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# BOREAS LANDSAT TM LEVEL-3P IMAGERY: GEOCODED AND SCALED AT-SENSOR RADIANCE

## Get Data

### Summary:

For BOREAS, the level-3p Landsat TM data were used to supplement the level-3s Landsat TM products. Along with the other remotely sensed images, the Landsat TM images were collected in order to provide spatially extensive information over the primary study areas. This information includes radiant energy, detailed land cover, and biophysical parameter maps such as FPAR and LAI. Although very similar to the level-3s Landsat TM products, the level-3p images were processed with ground control information which improved the accuracy of the geographic coordinates provided. Geographically, the level-3p images cover the BOREAS NSA and SSA. Temporally, the four images cover the period of 20-Aug-1988 to 07-Jun-1994. Except for the 07-Jun-1994 image which contains 7 bands, the other three only contain 3 bands.

Companion files include (1) an image inventory listing to inform users of the images that are available and (2) example thumbnail images that may be viewed using a convenient viewer utility.

A guide document which includes more information about this data set can be found at [http://daac.ornl.gov/daacdata/boreas/STAFF/lm\\_ii3p/comp/LANDSAT\\_TM\\_L3P.txt](http://daac.ornl.gov/daacdata/boreas/STAFF/lm_ii3p/comp/LANDSAT_TM_L3P.txt).

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

### Data Citation

Cite this data set as follows (citation revised on October 29, 2002):

Newcomer, J. A., and J. Cihlar. 1999. BOREAS Landsat TM Level-3p Imagery: Geocoded and Scaled At-Sensor Radiance. ORNL DAAC, Oak Ridge, Tennessee, USA. <http://dx.doi.org/10.3334/ORNLDAAC/426>

### References:

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

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

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.

### Data Format:

For information about the image inventory dataset including Parameter/Variable Names, Variable Description/Definition, Units of Measurement, and Data File Format see this companion file [http://daac.ornl.gov/daacdata/boreas/STAFF/lm\\_ii3p/comp/lm\\_ii3p.def](http://daac.ornl.gov/daacdata/boreas/STAFF/lm_ii3p/comp/lm_ii3p.def)

## Document Information:

September 14, 1999 (data citation revised on September 30, 2002)

### Document Review Date:

September 14, 1999

### Document Curator:

[uso@daac.ornl.gov](mailto:uso@daac.ornl.gov)

### Document URL:

<http://daac.ornl.gov>



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