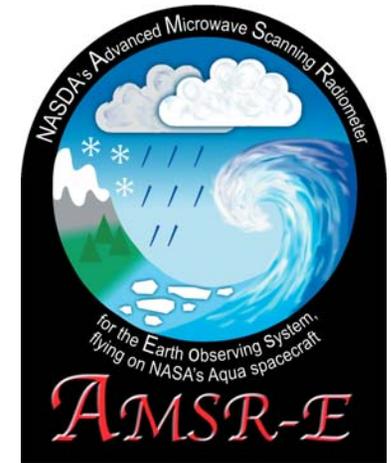




National Snow and Ice Data Center
Supporting Cryospheric Research Since 1976



AMSRE Validation Data Archive and Distribution

Michelle Holm

AMSRE Validation Data Coordinator

September 13, 2005



Overview

- Product Team
- Status of Data Set Publishing
- Web Site Updates
- AMSR-E Validation Data Distribution
- What's Next?

AMSR-E Validation Campaigns

Cryospheric Data

- Meltpond2000, 25 June - 6 July 2000
- Cold Land Processes Experiment
 - CLP IOP 1: 19 - 24 February 2002
 - CLP IOP 2: 25 - 30 March 2002
 - CLP IOP 3: 19 - 27 February 2003
 - CLP IOP 4: 25 March - 2 April 2003
- Alaska Sea Ice
 - Beaufort Sea, Apr/May 2002
 - Sea of Okhotsk, Japan, 4 and 11 February 2003
 - Beaufort/Northern Bering Seas, 6 - 23 March 2003
 - Bering and Chukchi Seas, February/March 2005
- Antarctic (from Punta Arenas) Sea Ice, 2003 & 2004

Rainfall Data

- Eureka, CA, October 2002 through September 2004
- Iowa City, IA, October 2002 through September 2004
- BALTEX, October 1999 - February 2002
- Wakasa Bay, January- February 2001, 3 January - 14 February 2003

Soil Moisture Data

- SMEX02: Iowa, 24 June - 15 July 2002
- SMEX03: Oklahoma, Georgia, Alabama, 23 June - 18 July 2003
- SMEX03: Brazil, December 2003
- SMEX04-NAME: North American Monsoon Experiment, Mexico and Arizona, 2 August - 27 August 2004
- SMEX05 Iowa, June – July 2005

Product Team

Michelle Holm	Data Coordinator
Amanda Leon	Cryospheric Data Sets Coordinator User Services
Cari Gallup	Archive Management Services
Lynn French	Technical Writer
Matt Savoie	Scientific Programmer

Status of Data Set Publishing

Cryosphere	<ul style="list-style-type: none">•CLPX•Meltpond•AMSRIce03•East Antarctic•West Antarctic (AASI)	Working with AMSRIce03 PIs to transfer data, define data sets, begin documentation. In process of following up with Antarctic PIs to determine status of data sets.
Rainfall	Baltex Nexrad Wakasa Bay <i>Brokered Data Sets</i>	Discussion regarding NEXRAD data in progress, server no longer accessible. Additional brokered data sets from Japan.
Soil Moisture	SMEX02 SMEX03 SMEX04 SMEX05 SMEX07??	SMEX02 complete. SMEX03 start documentation, complete data transfer. SMEX04 continuing data transfer, complete in 2006. SMEX05 receive data in 2006.

- **Modified data listings**
 - Quickly determine data availability/status
 - Improved navigation and access to data and documentation
- **Adding content as experiments complete**
 - Brokered data
 - Reports and supporting documentation
 - Related web links

Web Site Updates

The screenshot shows a Mozilla Firefox browser window displaying the website "AMSR-E Validation Data - Rainfall". The address bar shows the URL "http://nsidc.org/data/amr_validation/rainfall/". The website header includes the NSIDC DAAC logo and the title "AMSR-E Validation Data". A navigation menu contains links for "Home", "Cryospheric Data", "Soil Moisture Data", "Rainfall Data", and "Submit Data". The main content area is titled "Rainfall Data" and features a sidebar with four links: "Eureka, CA NEXRAD", "Iowa City, IA", "BALTEX", and "Wakasa Bay, Japan". The main text describes the AMSR-E rainfall validation effort, which includes gauge-based and radar validation of AMSR-E global rain rate products. It details the types of studies conducted, such as stratiform/convective rain type, daily and monthly rain accumulation, and radar studies investigating water vapor profiles and cloud information. A color scale legend is provided, ranging from 0 to 35 mm/h, with labels for "AMSR 18:29Z (mm/h)", "NEXRAD 18Z - 19Z", "TMI 21:35Z", and "NEXRAD 21Z - 22Z". Below the legend are four maps showing rainfall estimates over the eastern U.S. for the specified times. A text block at the bottom right provides context for the rainfall event on June 5, 2002, and credits Jeff McCollum and Ralph Ferraro.

