:40.00	67.68	-166.75	5.2
10890757	2008-04-15	07:50:24.50	85.11	95.36	5.1
10890759	2008-04-15	10:19:30.80	85.09	95.31	5
13227549	2008-05-06	19:51:11.40	71.37	-12.68	5
13228861	2008-05-17	09:20:02.22	66.478	-141.994	4.4
13229628	2008-05-24	08:18:17.90	71.51	-3.5	4.9
12787473	2008-05-28	13:19:52.70	84.9	14.2	5.2
13230654	2008-06-01	06:24:36.90	79.58	2.89	4.8
13378356	2008-06-22	23:56:27.50	67.698	141.336	6.2
13388127	2008-07-04	04:55:07.70	75.25	134.16	5
11158565	2008-08-06	01:01:51.60	83.56	114.82	4.9
13391614	2008-08-13	08:35:02.40	83.54	115.02	5.4
13391663	2008-08-13	18:30:59.30	83.48	114.73	5.7
11652918	2008-08-13	22:00:12.00	83.49	115.46	4.8
11180505	2008-08-14	10:37:49.70	83.65	114.51	5.1
11165769	2008-08-15	03:37:31.10	83.64	114.9	4.8
13391811	2008-08-15	15:52:50.60	82.23	-18.58	4.8
13395402	2008-09-28	19:52:24.60	71.44	-4.03	4.8
12789618	2008-09-28	22:20:21.10	71.39	-4.11	5.5
13395449	2008-09-29	11:03:56.10	71.34	-4.35	4.8
13396303	2008-10-07	10:00:49.90	79.77	-116.02	5.7
13396376	2008-10-08	07:57:35.10	79.74	-116.14	5.3
11374816	2008-10-28	14:30:13.57	66.412	-157.727	4.7
12072263	2008-11-04	15:46:34.99	66.344	-157.977	4.1
13399540	2008-11-07	21:40:58.30	71.66	-11.92	5.1
12789970	2008-11-15	14:23:30.82	66.393	-157.572	4.6
13400435	2008-11-17	12:55:22.79	79.648	-116.056	5.5
13400437	2008-11-17	13:16:51.40	79.61	-116.81	5
11456731	2008-11-17	13:40:12.10	79.64	-116.09	5.3
11456740	2008-11-17	17:17:06.20	79.55	-116.5	4.8
13400495	2008-11-18	03:59:48.66	79.694	-115.338	5.3
13400497	2008-11-18	04:10:36.10	79.57	-116.36	5.1

Event ID	Date	Time	Latitude (°)	Longitude (°)	Magnitude (Mw)
13400501	2008-11-18	04:52:51.60	79.66	-116.22	5.2
13400504	2008-11-18	05:37:27.80	79.6	-116.22	4.9
11473111	2008-11-20	11:34:09.19	69.107	-144.79	
13404537	2009-01-01	02:54:05.90	80.92	-3.78	4.8
11882865	2009-03-01	10:13:03.70	66.629	-135.74	4
13435556	2009-03-05	12:17:29.40	80.23	-1.91	5.4
13435571	2009-03-05	19:41:40.70	80.284	-1.832	5.4
14269610	2009-03-06	10:50:32.20	80.33	-2.32	6.5
13438579	2009-04-15	06:54:54.20	80.57	-108.63	5
13439079	2009-04-25	13:17:05.00	70.9	-6.12	4.9
14645911	2009-05-17	19:24:21.50	82.58	-9.16	5.5
12868600	2009-05-28	13:57:32.00	66.3	-135.11	3.9
13077426	2009-06-04	02:44:38.09	66.398	-157.567	4.3
13202283	2009-06-21	12:27:07.00	76.21	6.7	5.4
13209641	2009-06-22	15:24:44.00	76.29	6.44	4.7
14931608	2009-06-22	18:15:40.40	76.27	6.69	5.4
13217739	2009-06-22	19:05:18.00	76.21	6.63	5.1
13361366	2009-07-07	19:11:49.20	75.33	-72.49	6
14250216	2009-08-12	04:45:43.40	68.94	-16.83	4.9
13588037	2009-08-20	06:35:06.80	72.22	0.84	6
13786565	2009-09-19	20:21:56.70	76.44	6.18	4.9
13788743	2009-09-21	08:30:15.90	71.1	-7.7	5.6
13795286	2009-09-25	09:45:31.70	66.96	-170.75	5.1
13797076	2009-09-25	22:24:29.45	66.737	-130.881	4.2
13797079	2009-09-25	23:01:33.67	66.641	-130.912	4.1
15928265	2009-10-07	20:52:15.40	81.56	120.03	5.8
13867450	2009-10-19	03:43:01.00	71.59	-2.88	4.8
14093944	2009-10-20	04:47:22.10	83.99	111.63	4.7
14004465	2009-12-05	09:14:55.25	66.819	-142.472	4.5
14220832	2010-01-08	17:01:01.29	66.855	-136.101	4.2
17273334	2010-02-19	07:18:04.59	66.241	-142.203	4.2
14322971	2010-02-22	16:55:01.90	70.89	-6.64	5.3
14556703	2010-04-08	07:14:14.21	70.831	-132.603	4.4
14569132	2010-04-12	07:57:22.50	77.01	19.61	4.9
14576394	2010-04-15	16:35:12.40	71.72	-66.87	4.8
14704306	2010-05-16	15:29:02.80	73.42	7.4	5.1
14704304	2010-05-16	16:39:33.10	73.37	7.17	5.1
14705144	2010-05-16	20:23:01.00	73.65	7.86	4.9
14712415	2010-05-20	02:55:55.00	73.41	7.37	4.8
14738424	2010-06-03	04:32:42.50	70.77	-14.21	5.6
14738813	2010-06-03	10:16:15.20	70.84	-14.09	5
14759743	2010-06-09	16:54:23.70	70.4	-15.07	5
15051809	2010-07-30	09:58:35.60	76.32	7.11	4.9
15081970	2010-08-02	11:54:32.70	66.402	13.358	

Event ID	Date	Time	Latitude (°)	Longitude (°)	Magnitude (Mw)
15089787	2010-08-16	19:03:42.00	71.82	-1.46	5
15793742	2010-11-07	00:43:23.57	69.19	-146.222	5.1
15667126	2010-11-18	08:08:40.00	72.22	0.38	4.8
15979160	2011-01-29	06:55:26.00	70.96	-6.78	6.2
16951121	2011-08-15	11:04:08.43	70.577	-133.731	4.5
17000555	2011-08-24	08:08:15.70	72.66	3.54	5.4
603265614	2011-10-05	04:13:35.40	75.71	7.61	4.9
17342425	2011-10-10	15:20:58.90	85.06	12.4	4.8
17396540	2011-10-25	02:32:21.50	70.89	-6.61	5.1
17545709	2011-11-19	21:04:21.10	80.79	-2.93	4.7
17595147	2011-11-26	23:59:53.20	82.43	-6.42	5.1
600332421	2012-02-07	23:37:05.30	76.89	6.8	5.1
600668628	2012-02-17	16:52:23.20	71.74	-2.29	5
600698937	2012-02-21	13:50:42.60	67.66	-166.71	5.1
600822170	2012-03-26	09:30:18.80	66.38	-174.43	5.1
600835431	2012-03-30	11:19:19.70	80.04	0.54	5.1
600893854	2012-04-19	01:41:33.20	83.92	-0.75	4.9
600957091	2012-04-29	11:29:53.00	83.85	-0.77	5.1
600980150	2012-05-04	23:33:25.50	83.02	-6.31	4.8
601033410	2012-05-24	22:47:46.00	72.79	4.97	6.1
601033774	2012-05-25	04:01:36.10	72.99	5.47	5.2
601036267	2012-05-26	03:27:03.70	85.95	30.5	5.2
601133770	2012-06-18	20:14:55.40	86.32	39.25	4.8
601191872	2012-06-24	00:03:15.25	69.453	-144.331	4.3
601352412	2012-07-14	19:41:20.00	71.32	-10.15	4.8
601273552	2012-07-15	02:13:38.80	71.33	-9.78	4.8
601273570	2012-07-15	13:02:43.50	71.4	-9.71	5
601457928	2012-07-23	04:38:44.00	79.57	2.69	4.8
601484414	2012-07-28	10:14:45.60	79.78	3.03	4.8
601484417	2012-07-28	11:23:43.80	81.31	-4.18	5
601534324	2012-08-10	06:57:22.56	68.271	-136.294	4
601653047	2012-08-30	13:43:24.00	71.36	-10.41	6.8
601685279	2012-09-01	10:57:35.00	66.836	-135.612	3.8
601670454	2012-09-02	12:44:02.50	78.42	6.59	5.4
601687272	2012-09-06	20:43:00.90	68.9	-16.46	4.8
601709216	2012-09-11	10:15:55.40	73.47	7.91	4.8
601712983	2012-09-13	17:23:47.30	82.88	116.76	5.2
601721529	2012-09-17	16:08:45.80	72.46	2.6	4.9
601734986	2012-09-20	19:42:47.20	66.43	-18.91	4.6
601792484	2012-10-06	01:19:32.80	75.97	6.88	4.9
603370150	2012-10-21	00:10:35.90	66.51	-18.79	5.3
603370163	2012-10-21	01:25:22.30	66.18	-19.26	5.6
601867059	2012-11-01	06:33:37.10	71.95	-0.52	4.8
602034593	2012-12-11	05:12:18.70	68.26	-136.05	4.9

Event ID	Date	Time	Latitude (°)	Longitude (°)	Magnitude (Mw)
602043449	2012-12-13	23:03:37.50	80.88	121.39	5.6
602070609	2013-01-01	13:13:57.20	80.66	121.71	4.9
602437689	2013-02-14	13:13:51.60	67.557	142.678	6.9
602442932	2013-02-14	20:26:14.10	67.72	143.28	4.9
602444003	2013-02-15	16:32:55.70	67.77	142.29	4.7
602444215	2013-02-16	02:01:16.30	67.64	142.48	4.9
602760665	2013-02-22	09:31:55.60	67.71	142.56	4.9
602545988	2013-02-22	23:32:00.40	67.62	142.5	4.8
602569629	2013-03-05	08:33:53.19	67.644	142.415	5.2
602755757	2013-04-02	00:59:16.57	66.426	-17.599	5.3
602755778	2013-04-02	08:55:56.40	66.72	-17.68	5
602757108	2013-04-02	22:52:12.70	66.47	-17.23	4.7
602767645	2013-04-02	23:05:08.30	66.45	-17.37	4.7
602917643	2013-04-07	09:34:39.06	66.217	-148.784	3.7
602762745	2013-04-07	19:29:04.90	85.33	10.95	4.8
602787744	2013-04-13	15:50:35.00	67.46	-18.95	4.7
607983793	2013-05-10	08:38:28.10	67.55	139.32	5.2
603007795	2013-05-25	08:29:29.95	66.272	-149.563	4.3
603045435	2013-06-03	16:48:30.30	74.95	8.6	4.8
603271227	2013-07-15	09:50:58.00	69.94	-15.54	4.8
603232727	2013-07-15	11:34:25.80	69.93	-15.56	5.2
603232942	2013-07-15	13:41:27.50	69.64	-15.42	4.9
603236465	2013-07-17	06:36:20.15	69.194	-144.487	4.2
603237470	2013-07-18	14:41:08.88	69.158	-144.606	4.1
603329902	2013-08-13	07:01:34.77	66.961	-146.538	3.7
603331494	2013-08-14	05:15:50.40	67.63	142.79	4.8
603336795	2013-08-16	22:55:44.46	67.723	-141.098	3.9
603372564	2013-09-01	22:52:05	69.2024	-144.5337	4.5
603384742	2013-09-05	20:11:59.89	69.1594	-144.5349	3.9
603762235	2013-10-28	14:54:29.00	76.41	6.78	5.3
603786217	2013-11-13	06:27:14.19	66.5513	-141.9082	3.5
603860365	2013-12-17	13:49:36.30	75.93	6.9	5.3
606908404	2013-12-18	08:22:38.50	75.92	6.95	5.3
603874637	2013-12-23	00:29:01.00	76.03	7.15	4.8
603963686	2014-01-16	08:14:47.30	73.81	8.26	5
608542953	2014-01-24	19:36:33.20	66.68	13.457	
604032053	2014-02-02	09:23:01.31	69.2263	-144.52	3.8
604040365	2014-02-10	02:44:47.57	67.611	-146.9247	3.9
604057700	2014-02-20	13:26:20.80	80.11	0.13	5
604090202	2014-03-04	02:59:36.20	71.22	-8.89	5
604092783	2014-03-06	11:17:19.10	85.98	27.37	4.8
609047627	2014-03-07	21:36:52.90	66.948	13.405	
604187152	2014-03-23	15:08:59.64	71.5334	-134.6379	4.6
604369087	2014-03-25	22:26:19	66.267	-149.8411	3.8

