

INF: Data management (part 1)



PANGAEA[®] Data Publisher for Earth & Environmental Science

Amelie Driemel, Hannes Grobe, Stefanie Schumacher, Rainer Sieger
(AC)³ General Assembly, Potsdam, 01.12.2016

Don't lose your data ...



Technology | Mon Jul 20, 2009 6:15pm EDT

Moon landing tapes got erased, NASA admits

WASHINGTON | BY MAGGIE FOX, HEALTH AND SCIENCE EDITOR

NASA admitted in 2006 that no one could find the original video recordings of the July 20, 1969, landing.

Since then, Richard Nafzger,

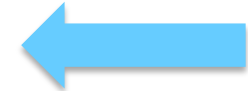
... , has been looking for them.

The good news is he found where they went. The bad news is they were part of a batch of 200,000 tapes that were degaussed -- magnetically erased -- and re-used to save money.

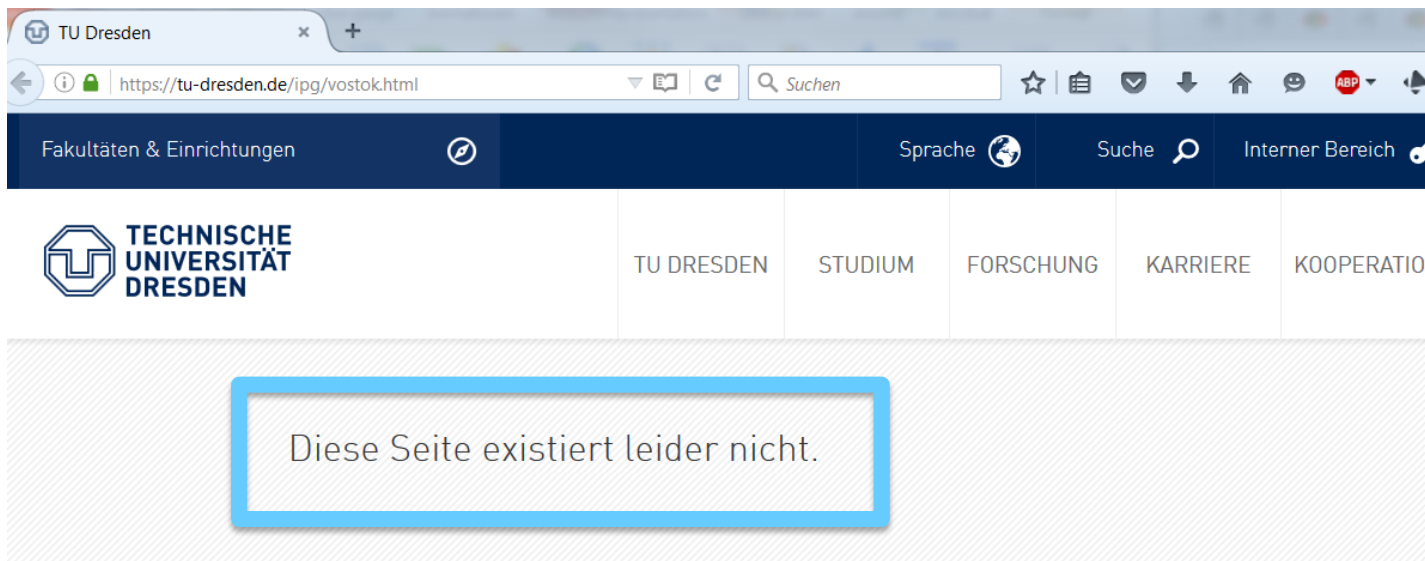
<http://www.reuters.com/article/us-nasa-tapes-idUSTRE56F5MK20090720>

Don't lose your data ...

...height and for the other altimetric parameters. The DEM is also a good reference for any glaciological studies in the area. It is available to researchers on the website <http://www.tu-dresden.de/ipg/vostok.html>.



doi:10.1016/j.rse.2006.02.026



Wir entschuldigen uns für die Unannehmlichkeiten, aber die Seite, auf die Sie zugreifen möchten, ist unter dieser Adresse nicht erreichbar.

Nutzen Sie bitte unsere interne Suche, um den gewünschten Inhalt zu finden.



What is PANGAEA®?