AMSR-E Validation Data - Rainfall - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://nsidc.org/data/amr_validation/rainfall/

Getting Started Latest Headlines

NSIDC DAAC

AMSR-E Validation Data

Home | [Cryospheric Data](#) | [Soil Moisture Data](#) | [Rainfall Data](#) | [Submit Data](#)

Rainfall Data

- ▶ Eureka, CA NEXRAD
- ▶ Iowa City, IA
- ▶ BALTEX
- ▶ Wakasa Bay, Japan

The AMSR-E rainfall validation effort consists of gauge-based and radar validation of AMSR-E global rain rate products. Gauge-based studies investigate instantaneous rain rate, stratiform/convective rain type, and daily and monthly rain accumulation. The radar studies investigate water vapor profiles and cloud information such as vertical cloud structure, radar backscatter, and radiative properties of different cloud types.

Use the navigation at left to access data and information about the AMSR-E rainfall data experiments.

AMSR 18:29Z (mm/h) NEXRAD 18Z - 19Z

0 5 10 15 20 25 30 35

TMI 21:35Z NEXRAD 21Z - 22Z

Rainfall estimates from the National Space Development Agency of Japan's AMSR-E instrument on Aqua and the Tropical Rainfall Measuring Mission (TRMM) Microwave Imager (TMI) for a rainfall event over the eastern U.S. on June 5, 2002. Images courtesy of Jeff McCollum of the University of Maryland and Ralph Ferraro of NOAA, members of the AMSR-E Science Team.

Done

Web Site Updates

The screenshot shows a Mozilla Firefox browser window displaying the AMSR-E Validation Data Management Portal. The address bar shows the URL http://nsidc.org/data/amr_validation/soil_moisture/. The page features a navigation menu with links for [data](#), [projects](#), [research](#), [news](#), and [the cryosphere](#). A prominent banner reads "Data Products & Services" with sub-links for [data providers](#), [data tools](#), [data help](#), and [data search](#). The main heading is "AMSR-E Validation Data". Below this, there are navigation links: [Home](#), [Cryospheric Data](#), [Soil Moisture Data](#), [Rainfall Data](#), and [Submit Data](#). The "Soil Moisture Data" section is active, listing experiments: [SMEX02](#), [SMEX03](#), [SMEX04-NAME](#), and [SMEX05](#). A detailed description of the SMEX02-05 experiments is provided, along with a satellite image of Iowa and a caption: "Iowa Landsat TM Image from the SMEX02. Image courtesy of the [SMEX02](#)." The footer of the browser window shows "Waiting for nsidc.org...".

- ▶ SMEX02
- ▶ SMEX03
- ▶ SMEX04-NAME
- ▶ SMEX05

SMEX03 Data Sets

The table below contains SMEX03 data sets received to date for AMSR-E Validation soil moisture experiments. The data are restricted to approved investigators. The restricted data do not yet have documentation. Please continue to check back for data set additions.

To access restricted SMEX data, you must be an AMSR-E Validation or SMEX investigator and [register with NSIDC](#) to obtain the password. After you get the password you can right-click on a link in the table and choose to open the link in a new window. In the password window that appears, enter the password, and click **OK**.

If you have problems accessing data or have questions, please contact [NSIDC User Services](#).