Event ID	Date	Time	Latitude (°)	Longitude (°)	Magnitude (Mw)
604462919	2014-04-18	18:44:20.00	67.8	-162.3	5.7
604464359	2014-04-18	18:56:47.60	67.83	-162.32	5.7
604464394	2014-04-19	08:49:03.00	67.75	-162.25	5
604484951	2014-04-26	03:55:32.80	73.5	7.96	5.2
604498552	2014-04-28	19:54:27.20	73.22	6.61	4.7
604511305	2014-05-03	08:57:17.00	67.84	-162.18	5.7
604512270	2014-05-03	09:51:09.60	67.82	-161.97	4.9
604512271	2014-05-03	09:57:10.40	68.05	-162.62	5
604583661	2014-05-14	12:18:57.90	71.58	-3.36	4.8
604660253	2014-05-29	05:07:32.50	70.86	140.17	4.9
604725207	2014-06-04	16:42:10.20	68.366	11.592	
610592440	2014-06-06	02:24:25.80	66.394	13.342	
604717717	2014-06-07	04:43:34.50	67.85	-162.07	5.8
606917973	2014-06-16	12:01:10.30	67.84	-162.16	5.7
604729729	2014-06-16	14:13:00.10	70.42	-14.97	4.9
604729730	2014-06-16	14:24:31.50	70.33	-15.26	5.5
604756900	2014-06-22	23:58:23.90	78.52	125.86	4.8
610571310	2014-07-18	05:33:29.00	67.94	-162.1	4.9
605127878	2014-08-01	19:44:24.20	72.01	-0.27	4.7
605170348	2014-08-25	22:54:45.60	67.79	142.61	5
610609922	2014-08-31	00:10:14.60	71.66	-2.79	4.8
605184098	2014-08-31	00:54:50.40	71.57	-2.89	4.6
605519752	2014-10-08	10:29:57.80	80.68	-2.61	4.9
605566726	2014-10-20	12:56:11.90	86.32	36.65	4.9
610610210	2014-10-28	00:36:05.40	68.067	9.944	
605645287	2014-11-04	12:33:49.50	71.86	-1.39	4.9
605652272	2014-11-09	04:42:39.20	76.7	-96.97	4.7
606510947	2015-01-11	20:34:31.80	77.37	7.14	5.2
609259373	2015-01-19	12:31:51.60	73.25	6.25	5
606589205	2015-01-19	12:45:13.90	73.22	6.35	5.4
606589211	2015-01-19	13:09:37.30	73.31	6.44	4.8
606931830	2015-01-19	15:05:49.30	73.29	6.44	4.9
606589998	2015-01-22	00:39:16.50	73.28	6.41	5.1
606724107	2015-02-09	22:20:07.50	79.44	2.52	4.8
606724414	2015-02-12	02:11:41.50	72.03	-75.31	4.8
606733262	2015-02-19	06:00:44.70	66.687	13.413	
610587071	2015-03-24	17:22:57.40	66.1952	-135.5446	3.8
606981625	2015-04-03	08:29:32	67.63	-145.76	4.6
607274875	2015-06-01	12:57:51.50	86.12	31.69	5.1
607277217	2015-06-02	07:31:31.70	72.41	2.09	5.1
607288456	2015-06-09	19:23:56.20	74.61	8.53	5.1
609272642	2015-06-30	07:40:01.30	71.0018	-7.6501	5.3
610195214	2015-07-31	17:27:58.70	69.349	24.237	
611879818	2015-08-03	01:49:50.50	67.697	11.348	

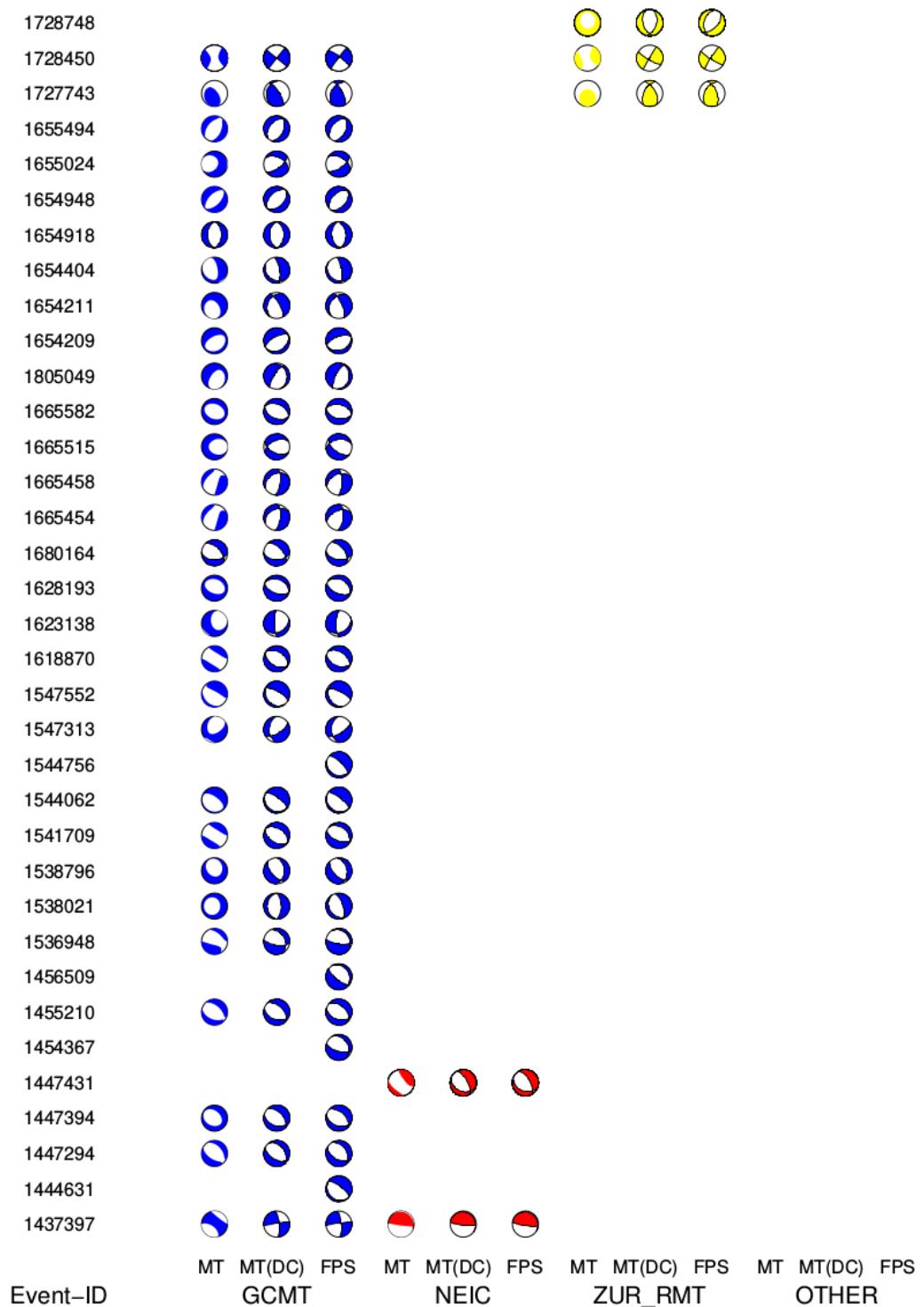
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607647619	2015-08-09	23:12:30	67.2333	-144.5177	3.7
607649015	2015-08-11	22:46:15.10	71.82	-1.67	5
607719000	2015-09-01	13:26:28.40	70.31	-15.3	5
609903739	2015-09-24	20:05:57.13	38.6378	141.8085	4.1
611836753	2015-10-03	02:35:00.20	71.53	-3.73	4.9
607877149	2015-10-12	12:31:26.20	78.18	7.09	4.8
607915739	2015-10-16	18:05:44	68.07	-136.31	4.1
608116874	2015-12-24	11:54:20.20	73.44	7.38	4.8
611838582	2016-01-03	02:01:43.00	71.47	-3.6	4.8
608172828	2016-01-17	14:52:26	66.5765	-153.8555	4.2
608304252	2016-02-01	22:34:47.50	71.82	-1.45	4.9
608339616	2016-02-22	02:30:44	69.26	-144.7	4.1
608441478	2016-02-28	18:09:34.30	71.69	-2.33	4.7
608441480	2016-02-28	18:24:45.00	71.69	-2.32	5.1
608444464	2016-03-01	11:58:09.60	85.3	13.13	4.9
608465620	2016-03-08	07:19:26	68.0433	-158.2088	4
608506465	2016-03-29	10:32:10.80	77.82	20.96	5.2
608546805	2016-04-12	20:50:00	67.6369	-162.8311	4.3
608556999	2016-04-17	16:17:14.30	69.148	-54.085	
611265564	2016-05-09	15:47:24.70	69.155	-53.79	
611829845	2016-05-22	01:06:20.80	84.45	106.79	4.9
608816441	2016-05-22	13:40:40.90	84.34	107.58	4.8
609909917	2016-07-06	06:19:48.30	0.84	-79.79	4.9
609091628	2016-07-09	08:45:09.50	85.05	11.9	4.7
610502637	2016-07-15	14:01:00	69.5397	-144.7763	3.6
610502741	2016-07-20	12:07:21.50	68.5931	-146.8825	3.6
610502743	2016-07-20	12:53:03	68.567	-146.759	3.7
609330179	2016-08-12	20:47:31.70	84.029	-1.7539	5
609366813	2016-08-18	07:32:34.90	73.31	6.56	4.7
611830504	2016-09-03	06:55:38.20	71.02	-7.54	5.2
611830859	2016-10-22	18:47:18.40	85.55	85.59	4.8
611831502	2017-01-08	23:47:15	74.32	-92.31	6
611831514	2017-01-09	17:55:38.40	74.53	-92.11	5
611831668	2017-01-28	17:32:34.90	68.42	-18.2	4.7
610243220	2017-02-19	05:22:45.20	82.5	-7	4.7
610240059	2017-02-23	20:13:39.30	86.21	72.91	4.8
610321336	2017-03-10	16:41:13.10	72.8	4.21	4.9
610344737	2017-03-18	04:30:58.90	79.49	2.92	4.8
610543677	2017-03-26	00:24:50.30	67.84	-18.7	4.8
611832137	2017-03-26	01:07:12.20	67.9202	-18.6366	5.2
610435140	2017-03-26	01:48:40.80	67.99	-18.49	5
610436994	2017-03-26	02:12:01.10	68.11	-18.68	4.9
611832269	2017-04-08	00:46:27.30	84.93	100.06	5.2
610594269	2017-05-04	15:47:06.50	72.65	3.2	4.7

