



<https://arcticdata.io>



@arcticdatactr

NSF Award #1546024



DataONE

the **Arctic Data Center, NSF Standards & Policies**

Amber E Budden



0000-0003-2885-3980

Arctic Data Center Training
August 13-17, 2018

the **Arctic Data Center,**
NSF Standards
& Policies





Troms Fylke



Rama



Detroit Publishing Co.



Features and Services

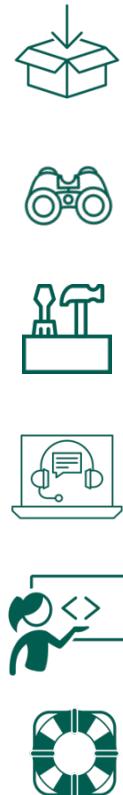
- **Data Archive**
- **Portal** for data discovery
- **Tools & Infrastructure**
 - *Data and metadata submission*
 - *Provenance features*
 - *Replication features*
 - *Metadata quality check*
- **Support Services**
- **Training & Outreach**
- **Data Rescue**





Features and Services

- **Data Archive**
- **Portal** for data discovery
- **Tools & Infrastructure**
 - *Data and metadata submission*
 - *Provenance features*
 - *Replication features*
 - *Metadata quality check*





Team



M. Jones



Baker-Yeboah



Budden



Casey



Dozier



Schildhauer



Walker



C. Jones



Mecum



Clark



Goldstein



Li



Mullen



Chong



Meyer



Team



M. Jones



Baker-Yeboah



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Casey



Dozier



Schildhauer



Walker



C. Jones



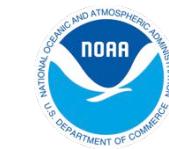
Mecum



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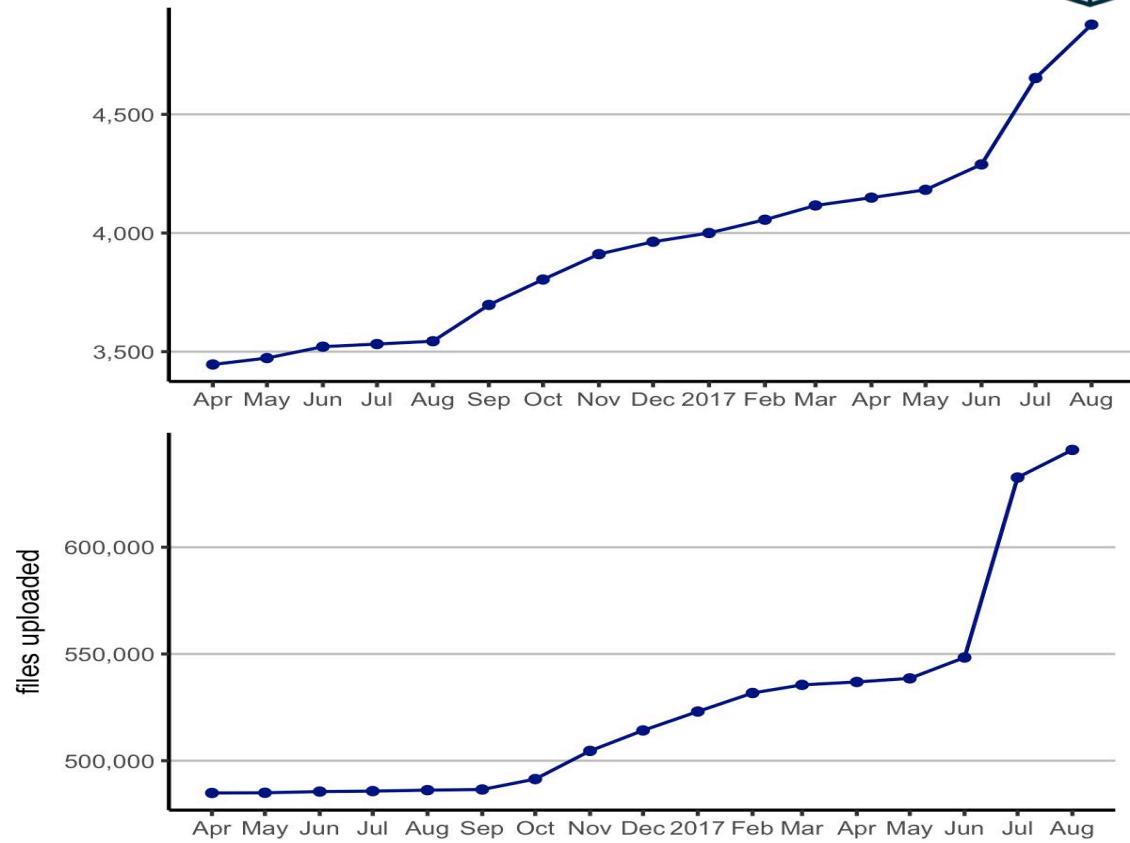
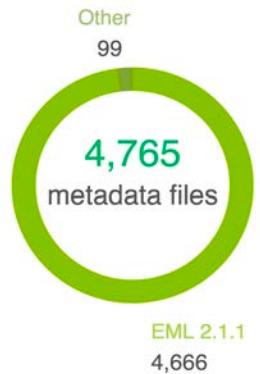
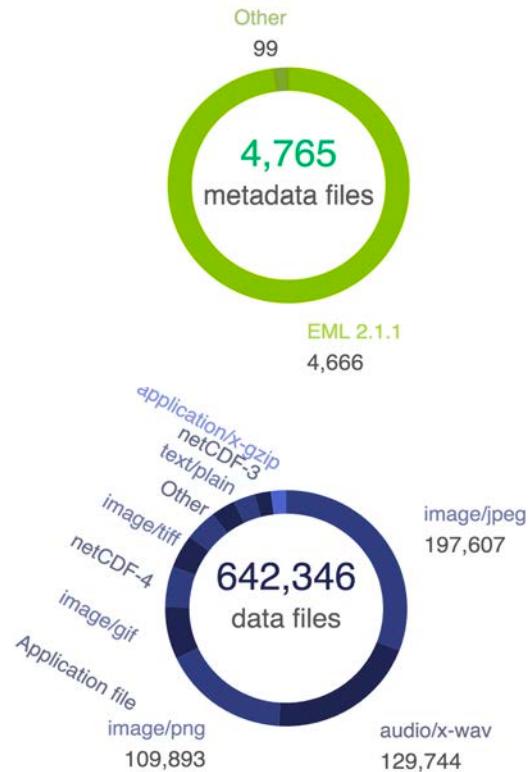


