How to use SimpleWingTracking\_wholedir and Ctrax2JAABA\_wholedir scripts

**Application**: The purpose of the SimpleWingTracking\_wholedir script is to track the wing movement AFTER tracking the flies with Ctrax. The script can do this for several videos without manually restarting the script for each individual file (however, it doesn’t run several trackings in parallel).

The purpose of the Ctrax2JAABA\_wholedir script is to prepare the output of the SimpleWingTracking script for import into JAABA and do this for several videos.

**How to use:**

1. convert your video to ufmf file format.
2. Track (and, if necessary, correct) in Ctrax
3. Make a folder containing all the Ctrax output data you would like to process. This folder should contain:

one subfolder per experiment named by the experiment name (or any unique identifier)

containing:

-the movie named movie.ufmf

-the annotation file named movie.ufmf.ann

-the tracking file named registered\_trx.mat

-a parameters file for wing tracking parameters named WingTrackingParameters.txt

1. Add to your MATLAB search path the folders misc and filehandling in the JAABA-master directory (but DO NOT add the whole JAABA master directory)
2. Add to your search path the path to the simplewing tracker
3. Type in the MATLAB command window: SimpleWingTracking\_wholedir(input\_directory)

Where input\_directory is the full path to the folder you want to track

1. Copy the Ctrax2JAABA\_wholedir script to the folder perframe in the JAABA-master folder and go to the folder containing the Ctrax2JAABA\_wholedir script in MATLAB
2. Type Ctrax2JAABA\_wholedir(input\_directory, output\_directory)