



Baltic Sea Experiment (BALTEX) Ground-Based Radar Polar Volume Data, Version 1

USER GUIDE

How to Cite These Data

As a condition of using these data, you must include a citation:

Bennartz, R. 2004. *Baltic Sea Experiment (BALTEX) Ground-Based Radar Polar Volume Data, Version 1*. [Indicate subset used]. Boulder, Colorado USA. NASA National Snow and Ice Data Center Distributed Active Archive Center. <https://doi.org/10.5067/FVJJ6961HB7L>. [Date Accessed].

FOR QUESTIONS ABOUT THESE DATA, CONTACT NSIDC@NSIDC.ORG

FOR CURRENT INFORMATION, VISIT <https://nsidc.org/data/NSIDC-0209>



National Snow and Ice Data Center

TABLE OF CONTENTS

1	DATA DESCRIPTION	2
1.1	Parameters.....	2
1.1.1	Unit of Measurement.....	2
1.1.2	Parameter Source.....	2
1.1.3	Sample Data Record.....	2
1.2	File Information.....	3
1.2.1	Format.....	3
1.2.2	File Contents.....	3
1.2.3	Naming Convention	4
1.3	Spatial Information	4
1.3.1	Coverage	4
1.4	Temporal Information	4
1.4.1	Coverage	4
1.4.2	Resolution.....	4
2	DATA ACQUISITION AND PROCESSING.....	4
2.1	Acquisition.....	4
3	SOFTWARE AND TOOLS	5
4	RELATED DATA SETS.....	5
5	RELATED WEBSITES	5
6	CONTACTS AND ACKNOWLEDGMENTS	5
7	DOCUMENT INFORMATION.....	6
7.1	Publication Date	6
7.2	Date Last Updated	6

1 DATA DESCRIPTION

1.1 Parameters

The parameter measured in this data set is reflectivity.

The following table shows the scanning angle for the 12 scans in each data file.

Table 1. Scan Angle

Scan	Angle (elevation angle in degrees)
1	0.5
2	0.7
3	0.9
4	1.1
5	1.5
6	2.3
7	3.2
8	4.1
9	6.0
10	12.0
11	24.0
12	40.0

1.1.1 Unit of Measurement

Reflectivity is given in dBz.

1.1.2 Parameter Source

The measurements were taken from the Gotland Island Hemse radar station.

1.1.3 Sample Data Record

The following shows scan 1 of the data file "znp_hem_030519t1145.h5.nc."