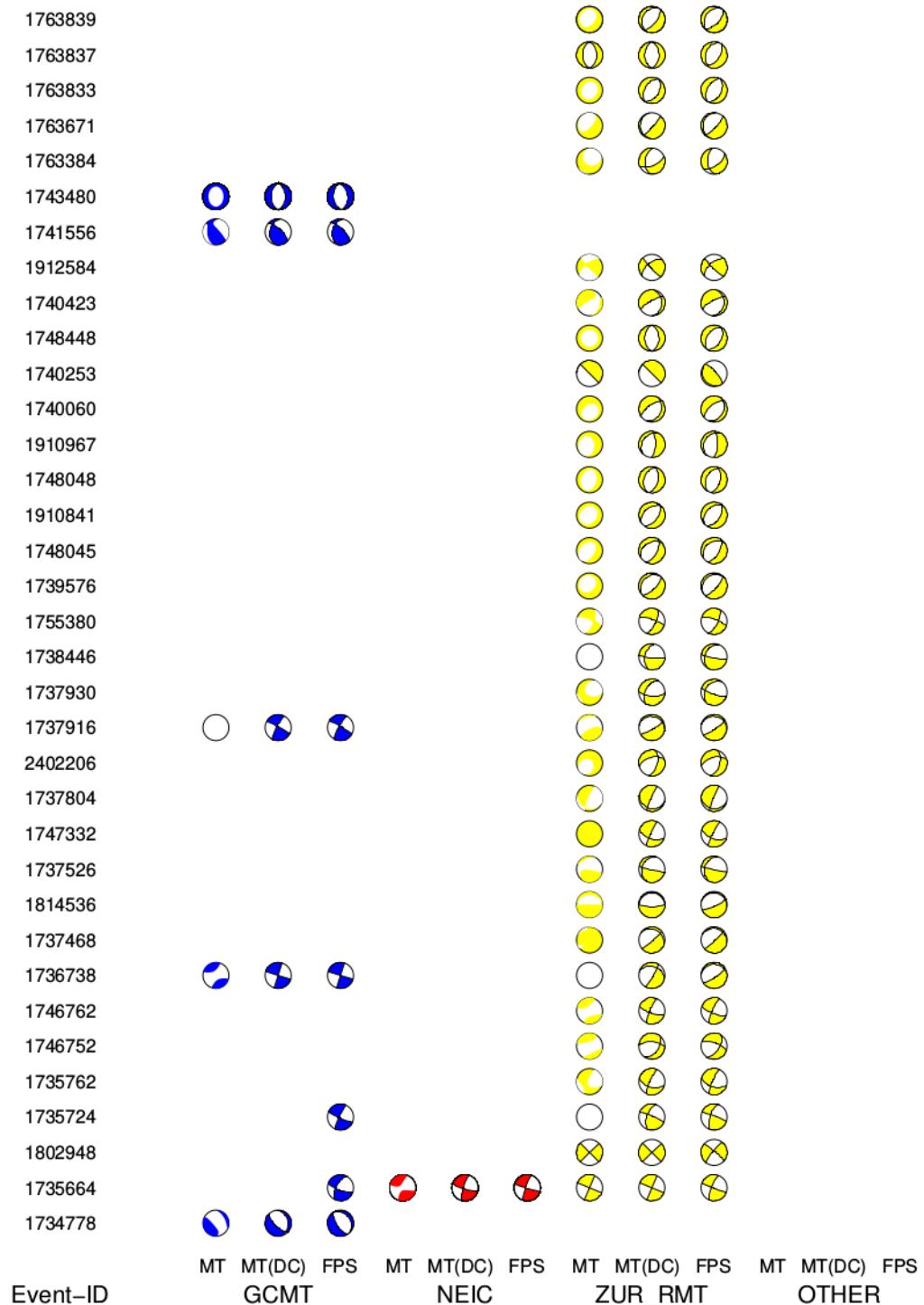
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610617958	2017-05-08	04:48:57.60	81.65	-4.49	4.8
610638097	2017-05-13	08:43:44.20	84.86	99.06	5.1
611834015	2017-05-31	13:59:12.40	77.14	15.42	4.7
610666951	2017-06-07	17:20:39.30	84.72	103.1	4.7
610669127	2017-06-09	20:49:50.70	80.1255	0.5981	5.3
610681621	2017-06-19	02:19:33.20	79.43	2.58	4.7
611834153	2017-06-20	15:27:30.50	84.85	6.66	4.9
610925803	2017-08-16	23:49:23.10	80.46	121.98	4.9
611834866	2017-09-15	23:13:13.70	67.69	143	4.8
611189646	2017-10-21	12:56:42.70	70.9	-6.55	5.4
611452668	2017-10-28	16:13:56.40	86.89	54.11	5.7
611307336	2017-10-28	16:16:06.90	86.9	54.26	5.7
611452674	2017-10-28	19:11:01.80	86.87	54.12	5.9
611451115	2017-11-08	10:53:08.10	82.4	-6.4	4.7
611835296	2017-11-15	03:12:10.60	72.66	3.19	4.9
611835386	2017-11-28	13:15:46.40	72.65	3.27	5.6
611835428	2017-12-02	16:40:47.60	71.53	-10.86	5.1
611608767	2017-12-23	22:13:02.10	85.36	90.29	4.9
611644850	2017-12-29	05:57:37.00	71.61	-3.64	4.7

4B All available focal mechanisms and moment tensor solutions in our database are displayed in the following table

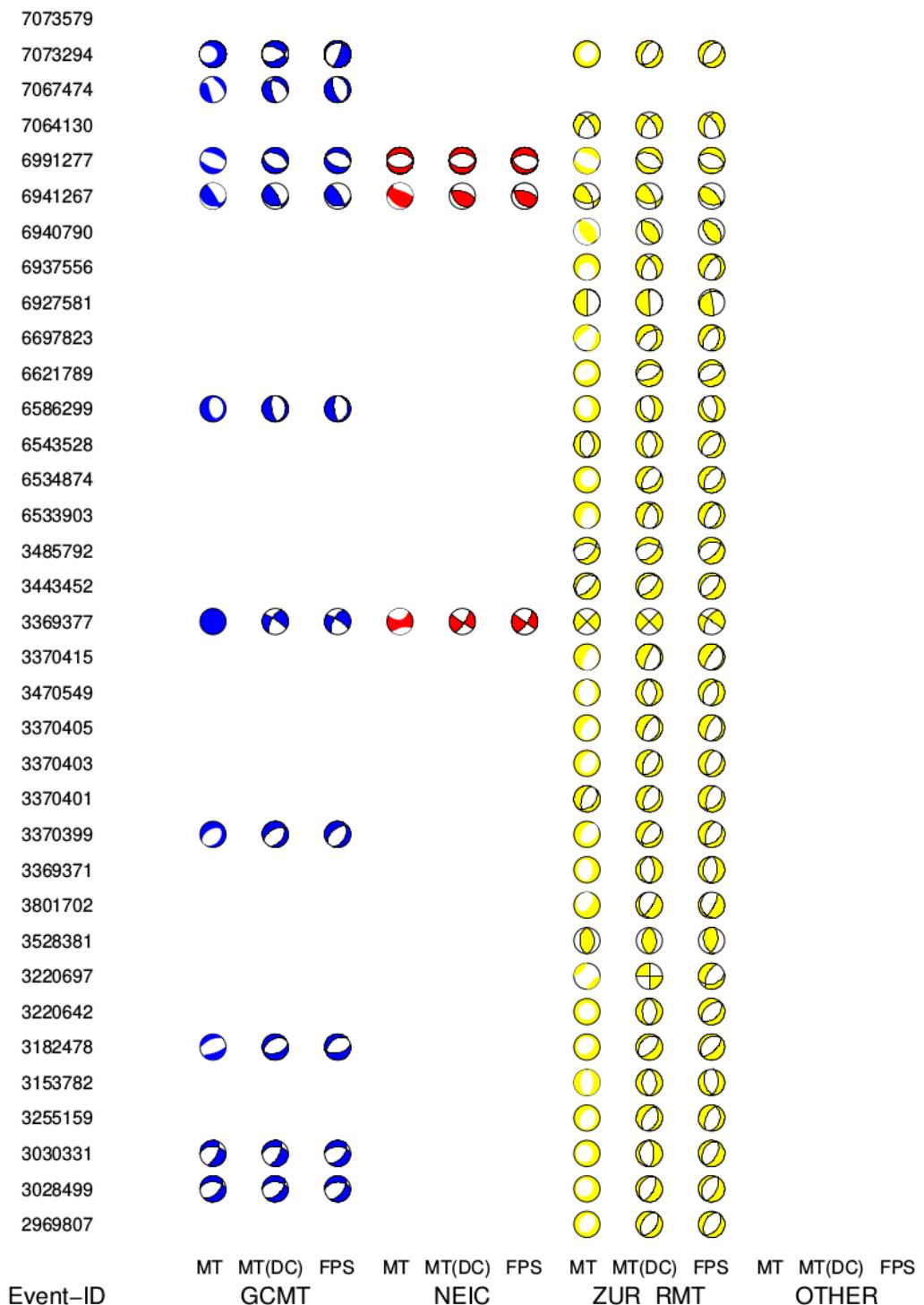
Event-ID	MT GCMT	MT(DC) GCMT	FPS	MT NEIC	MT(DC) NEIC	FPS	MT ZUR_RMT	MT(DC) ZUR_RMT	FPS	MT OTHER	MT(DC) OTHER	FPS
513489	●	●	●									
513386	●	●	●									
513374	●	●	●									
519203	●	●	●									
518589	●	●	●									
521149	●	●	●									
521136	●	●	●									
529595	●	●	●	●	●	●	●	●	●			
532243	●	●	●									
533878	●	●	●									
539653	●	●	●									
549961	●	●	●									
553235	●	●	●									
561991	●	●	●									
562401	●	●	●									
573793	●	●	●									
584706	●	●	●									
597037	●	●	●									
596988	●	●	●									
608937	●	●	●									
623494	●	●	●									
634511	●	●	●									
649794	●	●	●									
650592	●	●	●									
655921	●	●	●									
664174	●	●	●									
663488	●	●	●									
668098	●	●	●									
686093	●	●	●									
685956	●	●	●									
687246	●	●	●									
689432	●	●	●									
698203	●	●	●									
700235	●	●	●									
718969	●	●	●									

