

Documentation Notes for Remote Sensing (RS) GIMMS NDVI Based Global Monthly ET at One-Degree Spatial Resolution from 1983 to 2006

Rev: October 21, 2010

(1) Variable: Global monthly land surface evapotranspiration (mm/month) with a spatial resolution of 1 degree. This data set is a spatially aggregated version of the global 8-km RS GIMMS NDVI based monthly ET data set

(ftp://ftp.ntsg.umd.edu/pub/data/global_monthly_ET/Global_8kmResolution/).

(2) Temporal extent: Monthly data for 1983 through 2006 inclusive.

(3) Spatial resolution: $1.0^{\circ} \times 1.0^{\circ}$.

(4) Geographic extent: The region covers from -180° to 180° longitudinally and from 90° to -90° latitudinally with a cell size of 1.0° .

(5) Data Format and Organization: ArcInfo ASCII Grid Format. Data of each month are saved in a single ASCII text file. Data of each year are zipped into a single zip file.

(6) Spatial Map of Mean Annual ET from 1983 to 2006

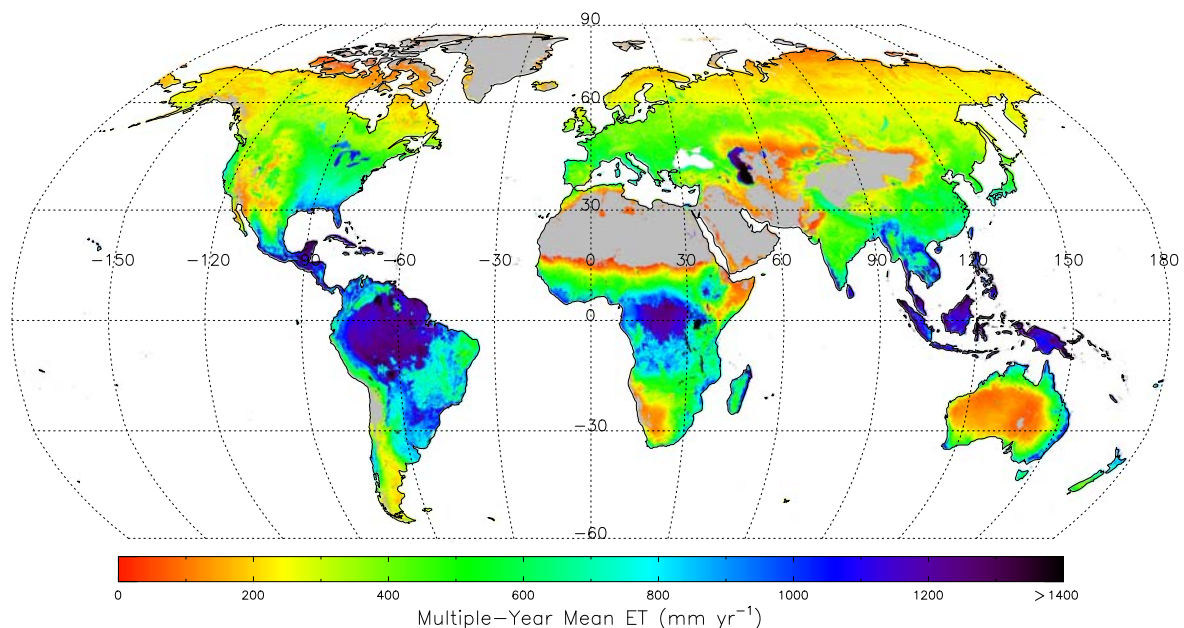


Fig.1 Spatial map of global multi-year (1983-2006) mean annual land surface ET.

(7) Validation of ET

Detailed comparison of this data set with site-level observations can be found in *Zhang et al. (2010)* and *Zhang et al. (2009)*.

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(9) References

1. Zhang, K., J.S. Kimball, R.R. Nemani and S.W. Running. A continuous satellite-derived global record of land surface evapotranspiration from 1983 to 2006 (2010), *Water Resources Research*, **46**, W09522, doi:10.1029/2009WR008800.

2. Zhang, K., J.S. Kimball, Q. Mu, L.A. Jones, S.J. Goetz and S.W. Running. Satellite based analysis of northern ET trends and associated changes in the regional water balance from 1983 to 2005 (2009), *Journal of Hydrology*, **379**, 92-110, 10.1016/j.jhydrol.2009.09.047.