README_SABER_GravityWave_Data

Author: Dr. Brentha Thurairajah (brenthat@vt.edu)

Date written: 27 September 2018

The SABER gravity wave netcdf (.nc) files are named in the following format: "SABER GravityWave YYYY doysss doyeee.nc"

- 'YYYY' refers to the year (e.g. 2007 to 2014)
- 'sss' refers to the start day of year (doy)
- 'eee' refers to the end day of year (doy)

There are 11 SABER gravity wave files. For year 2007 the GW data is available separately for May, June, July and August. For years 2008-2014 the GW data is available as one file that includes May (doy 121/122 for leap year) – August (doy 243/244 for leap year) data.

The data includes the following parameters and their [dimensions]:

- 1. z altitude (km)[nz]
- 2. date day of year as doy [nday]
- 3. lat latitude [nlat]
- 4. gw amp gravity wave amplitude (k) [nz,nlat, nday]
- 5. gw_mf gravity wave momentum [hPa] [nz, nlat, nday]

The dimensions are

- 1. nz no of altitude points
- 2. nlat number of latitudes
- 3. nday number of days