Data Archive





Data archive growth

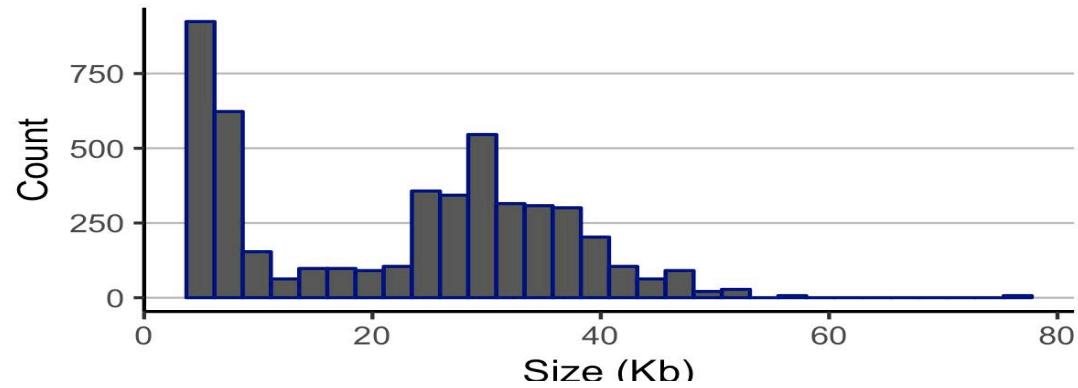




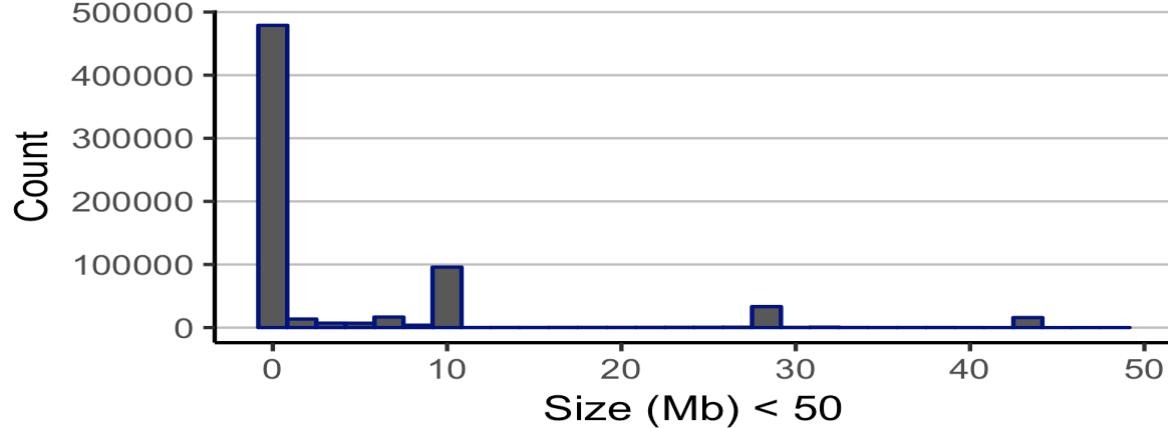
Size distribution



Metadata

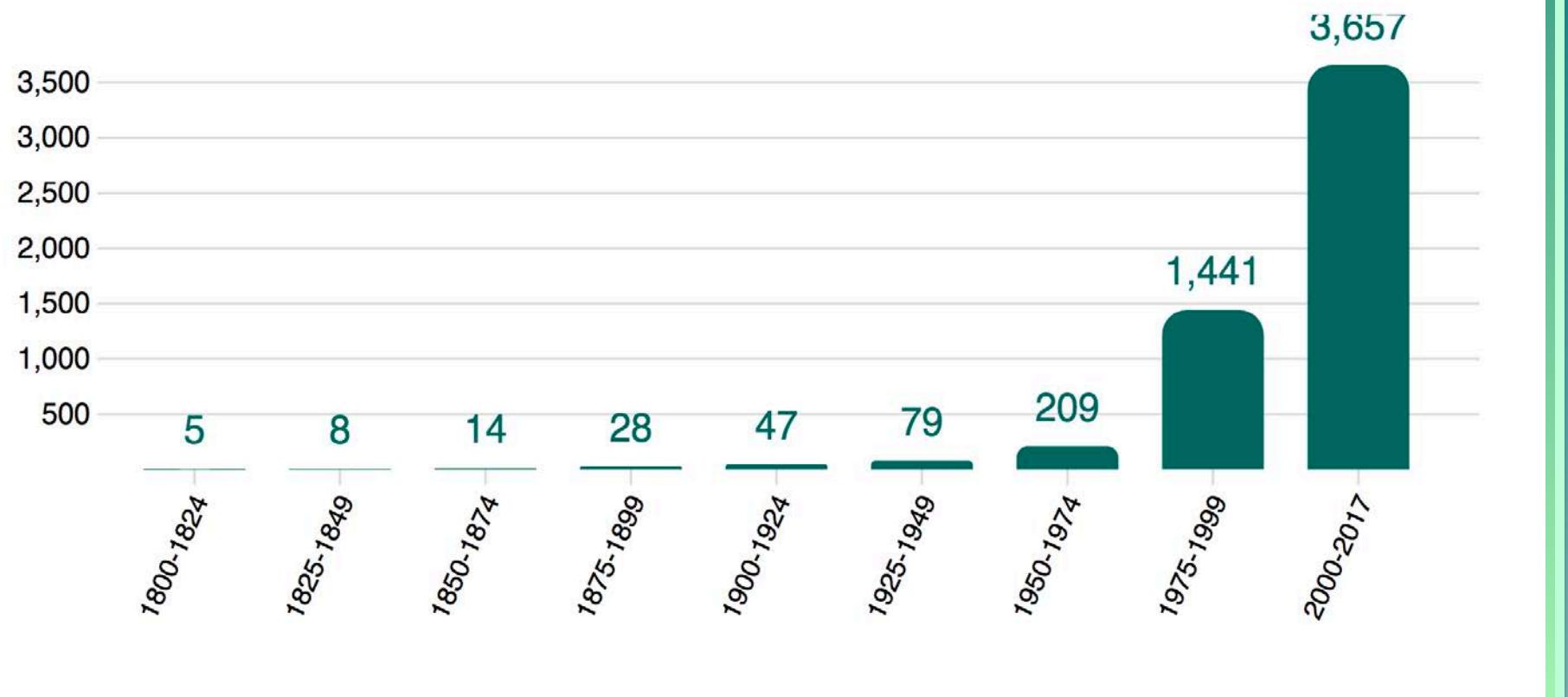


Data
(< 50MB)





Data by time period





Pan-Arctic Data





Data Discovery Portal



Secure | <https://arcticdata.io/catalog/>

Amber Gmail

NSF Arctic Data Center

Data Support About Submit Data Sign in with Orcid

Search phrase

Search by:

- Data attribute
- Creator
- Year
- Identifier
- Taxon
- Location

DATASETS 1 TO 25 OF 5,132

1 2 3 ... 206 Next Sort by Most recent

Andrew Parsekian, Andrea Creighton, Benjamin Jones, Allen Bondurant, and Christopher Arp. 2018. **Arctic lake transient electromagnetic (TEM) soundings 2016-2017.** Arctic Data Center. doi:10.18739/A2599Z146.

Karen Junge. 2017. **Extreme summer melt: Assessing the habitability and physical structure of rotting first-year Arctic sea ice. Chukchi Sea, Alaska. 2015-2018.** Arctic Data Center. doi:10.18739/A2901ZF6N.

Lora Koenig and Lynn Montgomery. 2017. **Surface Mass Balance and Snow Depth on Sea Ice Working Group (SUMup) snow density, accumulation on land ice, and snow depth on sea ice datasets.** Arctic Data Center. um:uuid:3b1c4880-3917-4793-bbcc-2eac97c7e0e7.

Lora Koenig and Lynn Montgomery. 2018. **Surface Mass Balance and Snow Depth on Sea Ice Working Group (SUMup) accumulation on land ice subdataset, Greenland and Antarctica, 1987-2018.** Arctic Data Center. doi:10.18739/A2DR2P790.

Lora Koenig and Lynn Montgomery. 2018. **Surface Mass Balance and Snow Depth on Sea Ice Working Group (SUMup) snow density subdataset, Greenland and Antarctica. 1950-2018.** Arctic Data Center.

Hide Map

Map showing dataset locations across the globe, with a grid overlay indicating dataset coordinates. The map includes labels for countries like Mexico, Venezuela, Colombia, Brazil, Bolivia, Chile, Argentina, and New Zealand. A legend at the bottom left shows 'Satellite' and 'Terrain' options, and a scale bar indicates '1000 km'. A copyright notice at the bottom right states 'Map data ©2018 Google'.



