BOREAS TE-09 IN SITU DIURNAL GAS EXCHANGE OF NSA BOREAL FOREST STANDS

Get Data

Summary:

The gas exchange data of the Boreal Ecosystem-Atmosphere Study (BOREAS) Northern Study Area (NSA) were collected to characterize diurnal gas exchange and water potential of two canopy levels of five boreal canopy cover types: young and old jack pine (Pinus banksiana Lamb.), old aspen (Populus tremuloides Michx.), and lowland and upland black spruce (Picea mariana (Mill) B.S.P.). These data were collected between 27-May-1994 and 17-Sep-1994. The purpose of this study was threefold: 1) to provide in situ gas exchange data that will be used to validate models of photosynthetic responses to light, temperature, and carbon dioxide (CO2); 2) to compare the photosynthetic responses of different tree crown levels (upper and lower), and 3) to characterize the diurnal water potential curves for these sites to get an indication of the extent to which soil moisture supply to leaves might be limiting photosynthesis.

A guide document which includes more information about this data set can be found at http://daac.ornl.gov/daacdata/boreas/TE/te09gxda/comp/TE09_Gas_Exchange.txt .

ORNL DAAC maintains information on the entire BOREAS Project.

Data Citation

Cite this data set as follows:

Margolis, H., M. Coyea, and Q. Dang. 1998. BOREAS TE-09 In Situ Diurnal Gas Exchange of NSA Boreal Forest Stands. Data set. Available on-line [http://www.daac.ornl.gov] from Oak Ridge National Laboratory Distributed Active Archive Center, Oak Ridge National Laboratory, Oak Ridge, Tennessee, U.S.A. doi:10.3334/ORNLDAAC/337.

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Data Format:

For information on Parameter/Variable Names, Variable Description/Definition, Units of Measurement, and Data File Format see the companion file http://www.daac.ornl.gov/daacdata/boreas/TE/te09gxda/comp/te09gxda.def.

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