

ORNL DAAC Home



ORNL DAAC
DISTRIBUTED ACTIVE ARCHIVE CENTER
FOR BIOGEOCHEMICAL DYNAMICS

NASA Home



About Us

Get Data

Submit Data

Data Management

Tools

 Sign in

[DAAC Home](#) > [Get Data](#) > [Field Campaigns](#) > [Boreal Ecosystem-Atmosphere Study \(BOREAS\)](#) > User guide

BOREAS TGB-01 SF6 CHAMBER FLUX DATA: NSA

Get Data

Summary:

Chamber flux measurements were taken at the Boreal Ecosystem Atmosphere Study (BOREAS) Northern Study Area (NSA) Old Jack Pine (OJP) and Young Jack Pine (YJP) sites during the summer of 1994. The purpose of these measurements was to examine the trace gas exchange between the atmosphere and the boreal soils. The following is a description of the acquisition of data and the final data sets. The BOREAS TGB-01 team made sulfur hexafluoride (SF6) dark chamber flux measurements 16-May through 13-Sep-1994. Gas samples were extracted approximately every 7 days from dark chambers and analyzed at the NSA lab facility.

A guide document which includes more information about this data set can be found at http://daac.ornl.gov/daacdata/boreas/TGB/tgb1sf6/comp/TGB01_SF6.txt.

ORNL DAAC maintains information on the entire [BOREAS Project](#).

Data Citation

Cite this data set as follows:

Crill, P. M. 1998. BOREAS TGB-01 SF6 Chamber Flux Data: NSA. Data set. Available on-line [<http://www.daac.ornl.gov>] from Oak Ridge National Laboratory Distributed Active Archive Center, Oak Ridge, Tennessee, U.S.A. doi:[10.3334/ORNLDaac/376](https://doi.org/10.3334/ORNLDaac/376).

References:

- Bubier, J.L., T.R. Moore, L. Bellisario, N.T. Comer and P.M. Crill. 1995. Ecological controls on methane emissions from a northern peatland complex in the zone of discontinuous permafrost. Manitoba, Canada. Global Biogeochemical Cycles 9: 455-470.
- Crill, P. M., K.B. Bartlett, R.C. Harriss, E. Gorham, E.S. Verry, D.I. Sebacher, L. Madzer, and W. Sanner. 1988. Methane flux from Minnesota peatlands. Global Biogeochemical Cycles, 2, 371-384.
- Daubenmire, R.F. 1968. Plant communities: a textbook of plant synecology. Harper and Row, New York, NY.
- Moore, T.R. and N.T. Roulet. 1991. A comparison of dynamic and static chambers for methane emission measurements from subarctic fens. Atmosphere-Ocean, 29, 102-109.
- Rolston, D.E., R.D. Glauz, G.L. Grundman, and D.T. Louie, Evaluation of an in situ method for measurement of gas diffusivity in surface soils, Soil Science Society of America Journal, 55, 1536-1542, 1991.
- Roulet, N., S. Hardill, and N. Comer. 1991 Continuous measurement of the depth of water table (inundation) in wetlands with fluctuating surfaces. Hydrological Processes, 5, 399-403.
- Roulet, N.T. 1991. Surface level and water table fluctuations in a subarctic fen. Arctic and Alpine Research, 23, 303-310.
- Sjors, H. 1950. On the relation between vegetation and electrolytes in Swedish mire waters. Oikos, 2, 241-258.
- Sellers, P. and F. Hall. 1994. Boreal Ecosystem-Atmosphere Study: Experiment Plan. Version 1994-3.0, NASA BOREAS Report (EXPLAN 94).
- Sellers, P. and F. Hall. 1996. Boreal Ecosystem-Atmosphere Study: Experiment Plan. Version 1996-2.0, NASA BOREAS Report (EXPLAN 96).
- Sellers, P. and F. Hall. 1997. BOREAS Overview Paper. JGR Special Issue (in press).
- Sellers, P., F. Hall, and K.F. Huemmrich. 1996. Boreal Ecosystem- Atmosphere Study: 1994 Operations. NASA BOREAS Report (OPS DOC 94).

- Sellers, P., F. Hall, and K.F. Huemmrich. 1997. Boreal Ecosystem- Atmosphere Study: 1996 Operations. NASA BOREAS Report (OPS DOC 96).
- Sellers, P., F. Hall, H. Margolis, B. Kelly, D. Baldocchi, G. den Hartog, J. Cihlar, M.G. Ryan, B. Goodison, P. Crill, K.J. Ranson, D. Lettenmaier, and D.E. Wickland. 1995. The boreal ecosystem-atmosphere study (BOREAS): an overview and early results from the 1994 field year. Bulletin of the American Meteorological Society. 76(9):1549-1577.
- Sellers, P., F. Hall. 1997. BOREAS Overview Paper. JGR Special Issue (in press).
- Trumbore, S.E., Use of isotopes and tracers in the study of emissions and consumption of trace gases in terrestrial environments, in Biogenic Trace Gases: Measuring Emissions from Soil and Water, edited by P.A. Matson, and R.C. Harriss, pp. 291-326, Blackwell, Oxford, 1995.

Data Format:

For information on Parameter/Variable Names, Variable Description/Definition, Units of Measurement, and Data File Format see this companion file
<http://daac.ornl.gov/daacdata/boreas/TGB/tgb1sfd/comp/tgb1sfd.def>

Document Information:

13-Oct-1998 (data set citation revised on 10-Sep-2002)

Document Review Date:

13-Oct-1998

Document Curator:

uso@daac.ornl.gov

Document URL:

<http://daac.ornl.gov>



[Privacy Policy](#) | [Feedback](#) | [Help](#)



[Home](#)

About Us

[Who We Are](#)
[Partners](#)
[User Working Group](#)
[Data Citation Policy](#)
[Workshops](#)
[News](#)

[Contact Us](#)

Get Data

[Complete Dataset List](#)
[Search for Data](#)
[Field Campaigns](#)
[Land Validation](#)
[Regional/Global](#)
[Model Archive](#)

Submit Data

[Submit Data Form](#)
[Data Scope and Acceptance](#)
[Data Authorship Policy](#)
[Data Publication Timeline](#)
[Detailed Submission Guidelines](#)

Data Management

[Best Practices](#)
[Data Management Plan](#)
[How-to's](#)

Tools

[MODIS](#)
[THREDDS](#)
[SDAT](#)
[Daymet](#)
[CARVE Data Viewer](#)
[Soil Moisture Visualizer](#)
[Land - Water Checker](#)

Help

[FAQs](#)