SOP: UGGA Data Correction using ‘FluxCalR’

<https://github.com/junbinzhao/FluxCalR>

Created: 19 Feb 2021, AG Hounshell

Raw data, data correction scripts, and corrected data can be found on the Carey Lab Github in the Reservoirs Repo (<https://github.com/CareyLabVT/Reservoirs/tree/master/Data/DataNotYetUploadedToEDI/UGGA>).

There’s also still a TON of data on Dropbox (link from RPM: <https://www.dropbox.com/sh/nhzw3keaxyq24zi/AADoLUO3yR5hMoSHOVcMhc-6a?dl=0>) which we’ll need to migrate over. Started doing this and then realized it was going to take FOREVER. Open to suggestions on how best to handle this….

Note: I’m going to tailor this SOP for correcting annual data (i.e., correcting data for all 2017, 2018, and 2019) and will likely need to be updated when collecting contemporary data : )

1. I would suggest separating the data by year (2017, 2018, 2019) in the GitHub repo with a ‘RawData’ folder (contains all the raw data folders downloaded from the UGGA) and a ‘TextFiles’ folder which contains all the text files that you’ll use for data correction.
2. From the raw data file downloaded for each UGGA day, copy and paste the text file ending in ‘\_f00000.txt’ into the ‘TextFiles’ folder.
3. Start a new script following the ‘FluxCalR\_2020.R’ script and save it under the same ‘TextFiles’ folder. This is the script you will use to import and correct all of the UGGA text files.
4. Then just follow the script : )
5. You’ll probably need to use historical field sheets to double check the reservoir and location (\*should\* be site 50) for all dates.
6. Eventually, we’ll want to concatenate all years (2017-2020) and publish to EDI!
7. Draft of EDI metadata can be found here: <https://docs.google.com/document/d/14TE6U2diw2zp0MT9xebvh5WFwPhjOny_/edit> (this will def need to be updated now that we’re adding ‘historical’ data : )