- PANGAEA is an **open access** Data Library for **earth system research data**



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- Data are stored **georeferenced** in space and time in a relational database and a tape archive



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- The data can be found via **internet searches** (e.g. google) and can be **directly downloaded** (*)



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MORATORIUM period



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- The data can be found via **internet searches** (e.g. google) and can be **directly downloaded** (*)
- Datasets can be tagged with a **project label** which facilitates the search for and documentation of project-related data



Hosts of PANGAEA



Both institutions have committed to the long-term operation of PANGAEA



The PANGAEA Data model

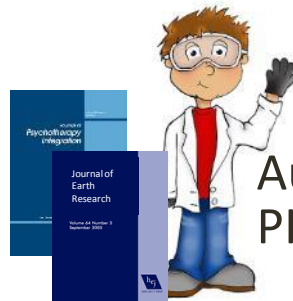


What?



Parameter [unit]

Who?



Author(s),
PI, Article

Where?



Latitude/Longitude
Depth in ice/water/
sediment; Altitude...

When?



Date,
Age...

How?




Method

Data types:

| ID | ID | Label | Mineral | wt % | wt % | wt % | wt % |
|-------|--------|-------|---------|------|-------|------|------|
| | | | | SiO2 | Al2O3 | FeO | CaO |
| | | | | No | [%] | [%] | [%] |
| WG216 | Garnet | 12 | 40.40 | 0.00 | 22.04 | 0.36 | |
| rim | | | | | | | |
| WG216 | Garnet | 12 | 40.64 | 0.03 | 22.56 | 0.38 | |
| core | | | | | | | |
| WG218 | Garnet | 12 | 39.87 | 0.21 | 22.10 | 0.51 | |
| rim | | | | | | | |
| WG218 | Garnet | 12 | 40.14 | 0.07 | 22.26 | 0.59 | |
| core | | | | | | | |
| WG240 | Garnet | 12 | 40.65 | 0.08 | 22.18 | 0.33 | |
| WG40A | Garnet | 12 | 39.90 | 0.00 | 21.96 | 0.38 | |
| WG40A | Garnet | 12 | 41.20 | 0.00 | 23.16 | 0.22 | |
| WG40A | Garnet | 12 | 41.04 | 0.06 | 23.27 | 0.14 | |
| WG232 | Garnet | 12 | 39.01 | 0.02 | 22.50 | 0.02 | |
| rim | | | | | | | |
| WG232 | Garnet | 12 | 39.43 | 0.06 | 22.26 | 0.04 | |
| core | | | | | | | |








Data in PANGAEA - examples

Data in PANGAEA - examples



www.pangaea.de

The screenshot shows the PANGAEA website homepage. At the top left is the PANGAEA logo, a globe with a red and green landmass, and the text "PANGAEA. Data Publisher for Earth & Environmental Science". To the right is a navigation menu with "SEARCH", "SUBMIT", "ABOUT", and "CONTACT". A "Not logged in" status is shown in the top right corner. The main content area is divided into several sections: a "Submit Data" button with a globe icon, a "Welcome to PANGAEA® Data Publisher" message, a search bar with the placeholder "Search for measurement type, author name, project, taxa,...", and a grid of 15 topic categories. On the right side, there are sections for "Latest News" and "Featured Data".

Submit Data

Welcome to PANGAEA® Data Publisher

Our services are generally open for archiving, publishing, and re-usage of data. The World Data Center PANGAEA is member of the ICSU World Data System.

ALL TOPICS ▼

Search for measurement type, author name, project, taxa,...

TOPICS

- OCEANS** (94272)
- LITHOSPHERE** (35996)
- BIOLOGICAL CLASSIFICATION** (27899)
- PALEONTOLOGY** (21992)
- ATMOSPHERE** (21986)
- ECOLOGY** (12736)
- BIOSPHERE** (5841)
- LAND SURFACE** (4969)
- CHEMISTRY** (3137)
- LAKES & RIVERS** (2611)
- GEOPHYSICS** (2369)
- CRYOSPHERE** (1157)
- HUMAN DIMENSIONS** (357)
- FISHERIES** (197)
- AGRICULTURE** (76)

MAP

Latest News

2016-09-30
PANGAEA'S NEW FACE

After more than 20 years of operation PANGAEA has renewed its face. Although many users were in favour of the minimalistic Google like interface we decided it was time to move to more sophisticated techniques to interact with our users. The new website offers new functionalities such as faceted searches, mobile browser support, and linking your data submissions with your ORCID ID. Try it out!