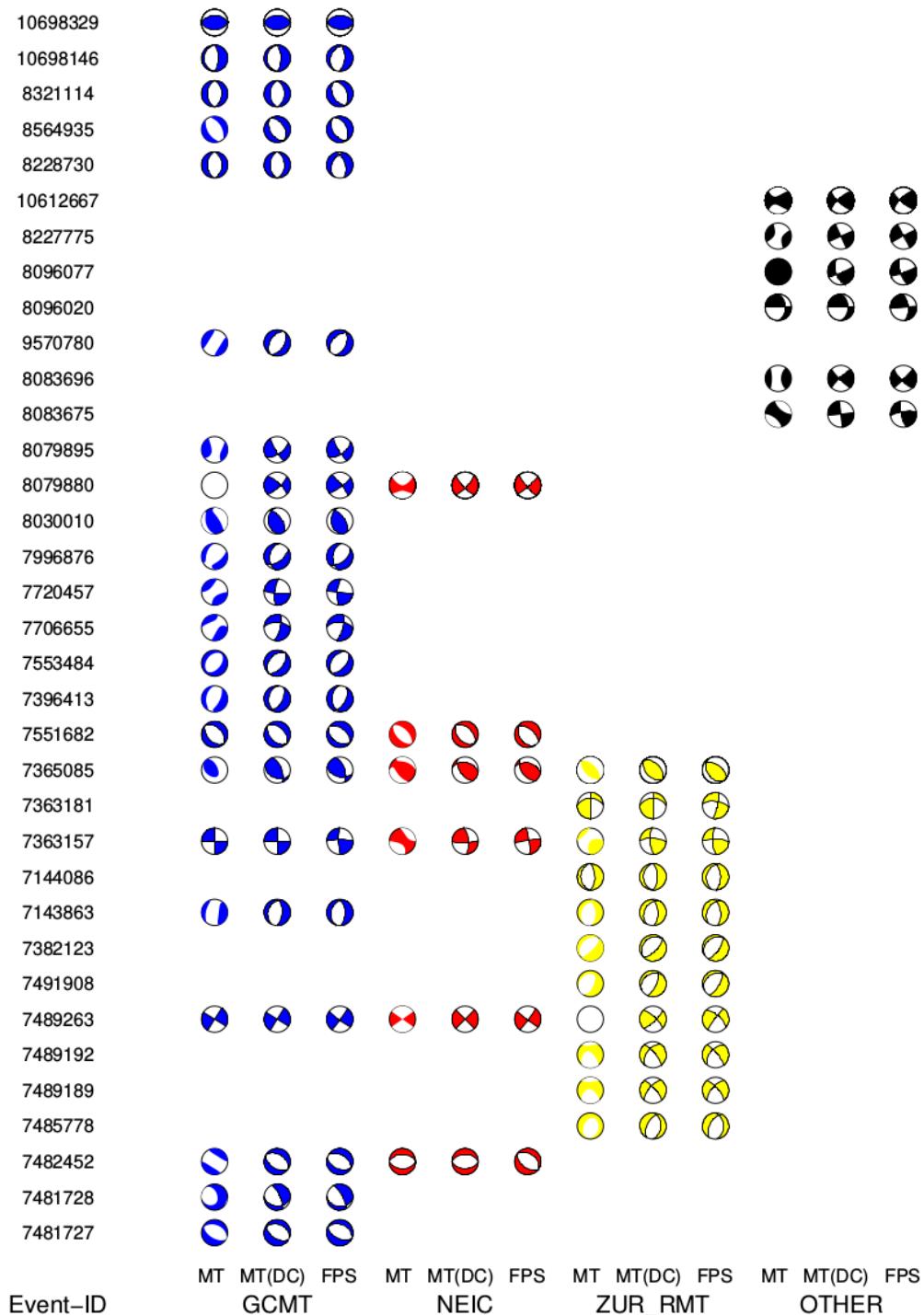
Event-ID	MT	MT(DC)	FPS	MT	MT(DC)	FPS	MT	MT(DC)	FPS	MT	MT(DC)	FPS
	GCMT			NEIC			ZUR_RMT			OTHER		
283093	●	●	●	●	●	●	●	●	●	●	●	●
286176	●	●	●	●	●	●						
304207	●	●	●	●	●	●	●	●	●	●	●	●
306036	●	●	●	●	●	●						
316817	●	●	●	●	●	●						
318364	●	●	●	●	●	●						
324680	●	●	●	●	●	●						
328651	●	●	●	●	●	●						
340095	●	●	●	●	●	●						
340867	●	●	●	●	●	●						
350207	●	●	●	●	●	●						
370547	●	●	●	●	●	●						
375469	●	●	●	●	●	●						
387170	●	●	●	●	●	●						
386049	●	●	●	●	●	●						
386045	●	●	●	●	●	●						
388898	●	●	●	●	●	●						
388662	●	●	●	●	●	●						
392706	●	●	●	●	●	●						
394219	●	●	●	●	●	●						
401584	●	●	●	●	●	●						
408163	●	●	●	●	●	●						
417897	●	●	●	●	●	●						
441540	●	●	●	●	●	●						
443717	●	●	●	●	●	●	●	●	●	●	●	●
446843	●	●	●	●	●	●						
450547	●	●	●	●	●	●						
458188	●	●	●	●	●	●						
458916	●	●	●	●	●	●						
461848	●	●	●	●	●	●						
473364	●	●	●	●	●	●						
475059	●	●	●	●	●	●						
483175	●	●	●	●	●	●						
493572	●	●	●	●	●	●						
509883	●	●	●	●	●	●						

