

BOREAS TF-04 CO₂ AND CH₄ CHAMBER FLUX DATA FROM THE SSA

Summary:

The BOREAS TF-04 team measured fluxes of carbon dioxide (CO₂) and methane (CH₄) across the soil-air interface in four ages of jack pine forest at the Southern Study Area of the Boreal Ecosystem Atmosphere Study (BOREAS) during August 1993 to March 1995. Gross and net flux of CO₂ and flux of CH₄ between soil and air are presented for 24 chamber sites in mature jack pine forest, 20-year old, 4- year old, and clear cut areas.

A guide document which includes more information about this data set can be found at http://daac.ornl.gov/boreas/TF/tf4ssafx/comp/TF04_Chamberflux.txt.

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

Data Citation

Cite this data set as follows:

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References:

Sellers, P. and F. Hall. 1994. Boreal Ecosystem-Atmosphere Study: Experiment Plan. Version 1994-3.0, NASA BOREAS Report (EXPLAN 94).

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, and K.F. Huemmrich. 1996. Boreal Ecosystem-Atmosphere Study: 1994 Operations. NASA BOREAS Report (OPS DOC 94).

Sellers, P. and F. Hall. 1996. Boreal Ecosystem-Atmosphere Study: Experiment Plan. Version 1996-2.0, NASA BOREAS Report (EXPLAN 96).

Sellers, P., F. Hall, and K.F. Huemmrich. 1997. Boreal Ecosystem-Atmosphere Study: 1996 Operations. NASA BOREAS Report (OPS DOC 96).

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): 28,731-28,770.

Striegl, R.G., and Wickland, K.P., 1998, effects of a clear-cut harvest on soil respiration in a jack-pine lichen woodland, *Can. Jour. Forest Research* 28:534-539.

Wickland, K.P., and Striegl, R.G., 1997, Measurements of soil carbon dioxide and methane concentrations and fluxes, and soil properties at four ages of jack pine forest in the Southern Study Area of the Boreal Ecosystem Atmosphere Study, Saskatchewan, Canada, 1993-1995. U.S. Geological Survey Open-File Report. 97-49.

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/boreas/TF/tf4ssafx/comp/tf4ssafx.def>

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