

FIRESTING PIPELINE

KNIEF.CODES



Raw Data Files

The .txt files generated by Firestings include a lot of unnecessary information and the data collected comes with bulky headers.



Data Clean Up

The first step of this pipeline removes the text-heavy header of the .txt files so that only data remains in the text files. It then renames the headers to more succinct variable names.



Data Selection

Next, you can select the columns you would like to keep and use for further analysis. This is currently done via a simple code edit, but a UI is in the works.



Collating Data

In the last step of the front-end of this pipeline, data from all channels are collated into one easy to use .txt file that is set-up for immediate use in LabChart.



Lab Chart

The data is now ready to be read into Lab Chart and curves can be selected. This step must remain manual unfortunately. Make sure to choose "Space" as the delimiter.



Calculating MR

Next, an automated R script iterates over all LabChart files and calculates multiple metric of metabolic rate (SMR, MR, etc.) as needed.



Hypthesis Testing

Lastly, a template escript for hypothesis testing is available that can be a basis for common hypothesis testing.



Optional UI

If you would rather not dig through the code, a simple UI that lets you put in your root folder, desired data columns and other pipeline parameters is being constructed.