Minutes 11/21

* Zach presents our current interface
  + Features:
    - Displays plot and labels
    - Buttons to open data, start labeling, and save labeled data
    - Can scale and pan on time and voltage axes
    - Can modify labels and add/remove transitions
  + Dr. Reif inquired about vertical scalability, which we have.
  + Dr. Cooper would like to see an indicator of compression level, but enjoys the increased simplicity of zooming without navigating the compression menu.
  + Add user preferences for zoom, color, etc.
  + Dr. Reif asked about how we’d view comments–not done yet but it is on the list
  + Dr. Cooper asks for an improvement in comment viewing, and specifies WinDaq’s “two window” system, where clicking on a comment shows a panel containing a list of comments.
    - Liaisons would prefer for comments to be marked with their number, or even better to correspond comments in the panel to their timestamps
  + Zach specifies that our output files will be in a non-WinDaq file (probably .csv)
  + Zach asks for expected csv format–Drs. Use csvs, notepad files. Used with SAS, R, Excel, etc. Just match files sent to us.
  + Dr. Reif asks for stats summary, time per label, amplitude, peak counting, etc. We should ask for a specific list of stats to show.
  + Dr. Cooper emphasizes peak counting/amplitude issues with blood feeders
* Dr. Reif checks up on status of ML model decision
  + We’ll be continuing to perfect our model and try different approaches into next semester, but are able to attach any of our currently working models to the GUI for testing (e.g. for our site visit)
  + Dr. Reif mentions publication and remembering to allocate some time to that. We should look into journals/locations to publish our work. Prof. Hope said he’d think about possibilities.
* Site visit
  + We propose the last week of February or the first week of March, according to liaison availability
  + Wouldn’t be able to visit Auburn during late Feb/early March, would have to be late March or early April
  + Visit with Dr. Backus–we’d probably work with sharpshooters, if we go to Auburn it’d be mosquito-oriented
  + We have the responsibility to decide what we want our site visit to look–we’ll come to Dec. 6th’s meeting with a vision
* Final points of discussion
  + Dr. Reif asks whether we’ve used the adis data
  + Dr. Reif offers to get us some biting midge data, if we’re interested
    - Mosquito peak counting code does terribly on midges, there are some interesting differences that could be cool to explore
  + Dr. Reif asks about our status on the stretch goal to expand to other species
    - Milo: retraining (our model on other species data) is a physically reasonable thing to do, but the models we’re using might not be best suited for other species. But we are going to continue to find the best model for mosquito data, and if it works when retrained on other species, that’s great. But we would rather achieve greatest performance for mosquitoes than greatest generalisability.
    - Describing pros and cons of each model option should be our number one priority so we can make a decision with consideration for mosquito fit and generalisability. We should do some testing of our models trained on other species data, just to see what happens.