Data Discovery Portal



Secure | <https://arcticdata.io/catalog/>

Amber Gmail

NSF Arctic Data Center

Data Support About Submit Data Sign in with Orcid

Search [Search phrase](#)

Filter by:

- Data attribute [Search](#)
- Creator [View](#)
- Year [View](#)
- Data coverage
- Publish year
- Identifier [View](#)
- Taxon [View](#)
- Location [Search](#)

DATASETS 1 TO 25 OF 5,132

Sort by Most recent

1 2 3 ... 206 Next

Andrew Parsekian, Andrea Creighton, Benjamin Jones, Allen Bondurant, and Christopher Arp. 2018. **Arctic lake transient electromagnetic (TEM) soundings 2016–2017.** Arctic Data Center. doi:10.18739/A2599Z146. [View](#) [Download](#) [Edit](#) [Delete](#)

Karen Junge. 2017. **Extreme summer melt: Assessing the habitability and physical structure of rotting first-year Arctic sea ice. Chukchi Sea, Alaska. 2015–2018.** Arctic Data Center. doi:10.18739/A2901ZF6N. [View](#) [Download](#) [Edit](#) [Delete](#)

Lora Koenig and Lynn Montgomery. 2017. **Surface Mass Balance and Snow Depth on Sea Ice Working Group (SUMup) snow density, accumulation on land ice, and snow depth on sea ice datasets.** Arctic Data Center. um:uuid:3b1c4880-3917-4793-bbcc-2eac97c7e0e7. [View](#) [Download](#) [Edit](#) [Delete](#)

Lora Koenig and Lynn Montgomery. 2018. **Surface Mass Balance and Snow Depth on Sea Ice Working Group (SUMup) accumulation on land ice subdataset, Greenland and Antarctica, 1987–2018.** Arctic Data Center. doi:10.18739/A2DR2P790. [View](#) [Download](#) [Edit](#) [Delete](#)

Lora Koenig and Lynn Montgomery. 2018. **Surface Mass Balance and Snow Depth on Sea Ice Working Group (SUMup) snow density subdataset, Greenland and Antarctica, 1950–2018.** Arctic Data Center. [View](#) [Download](#) [Edit](#) [Delete](#)

Hide Map

Map showing dataset locations across the globe, with a grid overlay indicating dataset coordinates. The map includes labels for countries like Mexico, Venezuela, Colombia, Brazil, Bolivia, Chile, Argentina, and New Zealand. A legend at the bottom left shows "Satellite" and "Terrain" options, and a scale bar indicates "1000 km".

Google

Map data ©2018 1000 km Terms of Use



Data Discovery Portal



NSF Arctic Data Center Amber Gmail

Secure | <https://arcticdata.io/catalog/#view/urn:uuid:3b1c4880-3917-4793-bbcc-2eac97c7e0e7>

Arctic Data Center Data Support About Submit Data Sign in with Orcid

< Back to search | Home / Search / Metadata

Lora Koenig and Lynn Montgomery. 2017. Surface Mass Balance and Snow Depth on Sea Ice Working Group (SUMup) snow density, accumulation on land ice, and snow depth on sea ice datasets. Arctic Data Center. urn:uuid:3b1c4880-3917-4793-bbcc-2eac97c7e0e7.

[Copy Citation](#) [Quality report](#)

Current Data Set (1 of 4) Package: resource_map_urn:uuid:3b1c4880-3917-4793-bbcc-2eac97c7e0e7				
Name	File type	Size	Downloads	Download All
Metadata: science_metadata.xml	EML v2.1.1	12 KB	18 views	Download
SUMup_Snow_Depth_on_Sea_Ice_Dataset_readme.pdf	More info PDF	125 KB	13 downloads	Download
SUMup_Snow_Density_Dataset_readme.pdf	More info PDF	211 KB	13 downloads	Download
SUMup_Snow_Accumulation_Dataset_readme.pdf	More info PDF	159 KB	13 downloads	Download

[Show 3 nested datasets](#)

General

Identifier: [urn:uuid:3b1c4880-3917-4793-bbcc-2eac97c7e0e7](#)

Alternate Identifier: SUMup Dataset



Tools and Infrastructure

Metadata Quality Report
Lars Koenig and Lynn Montgomery. 2017. Surface Mass Balance and Snow Depth on Sea Ice Working Group (SUMBz) know density, accumulation on land ice, and snow depth on sea ice datasets. Arctic Data Center. [urn:nbn:de:hbz:5:1873-4793.1000](https://arcticdata.io/doi/10.18738/3517-4793.1000) [check].

After running your metadata against our selected set of metadata, data, and consistency checks, we have found the following potential issues. Please assist us in improving the descritpiveness and readability of your research data by addressing the issues below.

Identification: 50% complete
Discovery: 100% complete
Interpretation: 100% complete

26 checks

- Passed 16 checks out of 18. Good job!
- Warning for 1 check. Please review these warnings.
- Failed 1 check. Please correct these issues.
- 8 informational checks. These may include skips, errors and failures.

Arctic Data Center. [urn:nbn:de:hbz:5:1873-4793.1000](https://arcticdata.io/doi/10.18738/3517-4793.1000) [check].

Untitled dataset, Arctic Data Center. [urn:nbn:de:hbz:5:1873-4793.1000](https://arcticdata.io/doi/10.18738/3517-4793.1000) [check].

File	Size	Type	Status
Untitled dataset			

Add files to start your dataset! [Add Files](#)

Overview

Title *
A title for this dataset. Include the topic, geographic location, dates, and if applicable, the scale of the data. Write out all abbreviations.
Example: Greater Yellowstone Rivers from 1:125,700 U.S. Forest Service Visitor Maps (1981-1983)

Dates *

Locations *
Abstract *
Provide a brief overview that summarizes the specific contents and purpose of this dataset.