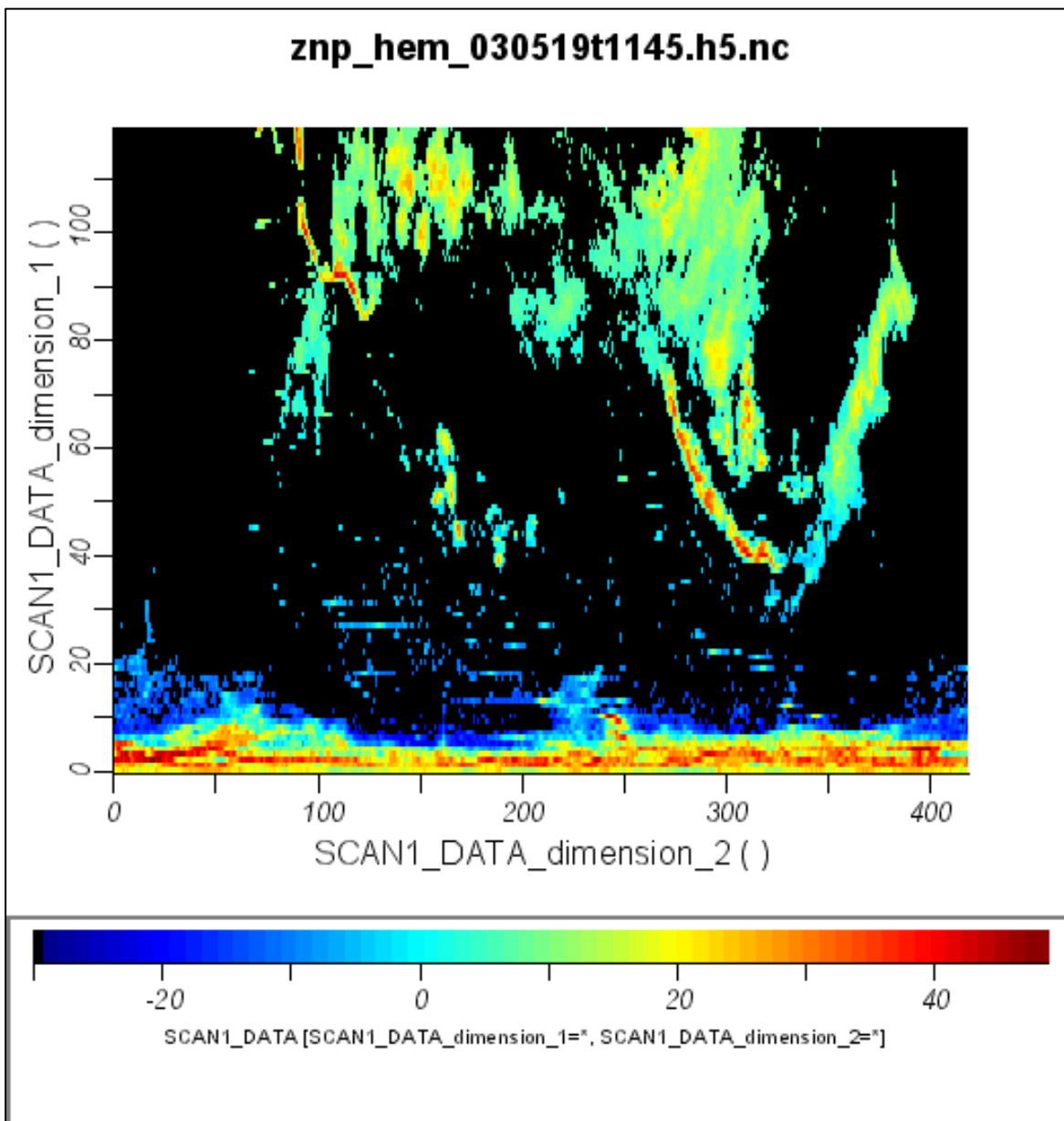


Figure 1. Scan 1 of the data file znp_hem_030519t1145.h5.nc.

1.2 File Information

1.2.1 Format

Data are provided in netCDF format. The netCDF headers contain dimensions, units, and other information.

1.2.2 File Contents

There is a tar file on the [HTTPS](https://nsidc.org) site for each month data were collected.

1.2.3 Naming Convention

File strings describe file contents, including the non-doppler radar (znp), place, date, and time. For instance, the file "znp_hem_030531t0145.h5.nc" indicates that the data were collected from Hemse radar station at 1 hour 45 minutes in UTC on 31 May 31 2003.

File Size: Each data file is 2.3 MB. Volume: Data files are contained in compressed tar files, one file for each month. The total compressed volume is 212 MB.

1.3 Spatial Information

1.3.1 Coverage

57.24°N, 18.39°E

1.4 Temporal Information

1.4.1 Coverage

1 September 2002 to 31 May 2003.

1.4.2 Resolution

Data are given in 15-minute intervals.

2 DATA ACQUISITION AND PROCESSING

2.1 Acquisition

The following table provides information about the Hemse radar station, the instrument, and data acquisition.

Table 2. Hemse radar station, the instrument, and data acquisition.

Radar System	Ericsson EWR Radar
Wavelength	5.31 cm
Location	Gotland Island (57.24 ° North, 18.39 ° East), Sweden
Processing Software	Ericsson Enterprise Wireless Internet Solutions (EWIS)
Height of the antenna	56 m above sea level

Radars System	Ericsson EWR Radar
Distance between two successive range bins	2,000 m
Number of range bins in each ray	120 (with 2,000 m spacing)
Number of azimuth gates (rays) per scan	480 (starting North, clockwise)
Half-power beamwidth	0.9 °
Antenna speed in revolutions per minute	6
Pulse width	2 ms
Low-pulse repetition frequency	250 Hz
High-pulse repetition frequency	250 Hz
How raw data in range are processed to arrive at the given value	average

3 SOFTWARE AND TOOLS

Use an appropriate application to view netCDF data.

The netCDF format is an interface for array-oriented data access with an interface library. The netCDF library also defines a machine-independent format for representing scientific data. Together, the interface, library, and format support creating, accessing, and sharing scientific data. The netCDF software was developed at the Unidata Program Center in Boulder, Colorado. More information about netCDF and software for manipulating and displaying NetCDF is available from [Unidata](#).

4 RELATED DATA SETS

- [AMSR-E Validation Data](#)
- [AMSR-E Data at NSIDC](#)

5 RELATED WEBSITES

[BALTEX Radar Data Centre](#)

6 CONTACTS AND ACKNOWLEDGMENTS

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7 DOCUMENT INFORMATION

7.1 Publication Date

April 2004

7.2 Date Last Updated

30 December 2020