Featured Data

Kuhlmann, J; Huhn, K; Ikari, MJ (2016): CT scan data and drained direct-shear laboratory experiments on marine tephra Y-7 at site GeoB14403, Gela Basin, Strait of Sicily Dataset #868450

Karlsson, NB; Eisen, O; Dahl-Jensen, D et al. (2016): Accumulation rates during 1311-2011 CE in North Central Greenland derived from air-borne radar data doi:10.1594/PANGAEA.868448

Dupont, LM; Kuhlmann, H (2016): Pollen, Fe/Ca XRF-scanning, oxygen isotopes of Globigerinoides ruber for time interval 0-250 ka analysed on sediment core GeoB9311-1 Dataset #867989

Stapel, JG; Schirrmeister, L; Overduin, PP et al. (2016): Geochemical and microbial biomarker parameters from permafrost deposits (Buor Khaya, Siberia) doi:10.1594/PANGAEA.867981

Wüdsch, M; Haberzettl, T; Meadows, ME et al. (2016):

Data in PANGAEA - examples



www.pangaea.de

The screenshot shows the PANGAEA website interface. At the top left is the PANGAEA logo and the text "Data Publisher for Earth & Environmental Science". At the top right, it says "Not logged in" with user icons. A navigation menu includes "SEARCH", "SUBMIT", "ABOUT", and "CONTACT".

The main content area features a "Submit Data" button on the left. The central header reads "Welcome to PANGAEA® Data Publisher" and states: "Our services are generally open for archiving, publishing, and re-usage of data. The World Data Center PANGAEA is member of the ICSU World Data System." Below this is a search bar containing the text "Project:BSRN -supplement".

A vertical sidebar on the left contains "TOPICS" and "MAP" buttons. The main content area displays a grid of 15 topic categories, each with a representative image and a count:

- OCEANS (94272)
- LITHOSPHERE (35996)
- BIOLOGICAL CLASSIFICATION (27899)
- PALEONTOLOGY (21992)
- ATMOSPHERE (21986)
- ECOLOGY (12736)
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- LAND SURFACE (4969)
- CHEMISTRY (3137)
- LAKES & RIVERS (2611)
- GEOPHYSICS (2369)
- CRYOSPHERE (1157)
- HUMAN DIMENSIONS (570)
- FISHERIES (197)
- AGRICULTURE (76)

On the right side, there are two sections: "Latest News" and "Featured Data".

Latest News: 2016-09-30
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Featured Data:

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- Karlsson, NB; Eisen, O; Dahl-Jensen, D et al. (2016):** Accumulation rates during 1311-2011 CE in North Central Greenland derived from air-borne radar data doi:10.1594/PANGAEA.868448
- Dupont, LM; Kuhlmann, H (2016):** Pollen, Fe/Ca XRF-scanning, oxygen isotopes of Globigerinoides ruber for time interval 0-250 ka analysed on sediment core GeoB9311-1 Dataset #867989
- Stapel, JG; Schirrmeister, L; Overduin, PP et al. (2016):** Geochemical and microbial biomarker parameters from permafrost deposits (Buor Khaya, Siberia) doi:10.1594/PANGAEA.867981
- Wüdsch, M; Haberzettl, T; Meadows, ME et al. (2016):**

Data in PANGAEA – project data



PANGAEA.

ALL TOPICS

Project:BSRN -supplement



SEARCH SUBMIT ABOUT CONTACT

Filter by...

22874 datasets found on search for »Project:BSRN -supplement«

SHOW MAP GOOGLE EARTH DATA WAREHOUSE

< 1 2 3 4 5 6 7 8 9 10 >

Dataset Author

Augustine, John (3037)
Dutton, Ellsworth G (2335)
Long, Charles (1993)
Deluisi, John (1544)
König-Langlo, Gert (1461)
Herber, Andreas (821)
Mimouni, Mohamed (794)
Vuilleumier, Laurent (790)
Behrens, Klaus (779)
Heimo, Alain (644)
Forgan, Bruce (609)
Yamanouchi, Takashi (585)
Maturilli, Marlon (581)
Sisterson, Douglas L (559)
Kallis, Ain (393)
Cuevas-Agulló, Emilio (368)
[more...](#)

Dataset Publication Year

2016 (1907)
 2015 (1743)
 2014 (1452)
 2013 (1180)
 2012 (1246)
 2011 (1010)
 2010 (1315)
 2009 (4995)
[more...](#)

Topic

Atmosphere (1300)

1. Vogt, R (2014): Basic and other measurements of radiation at station Gobabeb (2014-08)

Size: 579971 data points
doi:10.1594/PANGAEA.835621 - Score: 1.95 - Similar datasets