Taxa

Downloads

3 views

852 downloads

274 downloads

209 downloads

MAKE
DATA
COUNT

DataONE



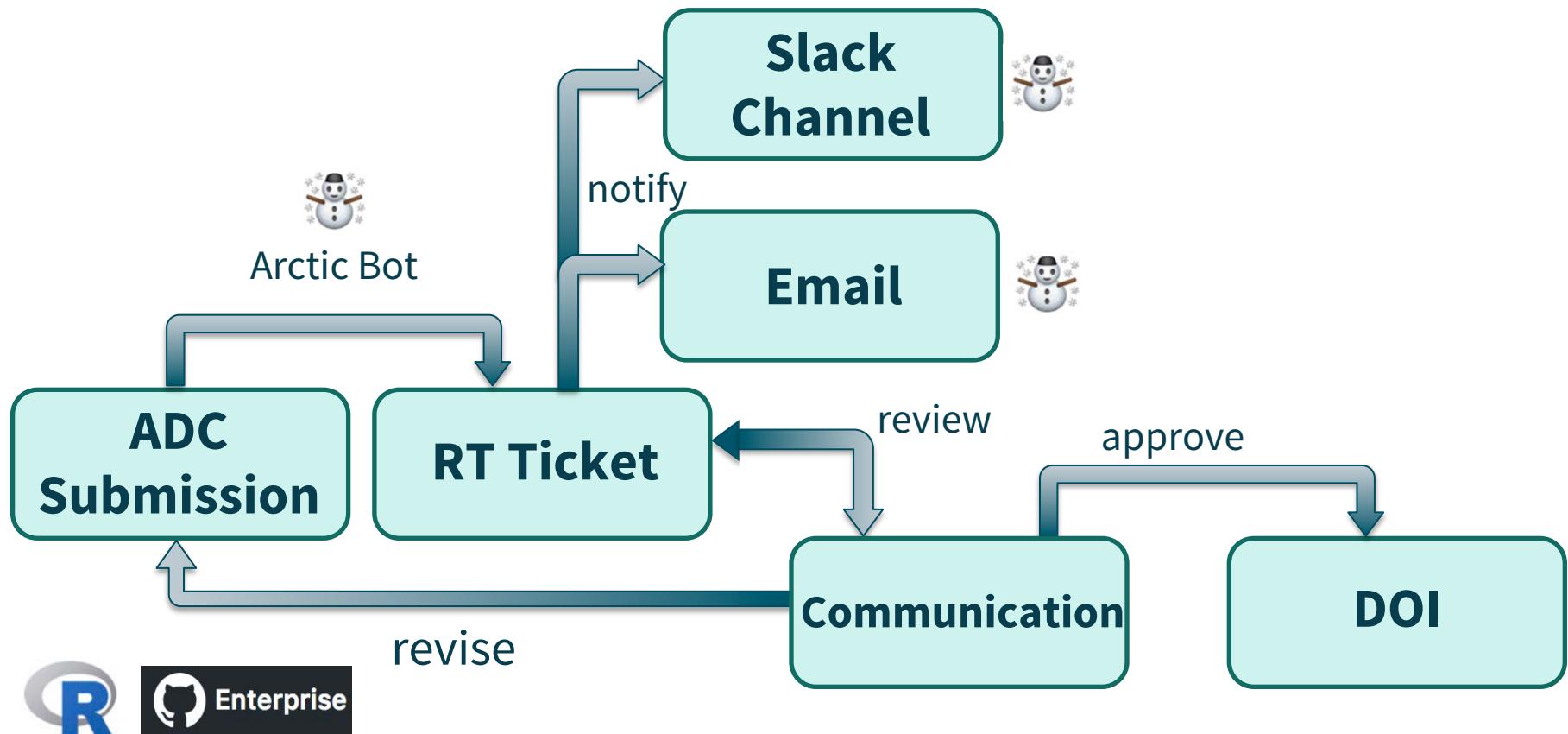


Support Services





Support Systems





Request Tracker ticket system



Display History Basics People Dates Links Jumbo Reminders Actions ⚙️

History

Mon Apr 10 18:00:22 2017 arcticabot - Ticket created
Subject: ERMOLD: IABP 12-Hourly Interpolated position, velocity, SL... (arctic-data.10529.1)

A new submission just came in. View it here: <https://arcticdata.io/catalog/#view/arctic-data.10529.1>. This ticket was automatically created by the submissions bot because the PID arctic-data.10529.1 was created/modified. See <https://github.ncses.ucsb.edu/KNB/arctic-data/blob/master/docs/handling-submissions.md> for more information on what to do. If you aren't sure why this ticket was created, please see the README at <https://github.ncses.ucsb.edu/KNB/submissions-bot>."

Download (untitled)
with headers
txt/plain 473B

Mon Apr 10 18:00:23 2017 The RT System itself - Outgoing email recorded

Tue Apr 11 10:01:02 2017 dmullen (Dominic Mullen) - Requestor <wermold@api.washington.edu> added

Tue Apr 11 10:05:19 2017 dmullen (Dominic Mullen) - Correspondence added

Hi Wendy,

Thank you for your submission to the NSF Arctic Data Center. Prior to your submission being finalized we would like to make a few small changes. We will spell out the abbreviations in the title for added clarity. Additionally, I noticed there is one dataset corresponding to each year, we will aggregate these into one table for added convenience. We noticed this entry is related to a previously submitted data set (located here: <https://arcticdata.io/catalog/#view/urn:uuid:346e2aad-3114-4cc7-917f-22efc2ae2898>), we can nest these together after the submission is finalized.

