

AmeriFlux Meeting notes for 2022-09-28

Date

\$currentDateLozenge

Attendees

Yong Wook Kim

Bethany Blakely

Rob Kooper

Minu Mathew

Taylor Pederson

Agenda

1. Run for 2020 whole year run
2. AmeriFlux site submission
3. Some 2020 met variables are not used in Ameriflux submission. Eg : Rs_net_Avg -> 'NetRs_Avg' and RI_net_Avg -> NetRI_Avg. Should these names be changed?
 - a. Leave untouched.
4. Some met variables are renamed using Ameriflux-Mainstem-Key . Eg : CM3Up_Avg-> 'SWDn_Avg', 'CM3Dn_Avg'-> 'SWUp_Avg', Solar_Wm2_Avg -> SWDn_Avg (Currently this is being changed in L1_ameriflux.txt). Are there occasions where both of these names are present in raw met file ?
 - a. CM3Up_Avg is present from Jan1 to May 1. SWDn_Avg is present from May 2 to Dec 31 for the same year / in the same raw met file.
 - b. If we continue to use the current process, when this situation happens, we will get L1_ameriflux as below:
 - [[SWIN]]
 - [[[xl]]] name = CM3Up_Avg
 - sheet = met_data_30
 - [[SWIN]]
 - [[[xl]]] name = SWDn_Avg
 - sheet = met_data_30
 - The current process reads input L1 variable by variable. For each variable, it checks the xl section and checks the name and sheet. Verifies if the variable name is in the given sheet. If yes, it looks for the variable's ameriflux label from Ameriflux-Mainstem-Key file. Write to L1 output file.
 - The above generated L1 will have duplicate variables. Currently the process does not write the second SWIN to output file.
 - c. If the above is not feasible,
 - i. Solution : We can change in the raw met file , during the met_merger. But we will need to changes these via code / have another key file (additional input file).
 - ii. Solution (agreed) : Have a user input excel file in met merger gui. Have a checkbox of "Is there variable names to be changed". If check box is yes, ask for variable name change file.
5. Soil heat flux calculation (Guide to Processing Flux data with eddypro and pyfluxpro document), is it shg_mv_Avg or shf_mv_Avg?
 - a. "If soil heat flux is recorded in mV [shg_mv_Avg], that value will need to be multiplied with the shf calibration [shf_cal_Avg] value and entered in a new column title [shf_1_Avg] "shf_1_Avg=[shf_mv_Avg(1)]*[shf_cal_Avg(1)]"
Check for shf_Avg(1) and shf_Avg(2) if exists, if not check if shg_mv_Avg exists and do this. "
 - b. shf_mv_Avg is correct.
6. Site name change in outputformat.py :
 - a. Miscanthus control: US-UiF
 - b. Maize Control: US-UiG
 - c. Miscanthus Basalt: US-UiB
 - d. Maize Basalt: US-UiC
 - e. Sorghum: US-UiE

Action items