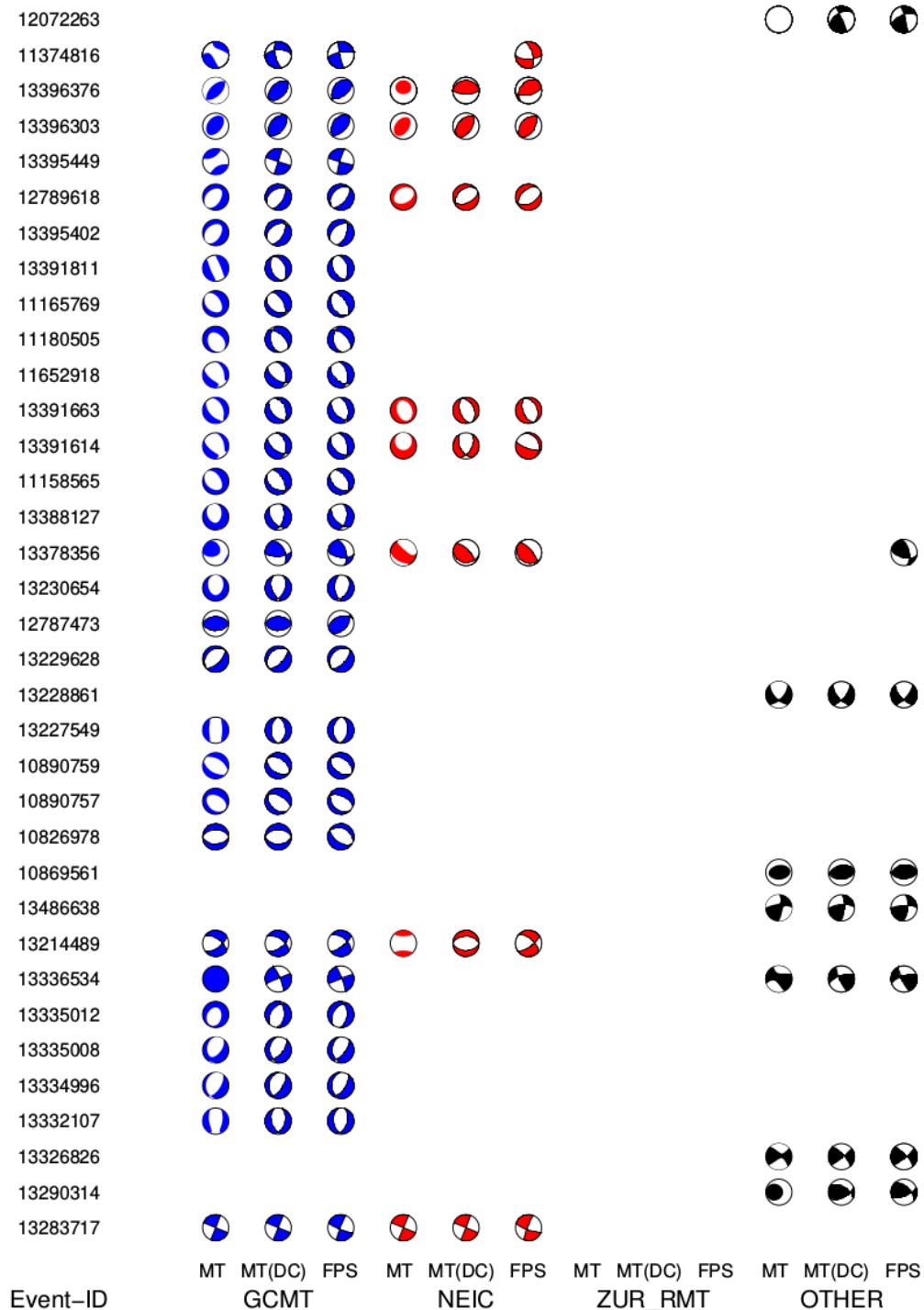


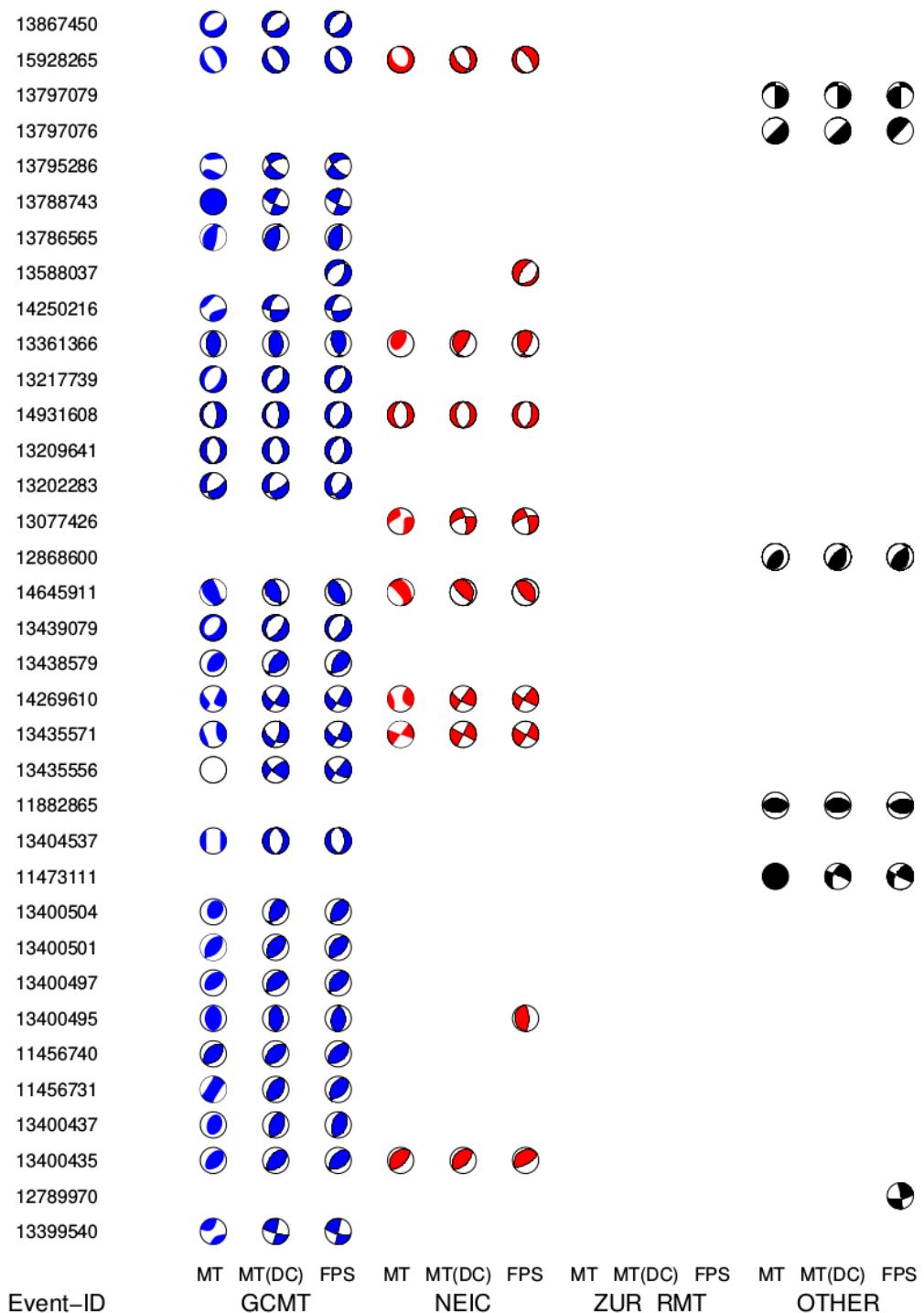


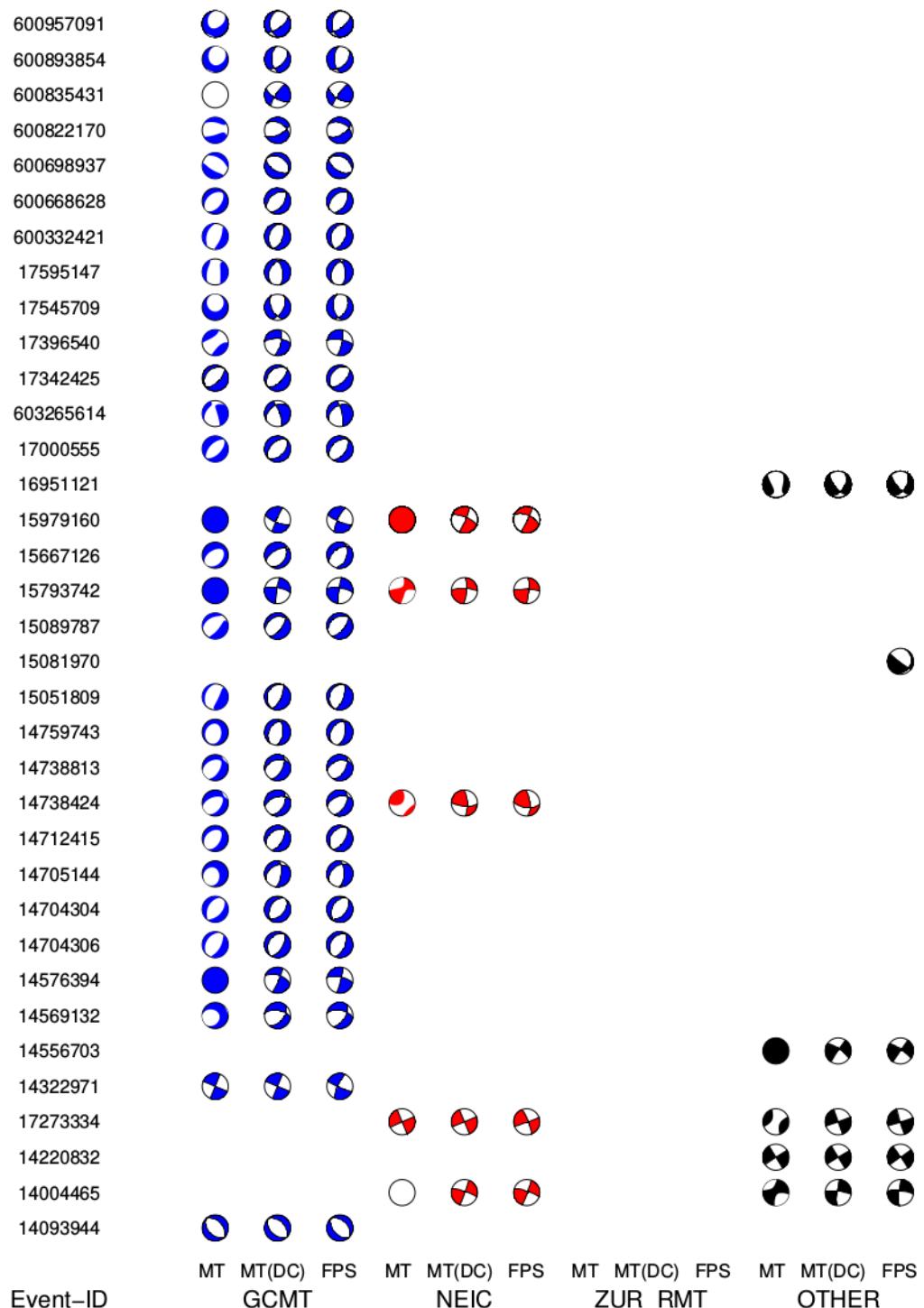
Event-ID	MT GCMT	MT(DC) FPS	MT NEIC	MT ZUR_RMT	MT OTHER
2969805					
2969492					
2891473					
2987728					
2429100					
2496582	● ● ●				
2418840	● ● ●				
2347411	● ● ●				
2331828					
2013504	● ● ●				
2051756					
2051752					
2051704					
1970250	● ● ●				
2963234					
1955367					
1955353					
1955349					
1955347					
2963200					
1955341					
1955335					
1955331					
1939557					
1939551					
1939535					
1939533					
1939511					
1939507					
2954000					
1954476					
1998023					
1915678	● ● ●				
1917183					
2040973					