2. Matsuzawa, K (2014): Basic measurements of radiation at station Ishigakijima (2014-06)

Size: 688396 data points
doi:10.1594/PANGAEA.834889 - Score: 1.95 - Similar datasets

3. Lyubansky, V (2011): Radiosonde measurements from station Sede Boqer (2010-12)

Size: 12245 data points
doi:10.1594/PANGAEA.761180 - Score: 1.95 - Similar datasets

4. Deluisi, J (2009): Basic measurements of radiation at station Fort Peck (2001-04)

Size: 129600 data points
doi:10.1594/PANGAEA.721544 - Score: 1.95 - Similar datasets

5. Mimouni, M (2013): Basic measurements of radiation at station Tamanrasset (2013-10)

Size: 357120 data points
doi:10.1594/PANGAEA.821960 - Score: 1.95 - Similar datasets

6. Dutton, EG (2007): Basic measurements of radiation at station Bermuda (2000-12)

Size: 409502 data points
doi:10.1594/PANGAEA.667754 - Score: 1.95 - Similar datasets

7. Dutton, EG (2008): Basic measurements of radiation at station Bermuda (2007-12)

Size: 373734 data points
doi:10.1594/PANGAEA.706317 - Score: 1.95 - Similar datasets

8. Sisterson, DL (2009): Basic measurements of radiation at station Southern Great Plains (1998-02)

Size: 213793 data points
doi:10.1594/PANGAEA.724008 - Score: 1.95 - Similar datasets



Google Map data ©2016 Imagery ©2016 NASA 1000 km Terms of Use

To create a new geographic search coverage, use the buttons below. You may zoom and drag the bounding rectangle on its borders. Alternatively enter coordinates. Press "Apply" to restrict current search results!

Start date:
End date:

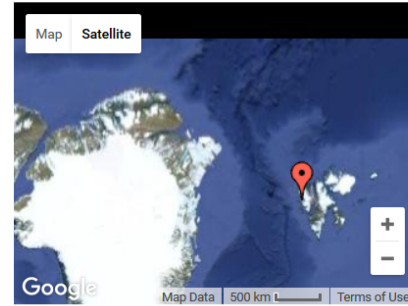


Citation:

Maturilli, Marion (2016): Radiosonde measurements from station Ny-Alesund (2015-12). Alfred Wegener Institute - Research Unit Potsdam, doi:10.1594/PANGAEA.863297

Always quote above citation when using data! You can download the citation in several formats below.

- RIS Citation BibTeX Citation Text Citation Facebook Twitter Google+ Show Map Google Earth



Other version:

Maturilli, Marion (2016): BSRN Station-to-archive file for station Ny-Alesund (2015-12). ftp://ftp.bsrn.awi.de/nya/nya1215.dat.gz

Project(s):

Baseline Surface Radiation Network (BSRN)

Coverage:

Latitude: 78.925000 * Longitude: 11.930000 Date/Time Start: 2015-12-01T10:47:00 * Date/Time End: 2015-12-31T10:51:00 Minimum ALTITUDE: 16 m * Maximum ALTITUDE: 31573 m

Event(s):

NYA (Ny-Ålesund) * Latitude: 78.925000 * Longitude: 11.930000 * Date/Time: 1992-08-01T00:00:00 * Elevation: 11.0 m * Location: Ny-Ålesund, Spitsbergen * Campaign: WCRP/GEWEX * Device: Monitoring station (MONS) * Comment: BSRN station no: 11; Surface type: tundra; Topography type: mountain valley, rural; Horizon: doi:10.1594/PANGAEA.669522; Station scientist: Marion.Maturilli@awi.de

Parameter(s):

Table with 6 columns: # Name, Short Name, Unit, Principal Investigator, Method, Comment. Rows include DATE/TIME, ALTITUDE, Pressure, Temperature, Dew/frost point, Wind direction, Wind speed, and Ozone.

