

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

BOREAS RSS-20 POLDER HELICOPTER-MOUNTED MEASUREMENTS OF SURFACE BRDF

Get Data

Summary:

This data set contains measurements of surface BRDF made by the POLDER instrument over several sites (pine, spruce, fen) of the BOREAS study areas during 1994. Single-point BRDF values were acquired from NASA's WFF helicopter. A related data set collected from the C-130 platform is available as is POLDER imagery acquired from the C-130.

A guide document which includes more information about this data set can be found at http://daac.ornl.gov/daacdata/boreas/RSS/rs20helo/comp/RSS20_POLDER_Helo.txt.

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

Data Citation

Cite this data set as follows:

Leroy, M. and F.-M. Breon. 1999. BOREAS RSS-20 POLDER Helicopter-Mounted Measurements of Surface BRDF. 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/306](https://doi.org/10.3334/ORNLDAAC/306).

References:

- Breon, F.M., V. Vanderbilt, M. Leroy, P. Bicheron, C.L. Walthall, and J.E. Kalshoven. 1997. Evidence of hot spot directional signature from airborne POLDER measurements. *IEEE Transactions on Geoscience and Remote Sensing*. vol. 35, pp. 479-484.
- Bicheron, P., M. Leroy, O. Hautecoeur, and F.M. Breon. 1997. Enhanced discrimination of boreal forest covers from airborne directional POLDER data. *JGR, BOREAS special issue* (in press).
- Deschamps, P.Y., F.M. Breon, M. Leroy, A. Podaire, A. Bricaud, J.C. Buriez, and G. Saze. 1994. The POLDER mission: Instrument characteristics and scientific objectives. *IEEE Transactions on Geoscience and Remote Sensing*, 32, pp. 598-615.
- Leblanc, S.G., P. Bicheron, J.M. Chen, M. Leroy, and J. Cihlar. 1997. Investigation of directional reflectance in boreal forests with an improved 4-scale model and airborne POLDER data. *IEEE Transactions on Geoscience and Remote Sensing* (submitted 1997).
- Leroy, M. and F.M. Breon. 1996. Surface reflectance angular signatures from airborne POLDER data. *Remote Sensing of Environment*, 57, pp. 97-107.
- Leroy, M., P. Bicheron, and O. Hautecoeur. 1997. An algorithm of LAI and FAPAR retrieval to be used with spaceborne POLDER/ADEOS data. In: 7th International Symposium - Physical Measurements and Signatures in Remote Sensing. Courchevel, France.
- Gastellu-Etchegorry J.P., P. Guillevic, F. Zagolski, V. Demarez, V. Trichon, D. Deering, and M. Leroy. 1997. Modelling BRDF and radiation regime of boreal and tropical forest. *Remote Sensing of Environment* (submitted)..
- 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.J., F.G. Hall, R.D. Kelly, A. Black, D. Baldocchi, J. Berry, H. Margolis, M. Ryan, J. Ranson, P.M. Crill, D.P. Lettenmeier, J. Cihlar, J. Newcomer, D. Halliwell, D. Fitzjarrald, P.G. Jarvis, S.T. Gower, D. Williams, B. Goodison, D.E. Wickland, and F.E. Guertin. 1997. BOREAS in 1997: Scientific results, experiment overview and future directions. *BOREAS Special Issue, JGR-Atmospheres*, 102:28,731-28,770, No. D24..

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.

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/RSS/rs20helo/comp/rs20helo.def>

Document Information:

14-Apr-1999 (data citation revised on 27-Sep-2002)

Document Review Date:

14-Apr-1999

Document Curator:

uso@daac.ornl.gov

Document URL:

<http://daac.ornl.gov>



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



Home

About Us

Get Data

Submit Data

Data Management

Tools

Help

Contact Us

- Who We Are
- Partners
- User Working Group
- Data Citation Policy
- News

- Complete Dataset List
- Search for Data
- Field Campaigns
- Land Validation
- Regional/Global
- Model Archive

- Submit Data Form
- Data Scope and Acceptance
- Data Authorship Policy
- Data Publication Timeline
- Detailed Submission Guidelines

- Best Practices
- Data Management Plan
- How-to's

- MODIS
- THREDDS
- SDAT
- Daymet
- CARVE Data Viewer
- Soil Moisture Visualizer
- Land - Water Checker

FAQs