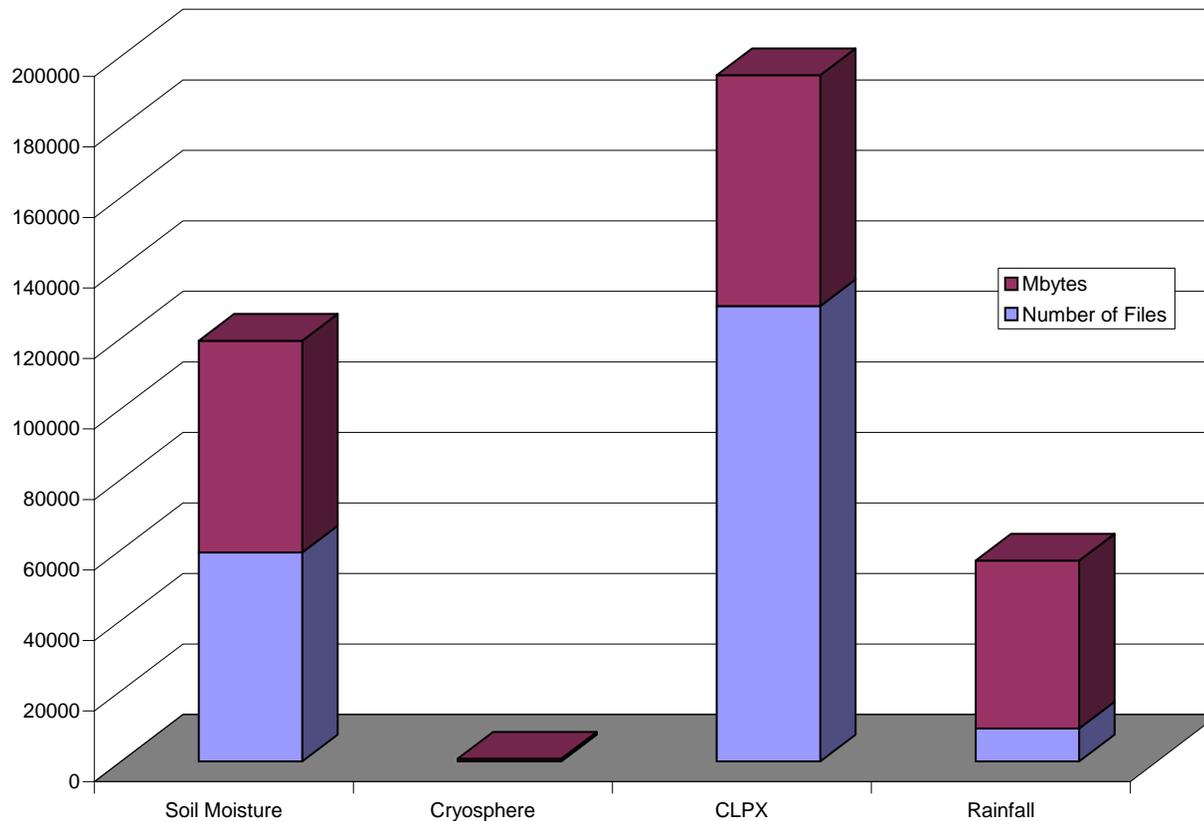
To learn more about the experiments or to access related links, view [About Soil Moisture Experiment 2003 \(SMEX03\)](#).

=Restricted Access:User must login or contact [NSIDC User Services](#) to access data.

Ground Soil Moisture		Alabama	Georgia	Oklahoma
SMEX03 Soil Climate Analysis Network (SCAN)	Documentation	Data	Data	Data
SMEX03 Regional Ground Soil Moisture Data	Documentation	Data	Data	Data
SMEX03 Watershed Ground Soil Moisture Data	Documentation	Data	Data	Data
SMEX03 Theta Probe Measurements	Documentation	Data	Data	Data
SMEX03 Micronet	Documentation	Data	Data	Data
Satellite Remote Sensing		Alabama	Georgia	Oklahoma
SMEX03 Vegetation Index and Water Index (NDVI and NDWI)	Documentation	Data	Data	Data
SMEX03 Thematic Mapper GEOTIFF Imagery	Documentation	Data	Data	Data
Vegetation		Alabama	Georgia	Oklahoma