Size:

97392 data points

Download Data

- Download dataset as tab-delimited text (use the following character encoding: UTF-8: Unicode (PANGAEA default)) View dataset as HTML

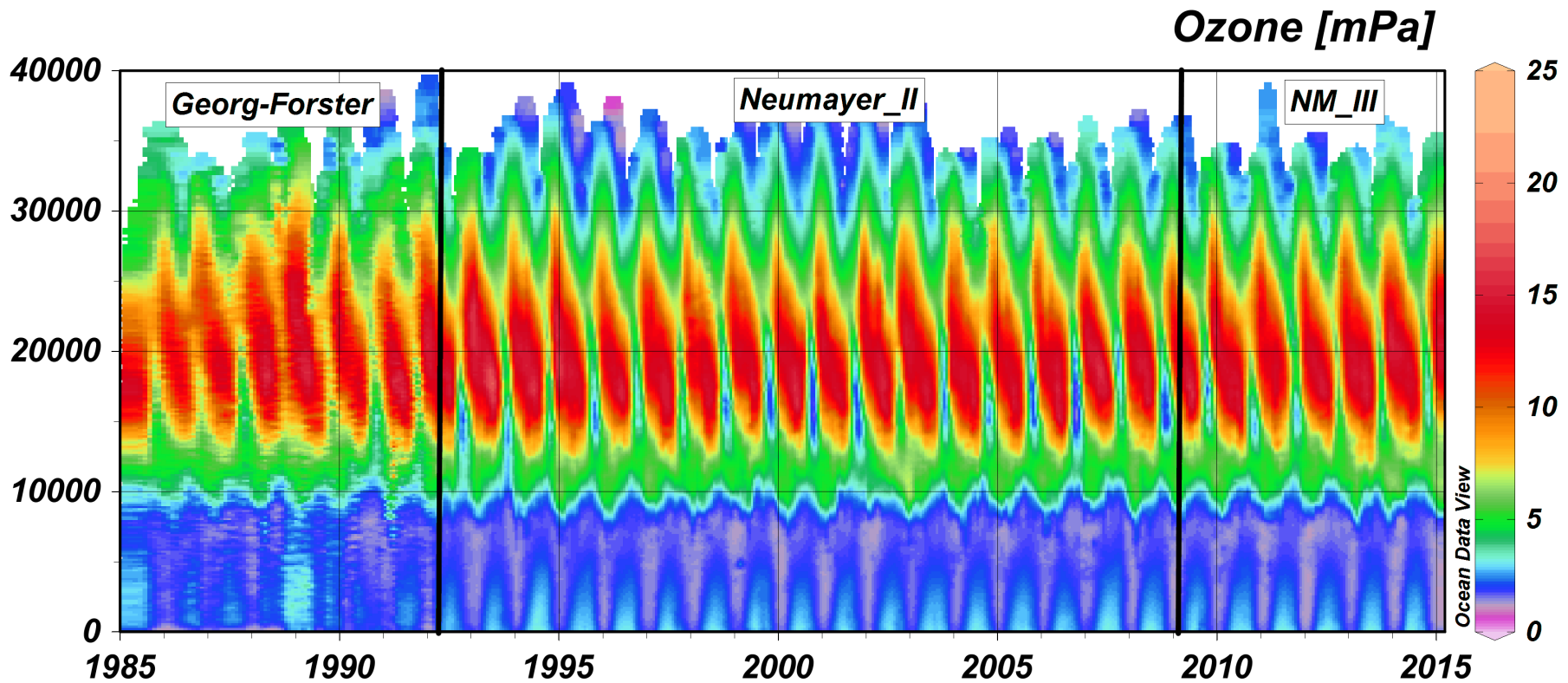
Data

Download dataset as tab-delimited text (use the following character encoding: UTF-8: Unicode (PANGAEA default))

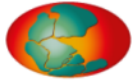
Table with 10 columns: Date/Time, Altitude [m], PPPP [hPa], TTT [°C], TdTdTd [°C], dd [deg], ff [m/s], O3 [mPa]. Shows three data rows for different dates and times.

Data in PANGAEA: Ozone, Antarctica

Figure provided by Gert König-Langlo/AWI



Data in PANGAEA – „sea ice thickness“



PANGAEA.

ALL TOPICS

Parameter:"sea ice thickness"

SEARCH SUBMIT ABOUT CONTACT

Filter by...

427 datasets found on search for »Parameter:"sea ice thi...« with geographic bounding box

SHOW MAP GOOGLE EARTH DATA WAREHOUSE

< 1 2 3 4 5 6 7 8 9 10 >

Dataset Author

Haas, Christian (345)
Hendricks, Stefan (116)
Pfaffling, Andreas (104)
Eicken, Hajo (75)
Gerland, Sebastian (38)
Miller, Heinz (37)
Rabenstein, Lasse (31)
Doble, M (28)
[more...](#)

Dataset Publication Year

2015 (1)
 2014 (2)
 2013 (1)
 2012 (59)
 2011 (9)
 2010 (12)
 2009 (1)
 2008 (27)
[more...](#)

