

BOREAS RSS-10 TOMS CIRCUMPOLAR ONE-DEGREE PAR IMAGES

Summary:

The BOREAS RSS-10 team investigated the magnitude of daily, seasonal, and yearly variations of PAR from ground and satellite observations. This data set contains satellite estimates of surface-incident photosynthetically active radiation (PAR, 400-700 nm, MJ m⁻²) at 1 degree spatial resolution. The spatial coverage is circumpolar from latitudes of 41 to 66 degrees N latitude. The temporal coverage is from May through September for years 1979 through 1989. Eleven-year statistics are also provided: mean, standard deviation, and coefficient of variation for 1979-1989. The PAR estimates were derived from the global gridded ultraviolet reflectivity data product (average of 360, 380 nm) from the Nimbus-7 Total Ozone Mapping Spectrometer (TOMS). Image mask data are provided for identifying the boreal forest zone, and ocean/land and snow/ice covered areas. The data are available as binary image format data files.

Companion files include example thumbnail images that may be viewed and the image data files downloaded using a convenient viewer utility.

A guide document which includes more information about this data set can be found at http://daac.ornl.gov/boreas/RSS/rss10tom/comp/RSS10_PAR_TOMS.txt.

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

Data Citation

Cite this data set as follows:

Dye, D. G., and B. Holben. 1999. BOREAS RSS-10 TOMS Circumpolar One-Degree PAR Images. 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/ORNLDAAAC/443](https://doi.org/10.3334/ORNLDAAAC/443).

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Document Information:

12-Oct-1999 (data citation revised on 26-Sep-2002)

Document Review Date:

12-Oct-1999

Document Curator:

webmaster@daac.ornl.gov

Document URL:

<http://daac.ornl.gov>