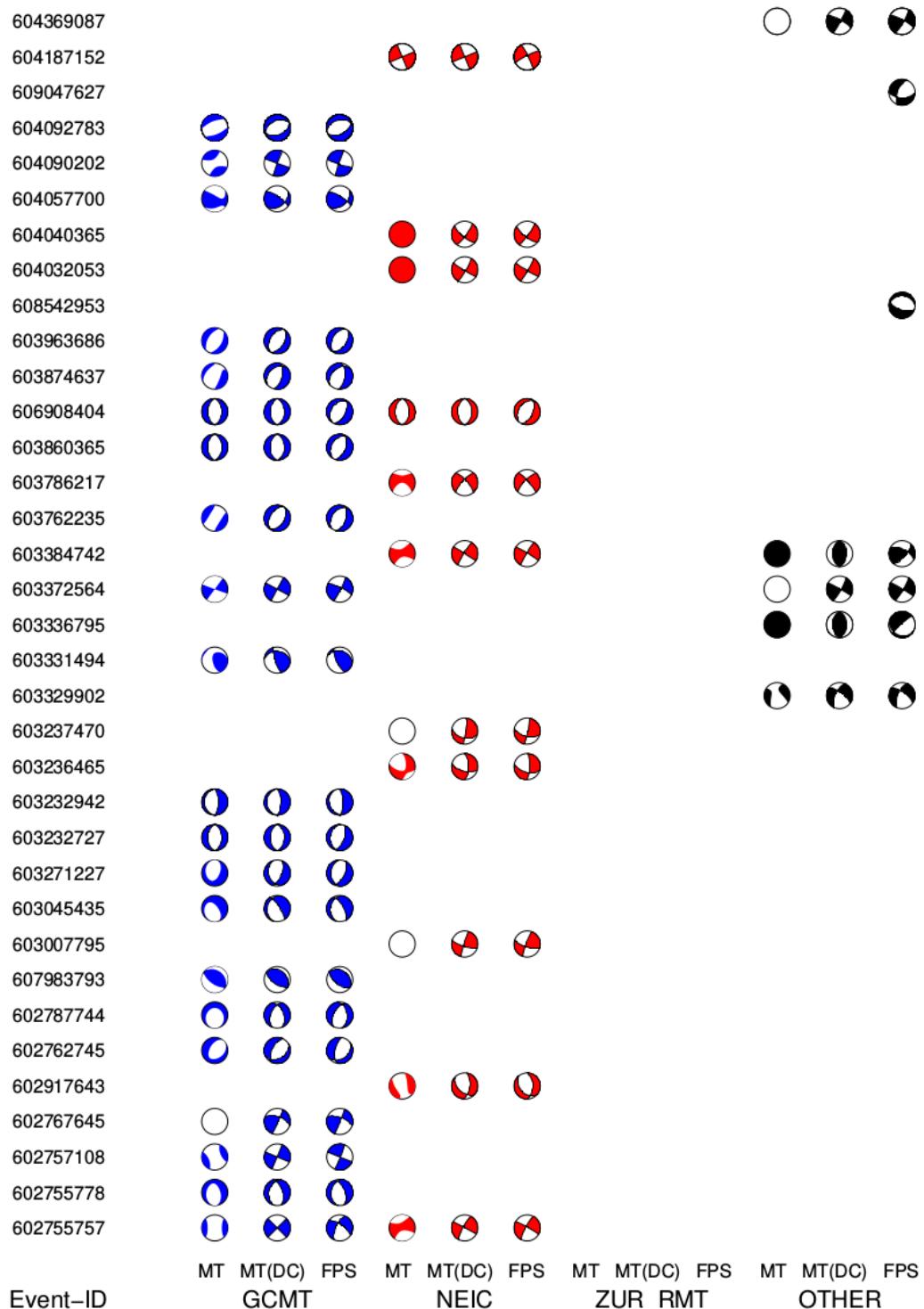


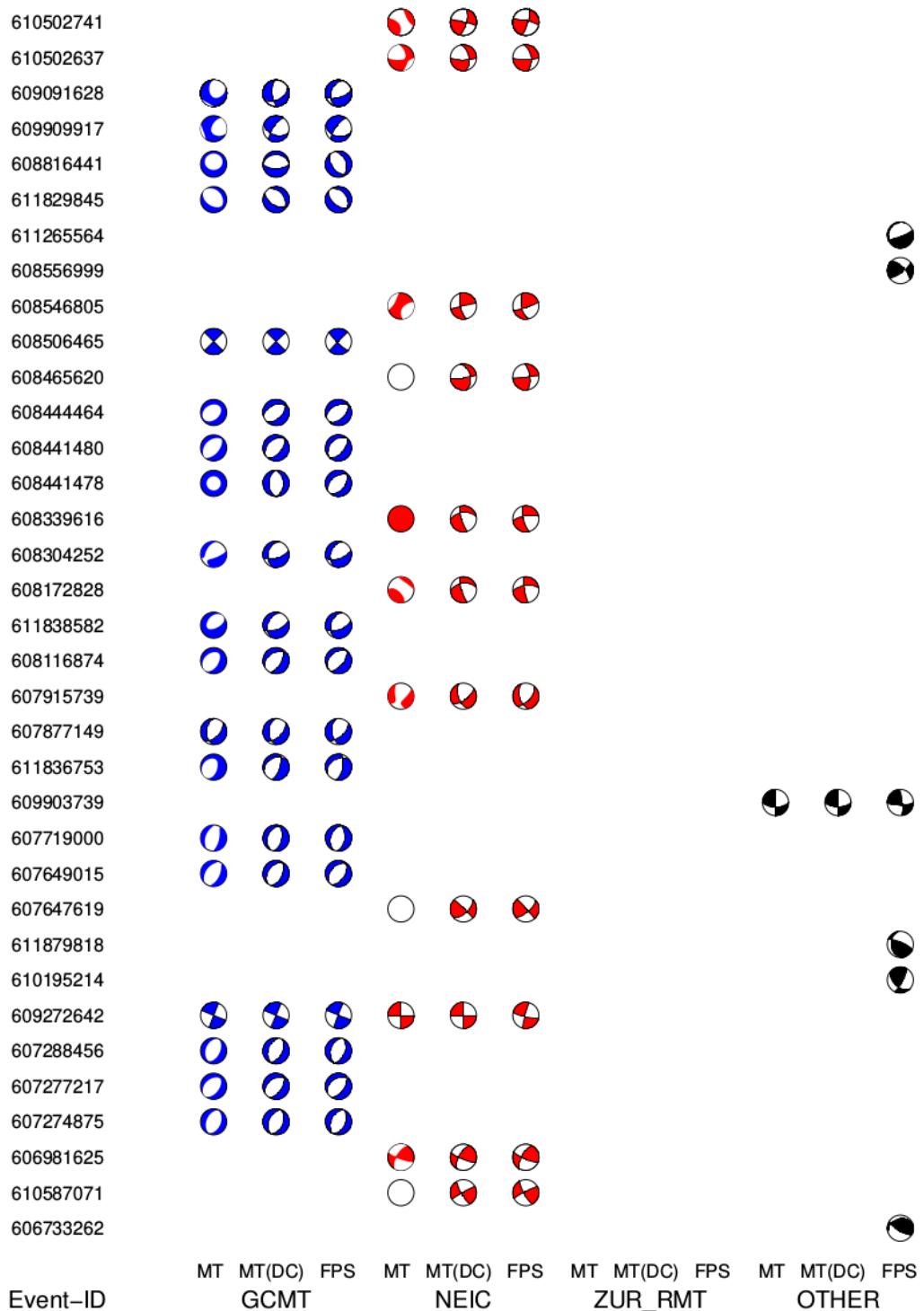


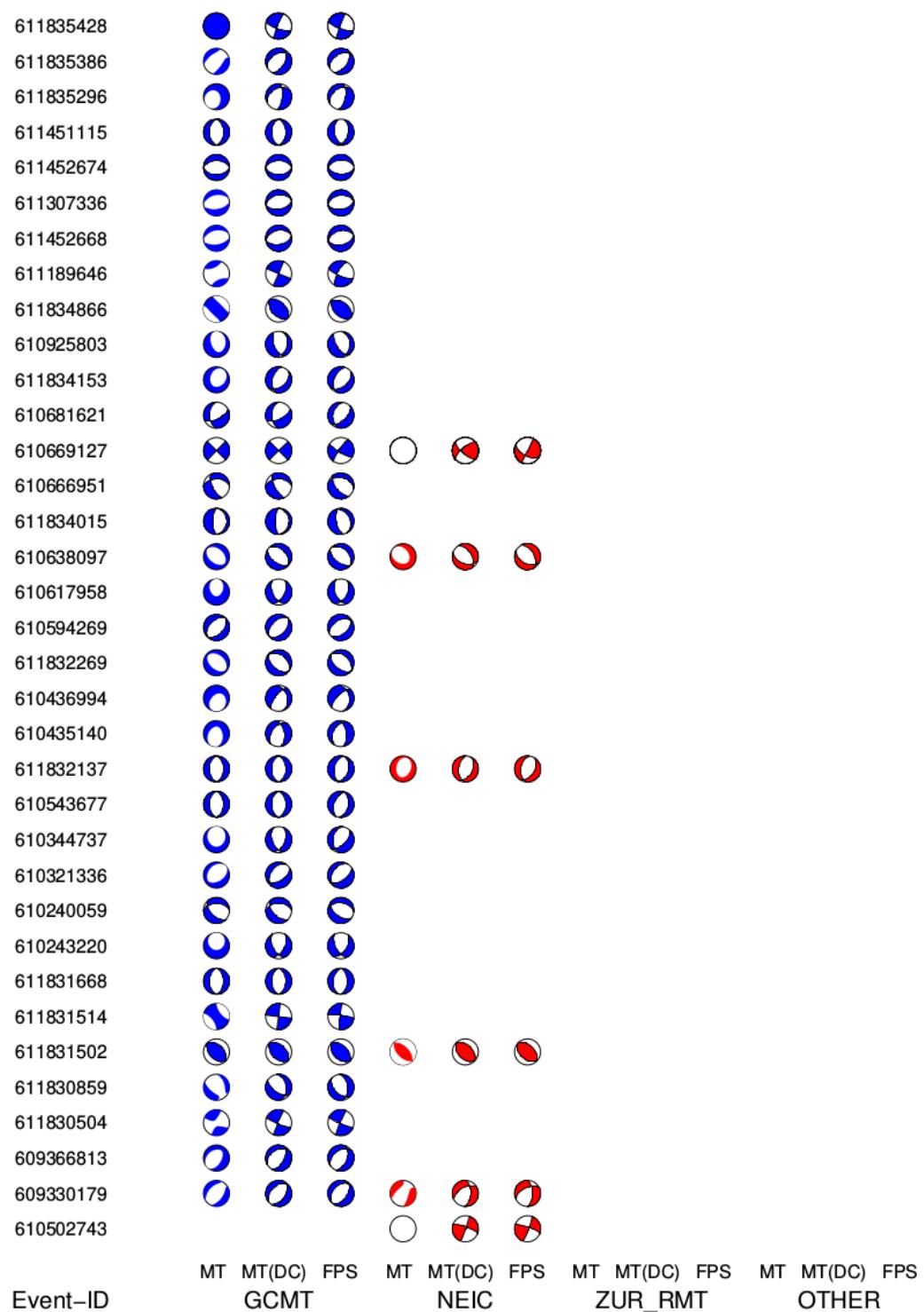




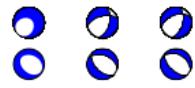








611644850



611608767

Event-ID

MT	MT(DC)	FPS	MT	MT(DC)	FPS	MT	MT(DC)	FPS	MT	MT(DC)	FPS
GCMT				NEIC		ZUR_RMT			OTHER		

4C Station list for the area north of the Arctic Circle

Station	Latitude (°)	Longitude (°)	Network	Open	Close	Array	Data*
MKI	68.967	173.714					0
BILL	68.0389	166.27111	IU	2014	2999		1
CES	68.7	161.2			1990		0
YBGR	68.5317	146.1927		2011	2999		-1
TLIS	70.18	140.78					0
DEPR	69.392	139.902		2009	2999		-1
TBK	67.538	136.522					0
YUB	70.738	136.093					0
BTGS	67.651	134.64		2004	2999		-1
SAYS	68.7	134.45					0
NAYS	70.85	130.73					0
TIXI	71.6341	128.866699		1995	2999		1
TIK	71.6333	128.86667		1956	2999		-1
KYU	70.68	127.37					0
SOTR	72.4	126.825					0
DUYS	73.92	124.49					0
TML	72.61	121.92					0
SVZ	79.276	101.657					0
NRIL	69.5049	88.441399		1992	2014		0
NRI	69.43	88.083		1977	1999		0
NRIS	69.0061	87.99639		1998	2000		0
NRIK	69.3396	87.55504		2011	2999		-1
AMD	69.7667	61.6833					0
AMDE	69.7607	61.6782	AH	2013	2015		0
KHE	80.6167	58.05		1958	1995		0
ZFI	80.807	47.659		2012	2015	1	0
ZFI2	80.809	47.655		2012	2015	1	0
TERR	69.2015	35.1076		2015	2015		0
APA	67.569	33.40511		1956	2999		-1
APZ9	67.569	33.40511			2999	1	-1
APB1	67.6068	33.00368			2999	1	-1
APB2	67.6024	32.99791			2999	1	-1
APA2	67.6054	32.99655			2999	1	-1
APB5	67.6106	32.99336			2999	1	-1
APAE	67.6061	32.99306			2999	1	-1
APA1	67.6079	32.99283			2999	1	-1
APA0	67.6062	32.99229			2999	1	-1
APA3	67.6057	32.98779			2999	1	-1
APB3	67.6029	32.98466			2999	1	-1
APB4	67.6079	32.98156			2999	1	-1
LP36	67.61	31.16	XK	2007	2009		1
SA05A	70.37	31.1	1G	2015	2017		-1
SA05	70.28	31.01	1G	2013	2017		-1
KRK	69.7242	30.0625		1964	1969		0
SA09	69.45	30.04	1G	2013	2017		-1
VRF	67.748	29.609		2007	2016		0
VADS	70.1202	29.3605	NS		2999		1
LP35	67.36	29.36	XK	2007	2009		1
LP14	66.34	29.34	XK	2007	2009		1
LP75	69.67	29.11	XK	2007	2009		1

Station	Latitude (°)	Longitude (°)	Network	Open	Close	Array	Data*
SA03	70.5	29.07	1G	2012	2017		-1
LP23	66.88	28.94	XK	2007	2009		1
LP54	68.47	28.32	XK	2007	2009		1
FJ01	66.04	28.31	ZB	1998	1999		1
LP65	68.85	28.31	XK	2007	2009		1
LP74	69.36	28.27	XK	2007	2009		1
SA02	71.06	28.24	1G	2013	2017		-1
LP34	67.27	28.13	XK	2007	2009		1
LP64	68.71	27.79	XK	2007	2009		1
LP43	67.78	27.78	XK	2007	2009		1
LP33	66.97	27.34	XK	2007	2009		1
LP22	66.3	27.3	XK	2007	2009		1
LP53	68.08	27.19	XK	2007	2009		1
LP73	69.07	27.11	XK	2007	2009		1
KEV1	69.7558	27.0125		1961	1963	1	0
KEV	69.7553	27.0067	IU	1993	2999	1	1
KMNF	69.149	26.99611	FN				0
SOD	67.3712	26.6291	FN	1956	1994		0
SGF	67.4421	26.52611	FN	2005	2999		1
LP63	68.41	26.45	XK	2007	2009		1
SDF	67.4203	26.3936	FN	1992	2000		0
RNF	66.61	26.01	FN	2007	2999		1
SA01	71.11	25.82	1G	2013	2017		-1
LP62	68.16	25.78	XK	2007	2009		1
LP72	68.95	25.71	XK	2007	2009		1
SA10	69.2	25.69	1G	2013	2017		-1
LP42	67.06	25.6	XK	2007	2009		1
ARD3	69.5366	25.54831				1	-1
ARD4	69.5271	25.53619				1	-1
ARD2	69.5452	25.53081				1	-1
ARC3	69.5329	25.52311				1	-1
ARC2	69.5383	25.52289				1	-1
ARB2	69.5357	25.51339				1	-1
ARD5	69.5214	25.51181				1	-1
ARC4	69.5293	25.51169				1	-1
ARB3	69.5324	25.51061				1	-1
ARD1	69.5483	25.50931				1	-1
ARB1	69.5379	25.50789				1	-1
ARC1	69.5411	25.50789				1	-1
ARA2	69.5338	25.50781				1	-1
ARA1	69.5363	25.50711				1	-1
ARA0	69.5349	25.5059				1	-1
ARCE	69.5349	25.5058				1	-1
ARCES	69.5349	25.5058				1	-1
ARE0	69.5348	25.50569				1	-1
ARA3	69.5346	25.50189				1	-1
ARB4	69.5328	25.49981				1	-1
ARB5	69.5363	25.4985				1	-1
ARC5	69.53	25.49819				1	-1
ARC7	69.5396	25.49361				1	-1
ARD6	69.5227	25.49				1	-1
ARC6	69.5341	25.48819				1	-1
ARD9	69.5454	25.48569				1	-1