Topic

Geosciences, Multidisciplinary (116)
Lithosphere (116)
Land Surface (33)
Ecology (32)
Geography (31)
Environmental Sciences (26)
Oceans (6)
Oceanography (5)
[more...](#)

Project

AWI_Sealce (355)
 IRIS (170)
 GreenICE (98)
 FEME (97)
 SITHOS (70)

Basis

Polarstern (247)
Aircraft (55)
POLAR 5 (16)
CCGS Amundsen (9)
Kapitan Dranitsyn (2)
Lance (1)
Lena Nordenskjöld Station (1)

Device

Electro-magnetic Bird (EM-Bird) (246)
Ice measurement (109)
Underway cruise track measurements (26)
Airborne electromagnetic induction sounding (16)
Ice station (13)
Multiple investigations (8)
[Snow/ice sample](#) (4)
CTD/Rosette (2)
[more...](#)

Campaign

IRIS2004 (82)
ARK-XIX/1 (74)
ARK-XVII/2 (40)
ARK-VIII/3 (23)
GreenICE2004 (23)
ARK-XII (19)
ARK-XXII/2 (16)
ARK-XXVI/3 (15)
[more...](#)

Location

Arctic Ocean (229)
Europe (138)
Baltic Sea (107)
Gulf of Bothnia (107)
Bay of Bothnia (82)
Barents Sea (45)
Lincoln Sea (41)
Transpolar Drift (23)
[more...](#)

S; Gerland, S; Smedsrud, LH et al. (2011): Helicopter-borne sea ice thickness measurements in the eastern Beaufort Sea, Spitsbergen from flight HEM_STJ06_01

Hendricks, S; Gerland, S; Smedsrud, LH et al. (2011): Sea-ice thickness variability in Storfjorden, Svalbard. *Annals of Glaciology*
128355 data points
GAEA.778258 - Score: 14.05 - [Similar datasets](#)

K; Richter-Menge, JA; Jones, KF et al. (2011): (Table 1) Snow and sea ice thickness, solar heat and solar radiation used for melting at seven ice mass-balance buoys in the Arctic in 2008

Perovich, DK; Richter-Menge, JA; Jones, KF et al. (2011): Arctic sea-ice melt in 2008 and the role of solar heating. *Annals of Glaciology*
70 data points
GAEA.817713 - Score: 8.21 - [Similar datasets](#)

Werner, I; Werner, I (2005): (Table 1) Ice station data during POLARSTERN expeditions ARK-XVIII/2 /1 to Fram Strait, the western Barents Sea and north of Svalbard

Schünemann, H; Werner, I (2004): Seasonal variations in distribution patterns of sympagic meiofauna in Arctic pack ice. *Marine Biology*
68 data points
GAEA.855170 - Score: 6.99 - [Similar datasets](#)

M; Kramer, M; Carnat, G et al. (2011): (Table 1) Snow and sea ice characteristics at stations during a CCGS Amundsen cruise in 2008, eastern Beaufort Sea

Marquardt, M; Kramer, M; Carnat, G et al. (2011): Vertical distribution of sympagic meiofauna in sea ice in the Canadian Beaufort Sea. *Polar Biology*
187 data points
GAEA.817877 - Score: 6.05 - [Similar datasets](#)

Mundy, CJ; Barber, DG et al. (2011): (Table 1) White ice and melt pond characteristics in Darnley Bay, Canada

Ehn, JK; Mundy, CJ; Barber, DG et al. (2011): Impact of horizontal spreading on light propagation in melt pond covered seasonal sea ice in the Canadian Arctic. *Journal of Geophysical Research-Oceans*
174 data points
GAEA.809476 - Score: 5.99 - [Similar datasets](#)

Werner, I (2012): Airborne sea ice thickness measurements from the SoRIPC field program in spring 2012. *Journal of Geophysical Research-Oceans*
174 data points
GAEA.809476 - Score: 5.99 - [Similar datasets](#)

doi:10.1594/PANGAEA.778711 - Score: 4.63 - [Similar datasets](#)



To create a new geographic search coverage, use the buttons below. You may zoom and drag the bounding rectangle on its borders. Alternatively enter coordinates. Press "Apply" to restrict current search results!

Data in PANGAEA – „sea ice thickness“



PANGAEA.

ALL TOPICS

Parameter:"sea ice thickness"

SEARCH SUBMIT ABOUT CONTACT

Filter by...

