4STAR codes first install

Starting with codes from github, what to do:

Legend: one time only, each time, extra info

1) Get github codes at www.github.com/samuelleblanc/4STAR_codes, under 'clone or download' button, select the 'Download ZIP'
2) Create new local directory and unpack zipped folder
3) Load matlab: select add to path, add with subfolders. Select the main 4STAR_codes folder from the directory you've just created.
4) Type in allstarmat
5) Select location of raw star files: select the folder with data - doesn't matter
6) Select location of allstarmat files: Select under the 4STAR_codes directory, the 'data_folder'. ** matters **
7) Select location of starsun files: select the location where you will be saving the starsun files - usually can be the same as the rawstarmat - doesn't matter
8) Next pick files: select all .dat files from a day
9) Next select location to save file: can be anywhere - sometimes in the same data directory
10) Allstarmat codes runs through all files and ensure formatting: will say 'deleted altered copy of … ' this is normal and does not impact the original files. Will warn if files are empty. And will return the structure of combined different raw files onto the mat file, and their timing. - creates a 4STAR*_yyyymmddstar.mat file containing all the raw file information.
11) Type in and run starsun
12) Select file created by allstarmat: the 4STAR*_yyyymmddstar.mat
13) Select folder to save file at
14) Select location of starinfo files: Select under the 4STAR_codes directory, the 'data_folder'. ** matters **
15) Select location of AATS_xsect: Select under the 4STAR_codes directory, the 'AATS_codes'. ** matters **
16) Starsun will run, but cause an error under the airmasses and open a new starinfo file. Enter the takeoff and landing times into the s.flight column in the matlab format. If there is some ground measurements for that day enter those in the format. Save file.
17) Type in and run starsun - If gas retrievals is not needed (can take around 30 minutes, depending on length of flight) edit the update_toggle.m, change the toggle_out.runwatervapor = false; rerun starsun if needed - creates starsun.mat, starsun_for_starflag.mat, starsun_small.mat
18) Type in and run Quicklooks_4STAR
19) Select the starsun.mat file and then the star.mat file.

Flagging flight:
1) If first run, edit starflag, line 183, to add your name and initials in the codes of this region
2) Type in and run staflag
3) Select your name, then select option 4 (for no previous flags and user defined prescreening)
4) Screen data