

BOREAS TGB-12 SOIL CARBON AND FLUX DATA OF NSA-MSA IN RASTER FORMAT

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Summary:

The BOREAS TGB-12 team made measurements of soil carbon inventories, carbon concentration in soil gases, and rates of soil respiration at several sites. This data set provides: (1) estimates of soil carbon stocks by horizon based on soil survey data and analyses of data from individual soil profiles; (2) estimates of soil carbon fluxes based on stocks, fire history, drainage, and soil C inputs and decomposition constants based on field work using radiocarbon analyses; (3) fire history data estimating age ranges of time since last fire; (4) a raster image and an associated soils table file from which area-weighted maps of soil carbon and fluxes and fire history may be generated. This data set was created from raster files, soil polygon data files, and detailed lab analysis of soils data that were received from Hugo Veldhuis who did the original mapping in the field during 1994. Also used were soils data from Susan Trumbore and Jennifer Harden (BOREAS TGB-12). The binary raster file covers a 733 km² area within the NSA-MSA.

A document that includes more information about this data set can be found at http://daac.ornl.gov/boreas/TGB/tgb12cfd/comp/TGB12_Soil_Carbon_Map.txt.

This data set was prepared as part of a Master of Science (M.S.) thesis (Rapalee 1999b). The file containing the thesis and additional information about the thesis is provided in the companion file http://daac.ornl.gov/boreas/TGB/tgb12cfd/comp/rapalee_thesis.tar.gz.

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

Data Citation

Cite this data set as follows:

Rapalee, G., E. A. Davidson, J. W. Harden, S. E. Trumbore, and H. Veldhuis. 2000. BOREAS TGB-12 Soil Carbon and Flux Data of NSA-MSA in Raster Format. 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/517](https://doi.org/10.3334/ORNLDAAC/517).

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Data Format:

There is no data format file for this dataset.

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