427 datasets found on search for »Parameter:"sea ice thi...« with geographic bounding box

SHOW MAP GOOGLE EARTH DATA WAREHOUSE

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Pfaffling, Andreas (104)
Eicken, Hajo (75)
Gerland, Sebastian (38)
Miller, Heinz (37)
Rabenstein, Lasse (31)
Doble, M (28)
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Land Surface (33)
Ecology (32)
Geography (31)
Environmental Sciences (26)
Oceans (6)
Oceanography (5)
[more...](#)

Project

AW_Sealce (355)
 IRIS (170)
 GreenICE (98)
 FEME (97)
 SITHOS (70)

< 1 2 3 4 5 6 7 8 9 10 >

1. **Hendricks, S; Gerland, S; Smedsrud, LH et al. (2011):** Helicopter-borne sea ice thickness measurements in the Storfjord, Spitsbergen from flight HEM_STJ06_01

Supplement to: Hendricks, S; Gerland, S; Smedsrud, LH et al. (2011): Sea-ice thickness variability in Storfjorden, Svalbard. *Annals of Glaciology*

Size: 128355 data points

doi:10.1594/PANGAEA.778258 - Score: 14.05 - Similar datasets

2. **Perovich, DK; Richter-Menge, JA; Jones, KF et al. (2011):** (Table 1) Snow and sea ice thickness, solar heat input and solar heat used for melting at seven ice mass-balance buoys in the Arctic in 2008

Supplement to: Perovich, DK; Richter-Menge, JA; Jones, KF et al. (2011): Arctic sea-ice melt in 2008 and the role of solar heating. *Annals of Glaciology*

Size: 70 data points

doi:10.1594/PANGAEA.817713 - Score: 8.21 - Similar datasets

3. **Schünemann, H; Werner, I (2005):** (Table 1) Ice station data during POLARSTERN expeditions ARK-XVIII/2 and ARK-XIX/1 to Fram Strait, the western Barents Sea and north of Svalbard

Supplement to: Schünemann, H; Werner, I (2004): Seasonal variations in distribution patterns of sympagic meiofauna in Arctic pack ice. *Marine Biology*

Size: 68 data points

doi:10.1594/PANGAEA.817877 - Score: 6.05 - Similar datasets

5. **Ehn, JK; Mundy, CJ; Barber, DG et al. (2011):** (Table 1) White ice and melt pond characteristics in Darnley and Franklin Bay, Canada

Supplement to: Ehn, JK; Mundy, CJ; Barber, DG et al. (2011): Impact of horizontal spreading on light propagation in melt pond covered seasonal sea ice in the Canadian Arctic. *Journal of Geophysical Research-Oceans*

Size: 174 data points

doi:10.1594/PANGAEA.809476 - Score: 5.99 - Similar datasets

6. **Krumpen, T (2012):** Airborne sea ice thickness measurements from the SoRPIC field program in spring 2010 from flight HEM_SPC10_01

Size: 11360 data points

doi:10.1594/PANGAEA.778711 - Score: 4.63 - Similar datasets



To create a new geographic search coverage, use the buttons below. You may zoom and drag the bounding rectangle on its borders. Alternatively enter coordinates. Press "Apply" to restrict current search results!

96849902
132.1875
34225871

Start date: YYYY-MM-DD
End date: YYYY-MM-DD

427 datasets with a total of 4 668 836 data points
(= sea ice thickness values)

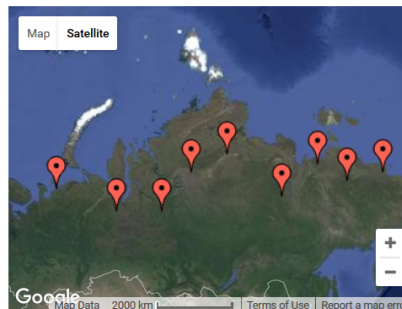


Citation:

Reschke, Julia; Bartsch, Annett; Schläffer, Stefan; Schepaschenko, Dmitry (2012): Wetland maps including open water extent dynamics based on ENVISAT ASAR WS for Siberia, 2007 and 2008, links to GeoTIFFs. doi:10.1594/PANGAEA.834502, Supplement to: Reschke, J et al. (2012): Capability of C-Band SAR for operational wetland monitoring at high latitudes. Remote Sensing, 4(12), 2923-2943, doi:10.3390/rs4102923

Always quote above citation when using data! You can download the citation in several formats below.