Finally, what are the definitions (including units) of the columns?

Best,
Dominic Mullen

Download (untitled)
with headers
txt/html 871B

Tue Apr 11 10:05:20 2017 The RT System itself - Outgoing email recorded

Tue Apr 11 10:05:20 2017 The RT System itself - Outgoing email recorded

Tue Apr 11 12:19:50 2017 <wermold@api.washington.edu> - Correspondence added

From: "Wendy Ermold" <wermold@api.washington.edu>
Date: Tue, 11 Apr 2017 12:12:29 -0700
Subject: Re: [arcticdata #14635] ERMOLD: IABP 12-Hourly Interpolated position, velocity, SL.... (arctic-data.10529.1)
CC: "Ignatius Rigor" <ignatius@uw.edu>
To: support@arcticdata.io

Hi Dominic,

Thank you for nesting this dataset with the others of its kind! The changes you suggest sound good.

The data in all 4 submitted files for 2013 thru 2016 contain the following columns of data:

Download (untitled)
with headers
txt/plain 1.7KB



Slack #arcticbot



Arctic Bot APP 12:40 PM

Correspondence by mgrieman@uci.edu: " Thanks for getting back to me so quickly The age scale for the ice core has been updated so I just wanted the data to ..." on [Ticket 14798](#)



[2 replies](#) Last reply 3 days ago



Arctic Bot APP 1:00 PM

Correspondence by austincharron@ku.edu: " The abstract should read On Tue May 9 2017 at 2:19 PM Alex Gordee via RT support@arcticdata.io wrote Hi Austin Thank y..." on [Ticket 14799](#)





Arctic Data Center Support Team

support@arcticdata.io



Clark



Goldstein



Mullen



Chong



Meyer



Steves



Maier



Ochs



Train



Nguyen



Sun



Reevesman



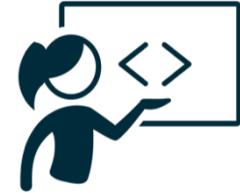
Chen

Data Science Fellows

Student Interns

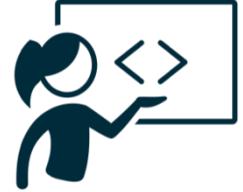


Training and Outreach





Training and Outreach

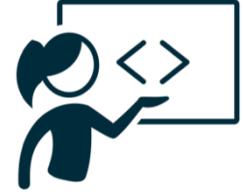


- Training
 - Summer Training
 - Workshops
 - Internship Program
 - Data Fellows Program
 - Webinars

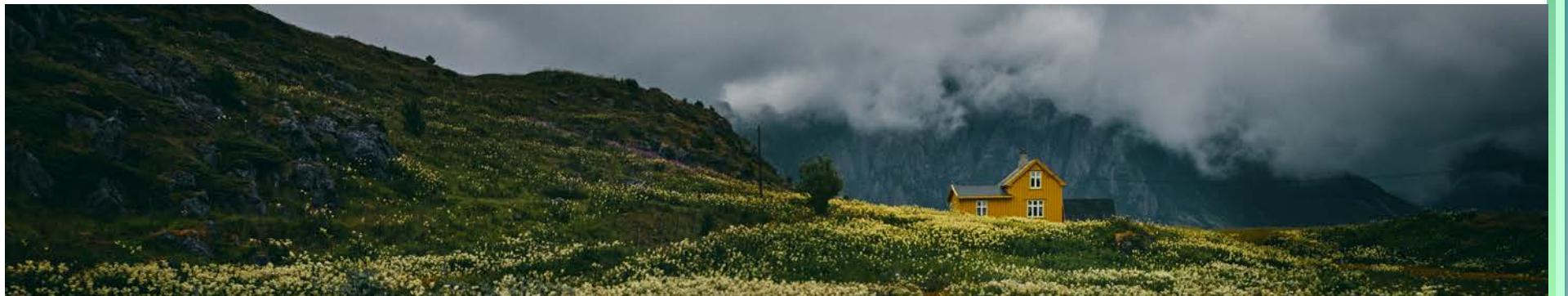




Training and Outreach

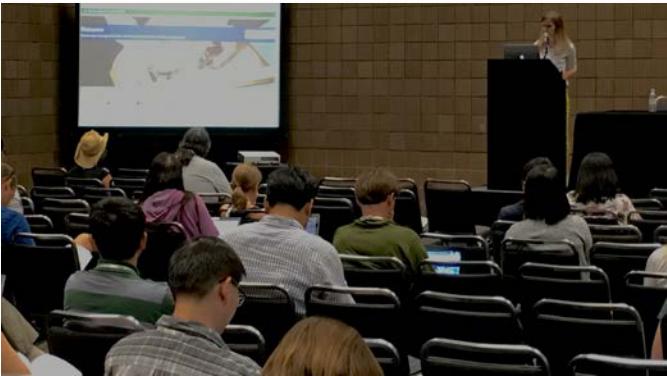
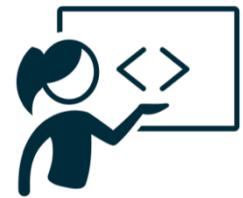


- Outreach
 - In-person events
 - News items and other communications
 - Social media
 - Arctic Data Center website
 - Marketing





Training and Outreach



Dataset Highlights

Learn how specific datasets in the Arctic Data Center incorporate best data management practices and gain insights directly from the researchers on how their data can be applied to benefit the Arctic research community.

