

Response to reviewer 1#

Dear Dr. Bond-Lamberty,

Thank you very much for your suggestion and comments to improve the netcdf dataset. Based on your comments and suggestion, we revised the netcdf dataset carefully. Please see, below, our point-to-point response and changes in the netcdf dataset at: https://figshare.com/articles/Rh_720_360_1980_2016_nc/8882567.

Please do not hesitate to let us know if you have additional questions and/or comments.

Sincerely,

Xiaolu Tang, Shaohui Fan and Wunian Yang, on behalf of all co-authors.

The dataset described by this manuscript, located at

https://figshare.com/articles/Rh_720_360_1980_2016_nc/8882567, has some significant problems.

1. No units are given, either in the netcdf file or on the Figshare webpage.

Response: sorry! We added the unit ($\text{g C m}^{-2} \text{ yr}^{-1}$) both in Figshare webpage and the netcdf. Please see https://figshare.com/articles/Rh_720_360_1980_2016_nc/8882567:

2. Latitude appears to be inverted (i.e. mirrored around the equator).

Response: we checked the netcdf file using “brick” and “spplot” function in raster package in R (version 3.5.0) and Latitude was not inverted.

3. If the units are in $\text{gC/m}^2/\text{yr}$, as appears likely, note that the file includes no area variable (needed to scale to a global flux, for example).

Response: the unit ($\text{g C m}^{-2} \text{ yr}^{-1}$) both in Figshare webpage and the netcdf. A new file named “land area” in this study was upload to the figureshare as well.

4. Minor: RH is named "variable" in the file, and time is named "z", which is not particularly user-friendly.

Response: sorry! The variable in netcdf file was renamed “RH”, while time was renamed “Year”.

Please see https://figshare.com/articles/Rh_720_360_1980_2016_nc/8882567.