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Abstract:

Wetlands store large amounts of carbon, and depending on their status and type, they release specific amounts of methane gas to the atmosphere. The connection between wetland type and methane emission has been investigated in various studies and utilized in climate change monitoring and modelling. For improved estimation of methane emissions, land surface models require information such as the wetland fraction and its dynamics over large areas. Existing datasets of wetland dynamics present the total amount of wetland (fraction) for each model grid cell, but do not discriminate the different wetland types like permanent lakes, periodically inundated areas or peatlands. Wetland types differently influence methane fluxes and thus their contribution to the total wetland fraction should be quantified. Especially wetlands of permafrost regions are expected to have a strong impact on future climate due to soil thawing. In this study ENVISAT ASAR Wide Swath data was tested for operational monitoring of the distribution of areas with a long-term SW near 1 (hSW) in northern Russia (SW = degree of saturation with water, 1 = saturated), which is a specific characteristic of peatlands. For the whole northern Russia, areas with hSW were delineated and discriminated from dynamic and open water bodies for the years 2007 and 2008. The area identified with this method amounts to approximately 300,000 km**2 in northern Siberia in 2007. It overlaps with zones of high carbon storage. Comparison with a range of related datasets (static and dynamic) showed that hSW represents not only peatlands but also temporary wetlands associated with post-forest fire conditions in permafrost regions. Annual long-term monitoring of change in boreal and tundra environments is possible with the presented approach. Sentinel-1, the successor of ENVISAT ASAR, will provide data that may allow continuous monitoring of these wetland dynamics in the future complementing global observations of wetland fraction.

Event(s):

- TUW_ASAWS_WBO_01 * Latitude: 65.000000 * Longitude: 85.000000 * Device: Satellite remote sensing (SAT)
TUW_ASAWS_WBO_02 * Latitude: 70.000000 * Longitude: 95.000000 * Device: Satellite remote sensing (SAT)
TUW_ASAWS_WBO_03 * Latitude: 72.000000 * Longitude: 107.000000 * Device: Satellite remote sensing (SAT)

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Parameter(s):

Table with 6 columns: # Name, Short Name, Unit, Principal Investigator, Method, Comment. Rows include Event label, DATE/TIME, Date/time end, File name, File size, and Uniform resource locator/link to file.

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Size:

70 data points

Data

Download dataset as tab-delimited text (use the following character encoding: UTF-8: Unicode (PANGAEA default))

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Other data types e.g. GeoTIFF



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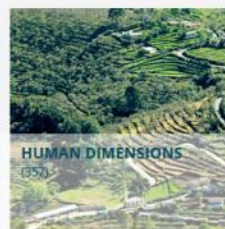
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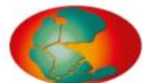
Karlsson, NB; Eisen, O; Dahl-Jensen, D et al. (2016): Accumulation rates during 1311-2011 CE in North Central Greenland derived from air-borne radar data doi:10.1594/PANGAEA.868448

Dupont, LM; Kuhlmann, H (2016): Pollen, Fe/Ca XRF-scanning, oxygen isotopes of Globigerinoides ruber for time interval 0-250 ka analysed on sediment core GeoB9311-1 Dataset #867989

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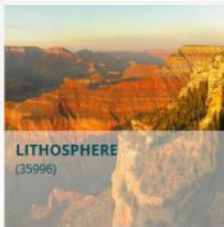
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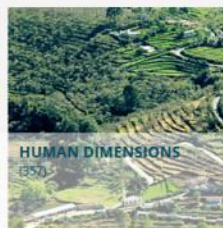
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



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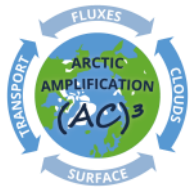
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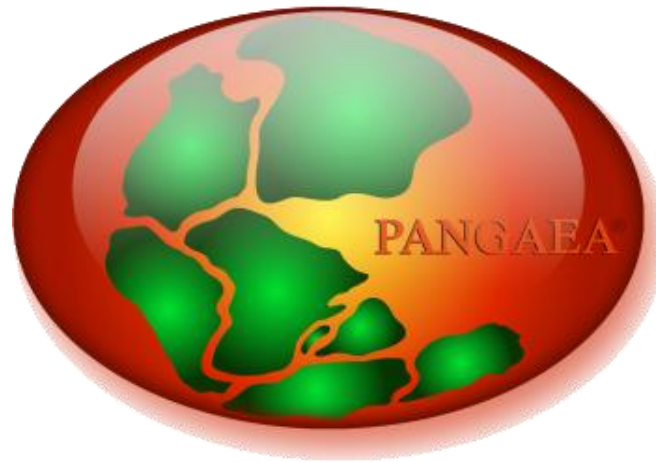
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