Data Provenance and Arctic Soil Bacteria, with Michael P. Ricketts

Dissolved Organic Carbon in the Arctic, with Dr. Rose Cory

Learning from the Hunters in Savoonga, with Dr. Henry Huntington

Subsistence Harvests in Alaskan Communities along the Bering Sea, with Dr. James Fall

Investigating Rotten Ice, with Dr. Karen Junge

Data and software from NSF Arctic research

Search for Data Submit New Data

News

Arctic Data Center Training Workshop

March 6, 2017. Please join us for a data best practices training workshop put on by the US NSF Arctic Data Center. This workshop will provide researchers with concrete steps and methods for more easily documenting and uploading their data to the Arctic Data Center. Register now on the Arctic Data Center website <https://arcticdata.io/training>. Workshop topics will include: Introduction to the US Arctic Data Center (<https://arcticdata.io>) NSF standards and policies for data preservation Crafting your data management plan Preparing and archiving your data using open source formats Creating standards-based metadata Uploading and versioning your data in the Arctic Data Center This workshop will ...





Data Rescue

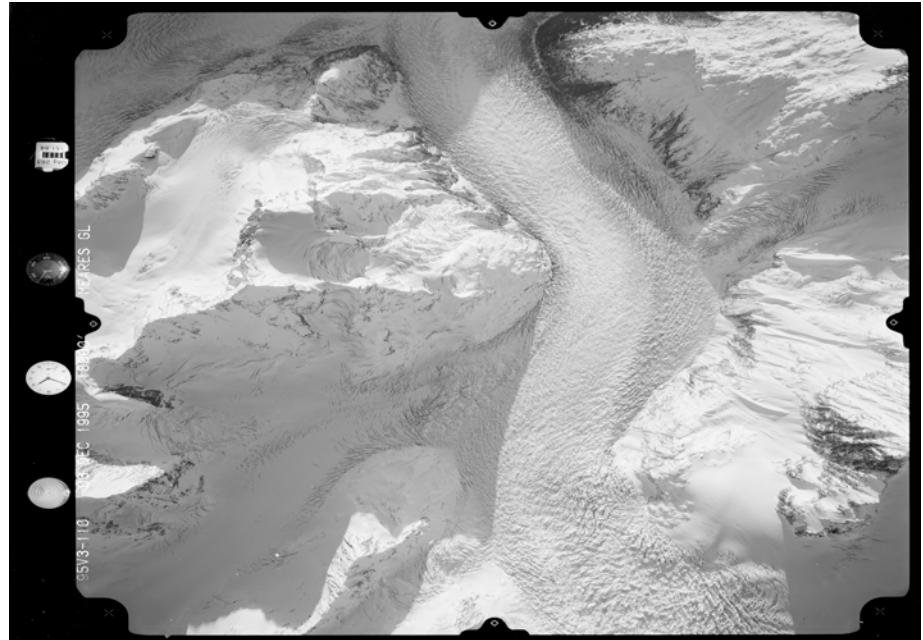




Data Recovery: Aerial Glacier Photos



- Austin Post's collection
 - 1964 – 1997
 - 2 - 6 rolls per year
 - 100,000+ files = 4.9 TB
 - Glacier photos:
TIFs, JPGs, TNs
 - Reconstructed flight paths, images of notes, image metadata, camera specs



Meares Glacier, Prince William Sound, AK
61.187448, -147.457573, taken from 18,000'
December 3, 1995, Roll 3, Frame 110
doi:10.18739/A2FF6Z (NAGAP_95V3_110.jpg)

the Arctic Data Center,
**NSF Standards
& Policies**



Who Must Submit

<https://arcticdata.io/submit/#who-must-submit>

Arctic Research Opportunities (ARC):

- Complete metadata and all appropriate data and derived products
- Within 2 years of collection or before end of award, whichever comes first

ARC Arctic Observing Network:

- Complete metadata and all data
- Real-time data made public immediately
- Within 6 months of collection



Who Must Submit: Social Sciences

<https://arcticdata.io/submit/#who-must-submit>

Arctic Social Sciences Program (ASSP):

- NSF policies include special exceptions for ASSP and other awards that contain sensitive data
- Human subjects, governed by an Institutional Review Board, ethically or legally sensitive, at risk of decontextualization
- Metadata record that documents non-sensitive aspects of the project and data
 - *Title, Contact information, Abstract, Methods*



Terms of Use: Licensing and Distribution

<https://arcticdata.io/submit/#license-and-data-distribution>

All metadata and (non-sensitive) data will be released under either:



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Data Citation

- We assign a DOI to each published data set
- Researchers should cite data they use

Nina J. Karnovsky and Ann M. A. Harding. 2016. At-sea density of foraging little auks (*Alle alle*) near Hornsund Fjord. Arctic Data Center. doi:10.5065/D6MK6B17.

