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# BOREAS TF-03 NSA-OBS TOWER FLUX, METEOROLOGICAL, AND SOIL TEMPERATURE DATA

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### Summary:

The BOREAS TF-03 team collected tower flux, surface meteorological, and soil temperature data at the BOREAS NSA-OBS site continuously from the March 1994 through October 1996.

A guide document which includes more information about this data set can be found at [http://daac.ornl.gov/daacdata/boreas/TF/tf3tflxd/comp/TF03\\_Flux\\_Met.txt](http://daac.ornl.gov/daacdata/boreas/TF/tf3tflxd/comp/TF03_Flux_Met.txt).

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

### Data Citation

Cite this data set as follows (citation revised on July 17, 2003):

Sutton, D., M. L. Goulden, A. Bazzaz, B. C. Daube, S.-M. Fan, J. W. Munger, and S. Wofsy. 1998. BOREAS TF-03 NSA-OBS Tower Flux, Meteorological, and Soil Temperature Data. Data set. Available on-line [ <http://daac.ornl.gov>] from Oak Ridge National Laboratory Distributed Active Archive Center, Oak Ridge, Tennessee, U.S.A. doi:10.3334/ORNLDAAC/361.

### References:

Goulden, M.L., B.C. Daube, S.M. Fan, D.J. Sutton, A. Bazzaz, J.W. Munger, and S.C. Wofsy. 1997. Physiological responses of a black spruce forest to weather, *Journal of Geophysical Research* 102 (D24):28987,28996.

Kaimal, J.C. and J.E. Gaynor. 1991. Another look at sonic thermometry. *Boundary Layer Meteorology*. 56:401-410.

Kaimal, J.C., J.E. Gaynor, H.A. Zimmerman, and G.A. Zimmerman. 1990. Minimizing flow distortion errors in a sonic anemometer. *Boundary Layer Meteorology*. 53:103-115.

Schotanus, P., F.T.M. Nieuwstadt, and H.A.R. De Bruin. 1983. Temperature measurement with a sonic anemometer and its application to heat and moisture fluxes. *Boundary-Layer Meteorology*. 26: 81-93.

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*.

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.J., F.G. Hall, R.D. Kelly, A. Black, D. Baldocchi, J. Berry, M. Ryan, K.J. Ranson, P.M. Crill, D.P. Lettenmaier, H. Margolis, J. Cihlar, J. Newcomer, D. Fitzjarrald, P.G. Jarvis, S.T. Gower, D. Halliwell, D. Williams, B. Goodison, D.E. Wickland, and F.E. Guertin. 1997. BOREAS in 1997: Experiment overview, scientific results, and future directions. *Journal of Geophysical Research*. 102(D24):28731-28770.

## 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/TF/tf3tflxd/comp/tf3tflxd.def>

## Document Information:

23-Sept-1998 (data set citation revised on 11-Sep-2002)

### Document Review Date:

23-Sept-1998

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### Document URL:

<http://daac.ornl.gov>



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