

# BOREAS TE-18 GEOSAIL CANOPY REFLECTANCE MODEL

## Summary:

The SAIL (Scattering from Arbitrarily Inclined Leaves) model was combined with the Jasinski geometric model to simulate canopy spectral reflectance and absorption of photosynthetically active radiation for discontinuous canopies. This model is called the GeoSail model. Tree shapes are described by cylinders or cones distributed over a plane. Spectral reflectance and transmittance of trees are calculated from the SAIL model to determine the reflectance of the three components used in the geometric model: illuminated canopy, illuminated background, shadowed canopy, and shadowed background. The model code is Fortran, sample input and output data are provided in ASCII text files.

A guide document which includes more information about this data set can be found at [http://daac.ornl.gov/boreas/TE/te18geos/comp/TE18\\_GeoSail.txt](http://daac.ornl.gov/boreas/TE/te18geos/comp/TE18_GeoSail.txt).

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

## Data Citation

Cite this data set as follows:

Huemmrich, K. F. 2000. BOREAS TE-18 GeoSail Canopy Reflectance Model. 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/532](https://doi.org/10.3334/ORNLDAAC/532).

## References:

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## **Data Format:**

There is no data format file for this dataset.

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