- We are working as part of Make Data Count to track the citations to data





Data Citation

- Each update has a unique identifier
- Cite the exact version used
- Newer versions are clearly indicated

The screenshot shows a dataset page from the Arctic Data Center. At the top, there's a navigation bar with the center's logo, links for Data, Support, and About, a green "Submit Data" button, and a "Sign in with Orcid" button. A yellow banner at the top indicates a newer version exists. Below the banner, the dataset title is displayed: "Nina J. Karnovsky, Pomona College, Ann M. A. Harding, Environmental Science Department, Alaska Pacific University, and UCAR/NCAR - Earth Observing Laboratory. 2016. **At-sea density of foraging little auks (Alle alle) near Hornsund Fjord.** Arctic Data Center. urn:uuid:849a7036-8dc4-400e-a584-9d1aaafacca63." The page also includes links for Home, Search, and Metadata.

the **Arctic Data Center,
NSF Standards
& Policies**

Summary



Arctic Data Center Features and Services



Data Archive



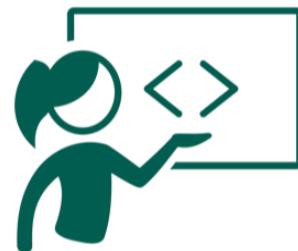
Data Discovery Portal



Tools and Infrastructure



Support Services



Training and Outreach



Data Rescue





Operation Metrics



4,700+
DATA SETS



2,000
CREATORS



642K
DATA FILES



4,600+
USERS



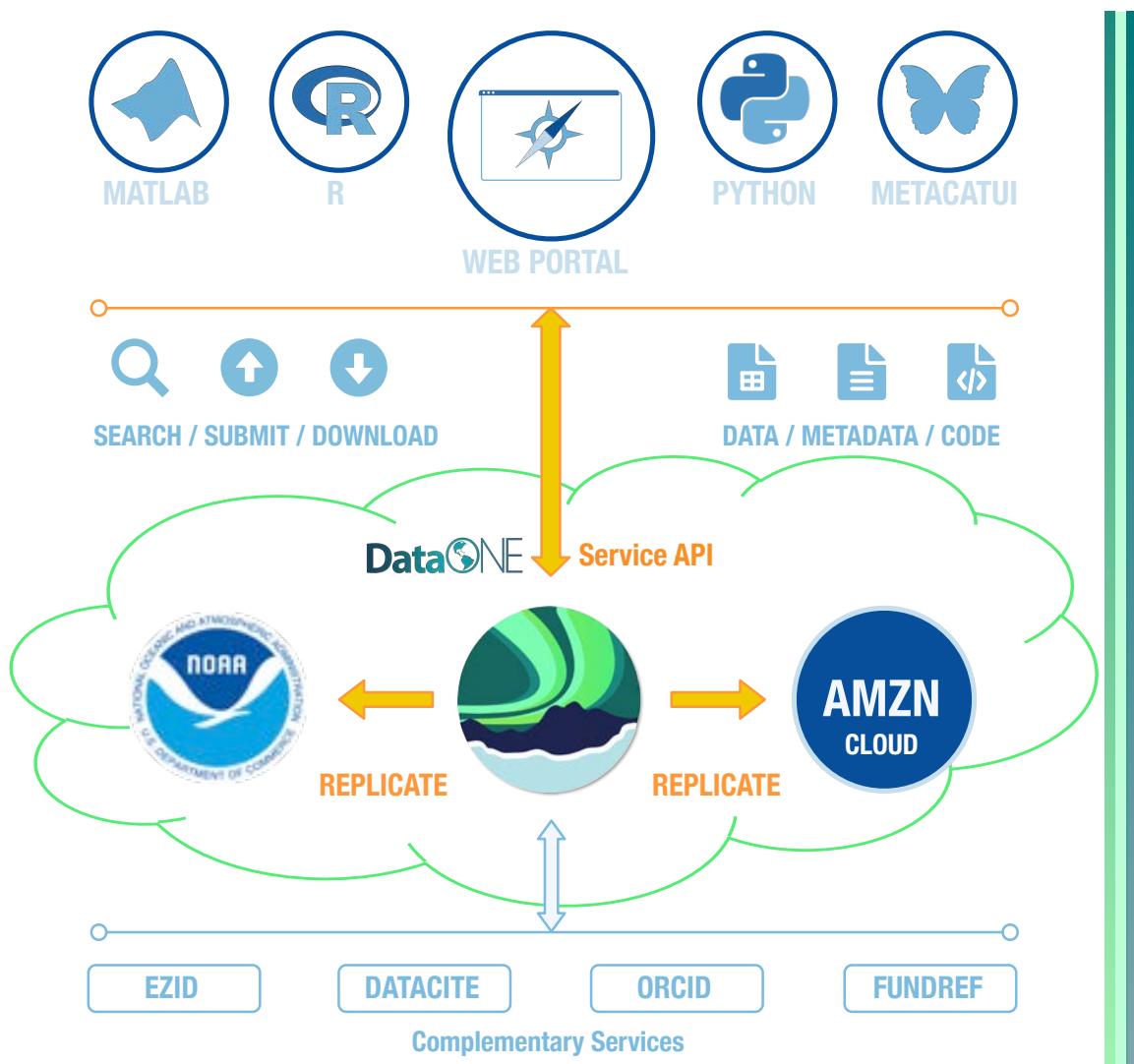
13.94 TB
DATA STORAGE



71K+
FILE DOWNLOADS



- Projects: GRISO, DBO, ARMAP
- Repositories: LTER, BCO-DMO, R2R, Antarctic Data Center (IDEA)
- Networks: A2DC, Arctic Data Explorer
- Committees: Arctic Data Committee, IARPC Data Sub-team





<https://arcticdata.io>