Station	Latitude (°)	Longitude (°)	Network	Open	Close	Array	Data*
SA04	70.32	25.48	1G	2012	2017		-1
ARD7	69.5294	25.47069				1	-1
ARD8	69.5384	25.46861				1	-1
LP52	67.58	25.09	XK	2007	2009		1
LP21	66.04	25.03	XK	2007	2009		1
SA21	66.04	25.03	1G	2014	2017		-1
SA21A	66.04	25.03	1G	2015	2017		-1
HOPEN	76.51	25.01	NS	2010	2999		1
LP71	68.49	24.71	XK	2007	2009		1
LP41	67.09	24.38	XK	2007	2009		1
LP83	69.38	24.21	XK	2007	2009		1
LP31	66.59	24.09	XK	2007	2009		1
KLF	67.2347	23.964		2015	2016		0
LP61	67.91	23.93	XK	2007	2009		1
HAMF	70.6424	23.6843	NS	2010	2999		1
HEF	68.408	23.66	HE	2007	2999		1
LP51	67.46	23.64	XK	2007	2009		1
SA18	66.74	23.56	1G	2012	2017		-1
SA07	70.13	23.37	1G	2013	2017		-1
KTK	69.01	23.24	XK	2007	2008	1	0
KTK2	69.0075	23.2374		1990	1990		0
KTK1	69.0117	23.2371	XK	2007	2009	1	0
KTK6	69.01	23.236		1987	1990		0
KTK3	69.0067	23.2352		1989	1989		0
KTK4	69.0081	23.2347		1992	1992		0
KTK5	69.0096	23.2273		1992	1992		0
PAJU	67.024	23.113	UP	2004	2999		-1
ERTU	66.55	22.19	UP	2004	2999		1
SA19	66.57	22.18	1G	2014	2017		-1
LP81	68.48	22.12	XK	2007	2009		1
SA08	69.76	22.06	1G	2013	2017		-1
MASU	67.4569	21.9983	UP	2003	2999		-1
LANU	68.0493	21.988	UP	2004	2999		1
SA14	67.7	21.62	1G	2012	2017		-1
E01	77.6583	21.2167		1977	1977		0
SA16	67.15	21.08	1G	2012	2017		-1
HARU	66.16	20.98	UP	2006	2999		-1
SA06A	70.04	20.97	1G	2015	2017		-1
KIF	69.0044	20.80181	HE	2006	2999		0
SA06	70.13	20.76	1G	2013	2017		-1
DUNU	67.1215	20.5688	UP	2003	2999		1
KIR	67.84	20.4167		1951	1998		0
JETT	69.5557	20.4095	NO	2014	2999		1
KUA	67.9542	20.33683	UP	2012	2013		1
KOVU	68.2229	20.1607	UP	2013	2999		1
SA20	66.43	19.69	1G	2012	2017		-1
RATU	67.8234	19.5913	UP	2011	2999		-1
BJO	74.5055	19.1883		1992	1994		0
NIKU	67.8673	19.0347	UP	2003	2013		-1
BJO1	74.502	18.999	NS	1998	2999		1
TRO	69.6325	18.9281	NS	1965	2999		1
SA12	68.97	18.91	1G	2012	2017		-1
SA13	68.35	18.84	1G	2012	2017		-1

Station	Latitude (°)	Longitude (°)	Network	Open	Close	Array	Data*
ABK	68.3417	18.8167	UP	1931	1961		0
SALU	67.3801	18.5067	UP	2003	2999		-1
SA15	67.47	18.36	1G	2012	2017		-1
SA15A	67.47	18.36	1G	2015	2017		-1
VAS	68.4167	18.1833	UP	1978	1989		0
SA11	69.13	18.05	1G	2012	2017		-1
SA22	66.04	17.86	1G	2012	2017		-1
SA17	66.95	17.73	1G	2012	2017		-1
N2HA	68.7838	16.5612	2D	2013	2016	1	-1
SPB1	78.1796	16.3906	NO	2004	2999	1	1
SPB2	78.1742	16.3846	NO	2004	2999	1	1
SPA2	78.1759	16.37664	NO	1992	2999	1	1
SPA1	78.1797	16.3755	NO	1992	2999	1	1
SPA0	78.1777	16.36998	NO	2004	2999	1	1
SPB5	78.1823	16.368299	NO	2004	2999	1	1
SPA3	78.1773	16.35881	NO	1992	2999	1	1
SPB3	78.1737	16.3584	NO	2004	2999	1	1
SPB4	78.1789	16.34819	NO	1992	2999	1	1
STN06	78.2	16.07	Y2	2014	2014	1	1
N2AN	69.24	16.04	2D	2013	2016	1	-1
STN05	78.2	16.01	Y2	2014	2014	1	1
STN07	78.16	16	Y2	2014	2014	1	1
STN04	78.2	15.99	Y2	2014	2014	1	1
N2LO	68.4003	15.952	2D	2013	2016	1	-1
N2IH	67.9662	15.9367	2D	2013	2016	1	-1
STN08	78.17	15.92	Y2	2014	2014	1	1
STN02	78.22	15.91	Y2	2014	2014	1	1
STN01	78.23	15.85	Y2	2014	2014	1	1
STN10	78.18	15.84	Y2	2014	2014	1	1
STN03	78.24	15.82	Y2	2014	2014	1	1
STN09	78.2	15.79	Y2	2014	2014	1	1
STN11	78.2	15.75	Y2	2014	2014	1	1
STN12	78.22	15.7	Y2	2014	2014	1	1
ADV	78.2217	15.59583					0
N2ST	67.3487	15.5958	2D	2013	2016	1	-1
HSP	77.0082	15.5504		1985	2010		0
HSPB	77.0019	15.5332	PL	2010	2999		1
N2HS	68.1033	15.5137	2D	2013	2016	1	-1
N2SO	68.7138	15.438	2D	2013	2016	1	-1
NBB29	66.99	15.33	2D	2013	2016	1	-1
FAUS	67.382	15.2878	NS	2014	2999		1
STEI	67.93	15.242	NS	2007	2999		1
N2NF	67.761	15.2277	2D	2013	2016	1	-1
N2TV	67.5675	15.1252	2D	2013	2016	1	-1
N2DI	68.3133	14.9863	2D	2013	2016	1	-1
NBB03	67.1	14.97	2D	2013	2016	1	-1
N2BR	68.58	14.71	2D	2013	2016	1	-1
NBB08	67.39	14.64	2D	2013	2016	1	-1
NBB28	67.19	14.46	2D	2013	2016	1	-1
BRBA	78.0591	14.217		2011	2999		-1
BRBB	78.0935	14.208		2012	2999		-1
N2VI	68.3212	14.1977	2D	2013	2016	1	-1
NBB05	67.04	14.03	2D	2013	2016	1	-1

Station	Latitude (°)	Longitude (°)	Network	Open	Close	Array	Data*
NBB17	66.82	13.96	2D	2013	2016	1	-1
NBB30	66.97	13.74	2D	2013	2016	1	-1
MELSS	66.8637	13.7233		2004	2005		0
ISF	78.0592	13.6403		1958	1960		0
NBB15	66.74	13.58	2D	2013	2016	1	-1
NBB14	66.3	13.56	2D	2013	2016	1	-1
LOF	68.131	13.542	NS	1987	2999		1
NBB13	66.63	13.33	2D	2013	2016	1	-1
N2VG	66.71	13.27	2D	2013	2016	1	-1
NBB12	66.39	13.12	2D	2013	2016	1	-1
NBB40	66.51	13.01	2D	2013	2016	1	-1
N2SV	67.8913	13.0098	2D	2013	2016	1	-1
N2VA	67.6638	12.6935	2D	2013	2016	1	-1
N2RO	67.5173	12.1158	2D	2013	2016	1	-1
KBS	78.9256	11.94169	GE	1994	2999		1
JNE	70.99	-8.297		1984	2999		1
JNW	71.029	-8.428		1984	2999		1
JMIC	70.9866	-8.50519	NO	2003	2999		1
JMI	70.9283	-8.73081	NO	1964	2999		1
NOR	81.6047	-16.6609	DK	1957	2999		1
DAG	76.7714	-18.6547	DK	1972	2999		1
DBG	74.3071	-20.219299	DK	2000	2999		1
SCO	70.4833	-21.950001	DK	1928	2999		1
KTG	70.4167	-21.9833	DK	1963	1980		0
AP11	71.28	-25.95	3H	2016	2016	1	-1
AP10	71.28	-25.96	3H	2016	2016	1	-1
AP01	71.28	-25.97	3H	2016	2016	1	-1
AP02	71.28	-25.97	3H	2016	2016	1	-1
AP03	71.28	-25.97	3H	2016	2016	1	-1
AP04	71.28	-25.97	3H	2016	2016	1	-1
AP05	71.28	-25.97	3H	2016	2016	1	-1
AP06	71.28	-25.97	3H	2016	2016	1	-1
AP07	71.28	-25.97	3H	2016	2016	1	-1
AP08	71.28	-25.97	3H	2016	2016	1	-1
AP09	71.28	-25.97	3H	2016	2016	1	-1
EB11	71.25	-26	3H	2016	2016	1	-1
EB12	71.25	-26.01	3H	2016	2016	1	-1
EB13	71.25	-26.01	3H	2016	2016	1	-1
EB14	71.25	-26.01	3H	2016	2016	1	-1
EB15	71.25	-26.02	3H	2016	2016	1	-1
EB16	71.25	-26.02	3H	2016	2016	1	-1
EB17	71.25	-26.02	3H	2016	2016	1	-1
EB26	71.24	-26.02	3H	2016	2016	1	-1
EB27	71.24	-26.02	3H	2016	2016	1	-1
EB28	71.24	-26.02	3H	2016	2016	1	-1
EB18	71.25	-26.03	3H	2016	2016	1	-1
EB19	71.25	-26.03	3H	2016	2016	1	-1
EB20	71.25	-26.03	3H	2016	2016	1	-1
EB24	71.24	-26.03	3H	2016	2016	1	-1
EB25	71.24	-26.03	3H	2016	2016	1	-1
EB21	71.25	-26.04	3H	2016	2016	1	-1
EB22	71.25	-26.04	3H	2016	2016	1	-1
EB23	71.24	-26.04	3H	2016	2016	1	-1

Station	Latitude (°)	Longitude (°)	Network	Open	Close	Array	Data*
HJO	70.352	-28.164	DK	2000	2002		1
CFJ	83.0835	-28.3208	DK	2005	2007		1
SOEG	68.2033	-31.377001	DK	2000	2999		1
IS3	68.91	-31.54	DK	2000	2000		1
RYL	83.0007	-34.0724	DK	2006	2007		1
EGRIP	75.6268	-35.9915	DK	2016	2999		1
HEL2	66.387	-38.078	YF	2013	2017	1	1
ASSG	82.1762	-38.1082	DK	2004	2005		1
HEL1	66.3293	-38.1466	YF	2012	2017	1	1
HEL3	66.401	-38.2151	YF	2014	2017	1	1
HEL4	66.3322	-38.2266	YF	2014	2017	1	1
SUMG	72.5763	-38.45381	GE	2000	2999		1
ILG/IC-GL	77.9467	-39.1833	DK	1966	1967		0
ICESG	69.0922	-39.6474	DK	2011	2999		1
NGR	75.001	-42.3148	DK	2000	2003		1
IS2	69.166	-44.7357	DK	2000	2000		1
DY2G	66.4796	-46.309399	DK	2011	2999		1
KNSN	69.3236	-49.589802	SY				0
JIG3	69.1203	-49.6454	YF	2012	2017	1	-1
JIG1	69.2223	-49.815	YF	2012	2017	1	-1
FX07	69.44	-49.87	XH	2011	2011	1	1
FX08	69.45	-49.87	XH	2011	2011	1	1
FX01	69.44	-49.88	XH	2011	2011	1	1
FX02	69.45	-49.88	XH	2011	2011	1	1
FX03	69.45	-49.88	XH	2011	2011	1	1
FX09	69.45	-49.88	XH	2011	2011	1	1
FX11	69.43	-49.88	XH	2011	2011	1	1
FX04	69.45	-49.89	XH	2011	2011	1	1
FX05	69.45	-49.89	XH	2011	2011	1	1
FX06	69.44	-49.89	XH	2011	2011	1	1
FX12	69.44	-49.89	XH	2011	2011	1	1
FX16	69.45	-49.89	XH	2011	2011	1	1
FX17	69.45	-49.89	XH	2011	2011	1	1
FX10	69.44	-49.9	XH	2011	2011	1	1
JIG2	69.1493	-50.0859	YF	2012	2017	1	-1
SFJ	66.9967	-50.615601	DK	1996	2005		1
SFJD	66.9961	-50.620762	DK	2005	2999		1
SA1G	66.19	-50.69	DK	2006	2007		1
NEEM	77.4447	-51.073799	DK	2007	2999		1
ILULI	69.2121	-51.104801	DK	2009	2999		1
ILUG	69.217	-51.108	DK	2004	2006		1
SA2G	66.33	-51.28	DK	2006	2007		1
SA3G	66.44	-51.86	DK	2006	2007		1
UMM	70.6771	-52.12095	DK	2004	2006		1
UMMG	70.6771	-52.12095	DK	2017	2999		1
SA4G	66.59	-52.43	DK	2006	2007		1
ASIG	68.706	-52.871	DK	2004	2006		1
NUUG	71.5384	-53.199581	DK	2010	2999		1
GDH	69.25	-53.5333	DK	2000	2001		1
SISG	66.9366	-53.643	DK	2006	2007		1
FFBG	82.1294	-56.0364	DK	2004	2006		1
UPNV	72.7829	-56.1395	KP	2013	2999		1
UPNG	72.7848	-56.14081	DK	1999	2000		1