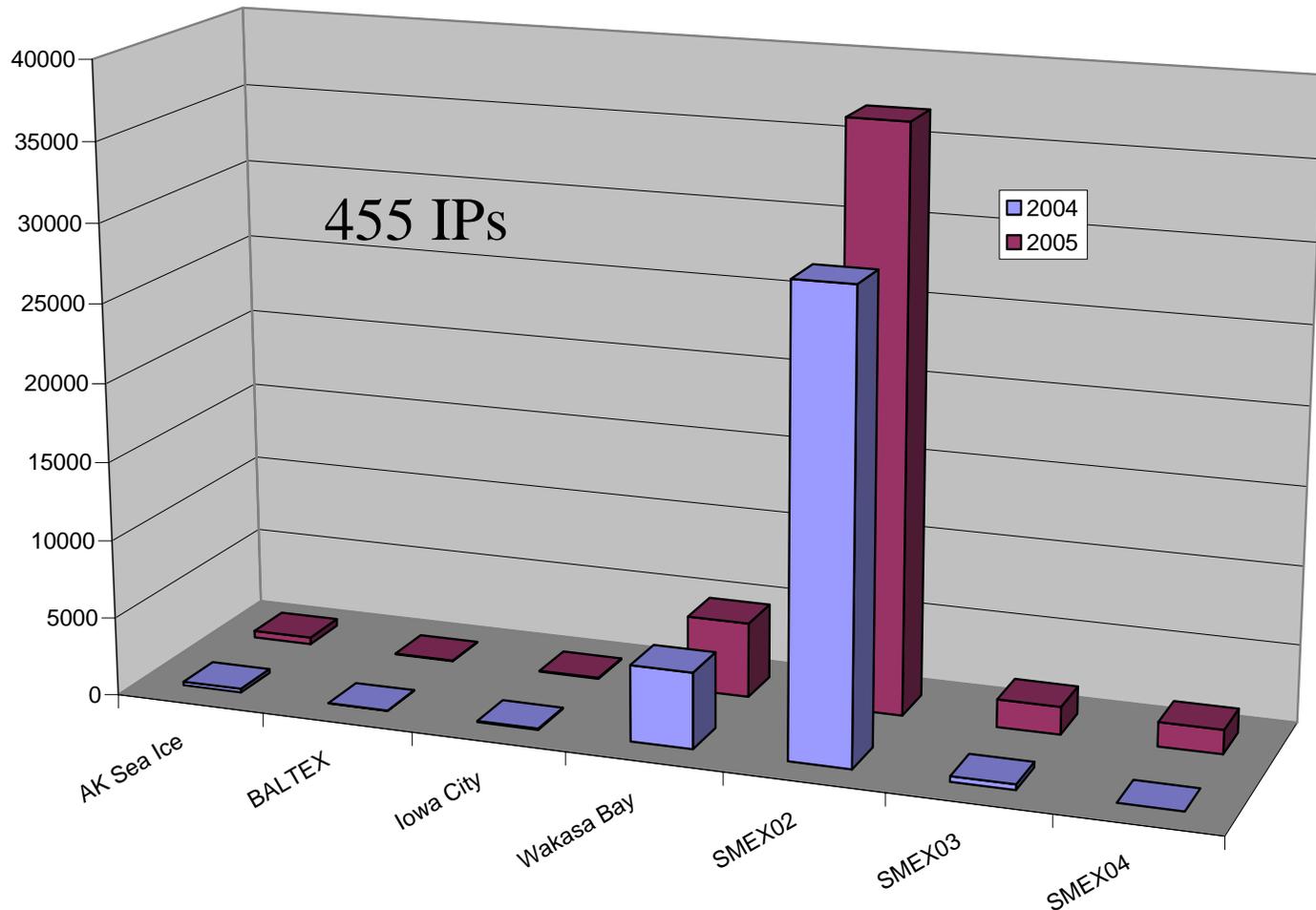
Data Distribution

AMSR Validation Number of Files and Volume of Data Distributed



Data Distribution

AMSR-E Validation Number of FTP Accesses by Campaign



Bibliography

- One measure of use is number of papers published
- Obstacles
 - Data are not regularly cited
 - Difficult to gather comprehensive results
 - “Catchy” or unique names help
 - Difficult to sort through results
- Quick look searching several databases

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- *Validation of AMSR-E Ice Concentration & Thickness in the Okhotsk Sea*. Gayana (Concepción) 2004

Future Plans

- Continued stewardship of data sets
 - “Close out”
 - Rainfall
 - SMEX02
 - Meltpond 2000
 - Archival and Publishing of SMEX03 & Cryospheric Data Sets
- Assessing Use of Data Sets
 - Distribution Statistics
 - Bibliography
 - Feedback from Science Team on publishing
 - Interest in this as a product/activity?
- Outreach
 - Priority?
 - Audiences and Strategies
 - Conferences
 - Papers
 - Newsletter
 - Other?
- Other activities
 - Science Team Feedback on Functionality and Priorities

Access and Contact Information

- To access or submit data:
 - http://nsidc.org/data/amsr_validation
 - NSIDC User Services
nsidc@nsidc.org

- Questions or concerns:
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