

AmeriFlux Meeting notes for 2021-10-26

Date

\$currentDateLozenge

Attendees

Yong Wook Kim

Bethany Blakely

Katie Bowman

Rob Kooper

Minu Mathew

Agenda

1. Running EddyPro GUI Error -
 - a. **Fatal error(20)>** Encountered while interpreting a timestamp template.

Fatal error(20)> It may apply to retrieval of timestamps from the "Raw file name format"

Fatal error(20)> or the biomet or dynamic metadata records."

Fatal error(20)> Program execution aborted.
 - i. Change TS to yyyy-mm-dd HH:MM
2. Comparison of format.py output and Formatted Master Met data output sent by Katie.
 - a. Formatted Master Met data has NAN and not -9999.0.
 - i. PyFluxPro needs NAN as fill values. All -9999.0 should be changed to NAN.
3. Number of decimal places for numerical values in the output file of format.py
 - a. No prob as of now.
4. U_Avg and V_Avg fields have no units in raw met file. These 2 blank cells are populated with -9999.0 after format.py
 - a. The fill value is correct.
 - b. Bethany will check the units for these 2 variables.
5. Is -9999.0 to be inputted as an int or string?
 - a. Should be an int.
6. Should all values be converted to numerical?
 - a. Should be in numbers. However, EddyPro reads inputs as of now (string)
7. Variables like MoistureA_Avg in output file coz the met variable key is absent in soil key.xlsx sheet.
 - a. Not used in EddyPro and PyFluxPro. Can be absent in the formatted met data file.
8. WindSpeed and WindDir - even if these fields are present in 'output_eddypro.csv' file for 2021, these fields will be ignored and EddyPro reads these variables from ghg file. Hence no need to drop these columns. Correct?
 - a. That is correct.
9. Function to check for required fields -
 - a. what are the required fields in 'output_eddypro.csv' file. – multiple columns for soil temp and soil moisture - how to check for n number of columns?
 - i. Global radiation, SWin, - from settings in EddyPro. – check the dataset if these variables are present in the dataframe.
 - ii. Check with Bethany :
 - EddyPro Basic Settings Select Items for Flux Computation : CO2, H2O, Ambient Temp, Ambient Pressure, Ambient Relative Humidity (*Ah_fromRH*), Global Radiation, Longwave Incoming Radiation (*LWin*), Photosynthetically Active Radiation (*PPFD*, *PPFDr*)
 - b. What are the required fields in ghg file? How to test for the same?
 - i. Do not check for anything in ghg file
10. What should be done if there are missing timestamps in precip data?

Action items

- ✓ 02 Nov 2021 Bethany Blakely missing timestamps in precip data