Station	Latitude (°)	Longitude (°)	Network	Open	Close	Array	Data*
KULLO	74.5804	-57.2201	DK	2009	2999		1
CCG	77.1667	-61.1333	DK	1980	1980		1
ALE	82.5033	-62.349998	IU	1961	2999		1
CLRN	70.4743	-68.58709	CN	2011	2999		1
TULEG	76.5374	-68.8237	DK	2000	2999		1
B1NU	68.4619	-71.588	SY				0
B2NU	68.9216	-73.19661	SY				0
WHI	83.0883	-74.146667	SY				0
MCF	82.6483	-75.041672	SY				0
AXF	78.88	-75.783333	SY				0
TQF	81.4133	-76.845001	SY				0
PINU	72.6971	-77.97481	CHASM	2000	2007		1
MRYN	71.3328	-79.379501	PO	2011	2999		1
IBFB	80.605	-79.576668	SY			1	0
IBFE	80.605	-79.576668	SY			1	0
CNF	79.6567	-80.778328	SY				0
GIFN	69.9945	-81.638	CN	2005	2011		1
IGL	69.3767	-81.8067	CN	1997	2005		0
ILON	69.3712	-81.824203	CN	2005	2999		1
GFNU	76.418	-82.89981	CN	2000	2001		1
SRLN	68.5513	-83.323799	PO	2005	2009		1
LAIN	69.1086	-83.536102		2005	2012		1
AP3N	69.4586	-84.461601	SY				0
QILN	66.6532	-86.370903	PO	2004	2007		1
EUNU	80.0533	-86.41581	CN	2008	2999		1
KUGN	68.0898	-90.0616		2007	2012		1
STLN	67.3116	-92.984901	CHASME	2006	2012		1
BULN	66.3971	-93.125198	SY				0
SBNU	69.5405	-93.55711	CHASM	2000	2002		0
RES	74.687	-94.900002	CN	1992	2999		1
CB34	69.2688	-104.821	CN			1	0
CB11	69.1509	-105.05469	CN			1	0
CB09	69.2125	-105.07969	CN			1	0
CB31	69.1266	-105.112	CN			1	0
CBAR	69.1266	-105.112	CN			1	0
CB12	69.1371	-105.11719	CN			1	0
CB03	69.162	-105.12989	CN			1	0
CB02	69.1939	-105.14569	CN			1	0
CB08	69.2228	-105.15131	CN			1	0
CB13	69.1183	-105.18619	CN			1	0
CB04	69.1483	-105.19989	CN			1	0
CB35	69.2628	-105.20731	CN			1	0
CB01	69.176	-105.20931	CN	2010	2014	1	0
CB07	69.2033	-105.21561	CN			1	0
CB19	69.2322	-105.23239	CN			1	0
CB14	69.1305	-105.257	CN			1	0
CB05	69.1592	-105.25939	CN			1	0
CB33	69.3894	-105.263	CN			1	0
CB06	69.1885	-105.27789	CN			1	0
CB18	69.2125	-105.2905	CN			1	0
CB15	69.1426	-105.33161	CN			1	0
CB16	69.1722	-105.34119	CN			1	0
CB17	69.1991	-105.35831	CN			1	0

Station	Latitude (°)	Longitude (°)	Network	Open	Close	Array	Data*
						1	0
CB32	69.242	-105.58481	CN				
JERN	66.0194	-111.467201	CN	2006	2010		1
CMC	67.8333	-115.08333	CN	1963	1969		0
KUKN	67.8226	-115.089897	CN	2010	2999		1
HPLN	66.3485	-115.323196	CN	2009	2013		1
HMNT	70.7631	-117.80581	CN	2000	2002		1
MBC	76.2417	-119.360001	CN	1992	1997		1
NP-	76.2522	-119.37167	CN	1964	1970		0
DHRN	67.0331	-119.5088	CN	2009	2015		1
C36M	69.3475	-124.0703	TA	2013	2999		1
LDBN	66.7219	-124.9431		2010	2012		1
SXT	71.9892	-125.24		1986	1992		0
A36M	71.9871	-125.2472	TA	2013	2999		1
SWT	71.9933	-125.283		1981	1987		0
CLVN	67.039	-126.077904	CN	2010	2999		0
SMPN	68.2107	-126.653999	PO	2010	2012		1
NPT	69.9272	-128.963	CN	1981	1987		0
TKT	69.4325	-132.996		1982	1983		0
TUK	69.44	-133.028		1981	1983		0
INK	68.3067	-133.520004	CN	1992	2999		1
F31M	67.441	-133.742	TA	2016	2999		1
G31M	66.9227	-134.2708	TA	2017	2999		1
F30M	67.6016	-135.786301	TA	2017	2999		1
G30M	66.9808	-136.2216	TA	2016	2999		1
EPYK	66.3701	-136.719101	TA	2012	2999		1
SPY	68.922	-137.26		1982	1991		0
E29M	68.3889	-137.8969	TA	2017	2999		1
G29M	66.9116	-138.022293	TA	2017	2999		1
H29M	66.2191	-138.368896	TA	2017	2999		1
D28M	69.3286	-138.7367	TA	2017	2999		1
E28M	68.6043	-139.534897	TA	2017	2999		1
F28M	67.6136	-139.8717	TA	2017	2999		1
KBT	69.5937	-140.182	CN	1981	1991		0
D27M	69.243	-140.964798	TA	2017	2999		1
H27K	66.2305	-141.5265	TA	2016	2999		1
E27K	68.1861	-141.5951	TA	2016	2999		1
G27K	66.8088	-141.6549	TA	2016	2999		1
BI4	69.5202	-142.98		1977	1978	1	0
FY5	67.14	-143.25		1977	1979		0
BI1	70.1318	-143.642		1977	1978	1	0
C27K	69.626	-143.7114	TA	2016	2999		1
G26K	66.9498	-143.784805	TA	2016	2999		1
F26K	67.6946	-144.1455	TA	2016	2999		1
BI3	69.5967	-144.371		1977	1978	1	0
BM02	67.4297	-144.49146	IM	1973	2999	1	1
BM01	67.4507	-144.52711	IM	1973	2999	1	1
BM04	67.4181	-144.5583	IM	1973	2999	1	1
BM05	67.4291	-144.58058	IM	1973	2999	1	1
BMAR	67.4291	-144.58058				1	0
BM03	67.4192	-144.60711	IM	1973	2999	1	1
BM3	67.4192	-144.60711	IM	1973	2999	1	1
C26K	69.9175	-144.9122	TA	2016	2999		1
FYU	66.566	-145.231598	AK	2009	2999		1

Station	Latitude (°)	Longitude (°)	Network	Open	Close	Array	Data*
E25K	68.1207	-145.568	TA	2016	2999		1
F25K	67.5933	-145.643	TA	2016	2999		1
FY3	68.1472	-145.7		1977	1979		0
H25L	66.267	-145.818695	TA	2016	2999		1
H25K	66.267	-145.819702					0
BI2	69.6233	-145.895		1977	1978	1	0
G25K	66.7653	-146.1013	TA	2016	2999		1
FY4	67.4533	-146.21		1977	1979		0
D25K	69.322	-146.3751	TA	2016	2999		1
FY2	67.1245	-147.097		1977	1980		0
G24K	66.7004	-147.4754	TA	2016	2999		1
F24K	67.5187	-147.8871	TA	2016	2999		1
E24K	68.0748	-148.4868	TA	2016	2999		1
PS01	70.2582	-148.61081		2010	2016		0
C24K	69.72	-148.7009	TA	2016	2999		1
D24K	69.1532	-148.8233	TA	2016	2999		1
FY1	67.2667	-148.97		1977	1980		0
PS04	68.4218	-149.35381		2010	2016		0
TOLK	68.6408	-149.57239		2011	2999		1
E23K	68.0584	-149.6163	TA	2016	2999		1
G23K	66.7108	-150.0239	TA	2016	2999		1
COLD	67.2274	-150.20131	AK	2004	2999		1
C23K	69.836	-150.6126	TA	2016	2999		1
PS05	66.8114	-150.66189		2010	2016		0
D23K	68.9656	-150.6807	TA	2016	2999		1
G22K	66.9214	-151.5073	TA	2016	2999		1
E22K	68.1343	-151.8132	TA	2016	2999		1
F22K	67.5076	-152.179	TA	2016	2999		1
D22K	68.8799	-152.682098	TA	2017	2999		1
B22K	70.34	-153.419601	TA	2017	2999		1
F21K	67.2221	-153.483	TA	2016	2999		1
G21K	66.5156	-153.5058	TA	2016	2999		1
IM02	66.0006	-153.79703	IM	2006	2999		1
E21K	68.4414	-153.972107	TA	2017	2999		1
B21K	69.6211	-154.612793	TA	2017	2999		1
C21K	69.1565	-154.7833	TA	2017	2999		1
A22K	71.0033	-154.974197	TA	2017	2999		1
F20K	67.0486	-155.7251	TA	2017	2999		1
E20K	68.2575	-156.1885	TA	2017	2999		1
D20K	68.7132	-156.6132	TA	2017	2999		1
A21K	71.3221	-156.6175	TA	2014	2999		1
BRW	71.3033	-156.748		1965	2000		0
BRV	71.2742	-156.785		1988	1995		0
PTB	71.1333	-156.8					0
G19K	66.1434	-157.087006	TA	2017	2999		1
B20K	70.0079	-157.159897	TA	2017	2999		1
E19K	67.4572	-157.2316	TA	2017	2999		1
F19K	66.8332	-157.7728	TA	2017	2999		1
D19K	68.4946	-158.115097	TA	2017	2999		1
C19K	69.1049	-159.587402	TA	2017	2999		1
F18K	66.6001	-159.6514	TA	2017	2999		1
E18K	67.4213	-160.6027	TA	2017	2999		1
A19K	70.2043	-161.071304	TA	2017	2999		1

Station	Latitude (°)	Longitude (°)	Network	Open	Close	Array	Data*
C18K	68.6483	-161.1943	TA	2017	2999		1
F17K	66.442	-161.250198	TA	2017	2999		1
B18K	69.3641	-161.801605	TA	2017	2999		1
E17K	67.082	-161.826202	TA	2017	2999		1
KOTZ	66.8951	-162.600006	AK	2014	2999		1
KTA	66.85	-162.61		1977	1981		0
RDOG	68.0547	-162.904907	AK	2009	2999		1
NOTK	67.5795	-162.971405	SY				0
D17K	67.6988	-163.0831	TA	2017	2999		1
C17K	68.4753	-163.1776	TA	2017	2999		1
C16K	68.2746	-165.343597	TA	2017	2999		1
NSH	67.036	-172.96		2003	2004		0
NSH2	67.107	-173.635		2003	2004		0
ILT	67.87	-178.73		1964	1996		0

***Data column include information about availability of data:**

[0]: No data is currently being sent (usually station closed)

[1]: Data is being sent

[-1]: Restricted/unavailable data

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INTAROS

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Project partners:

