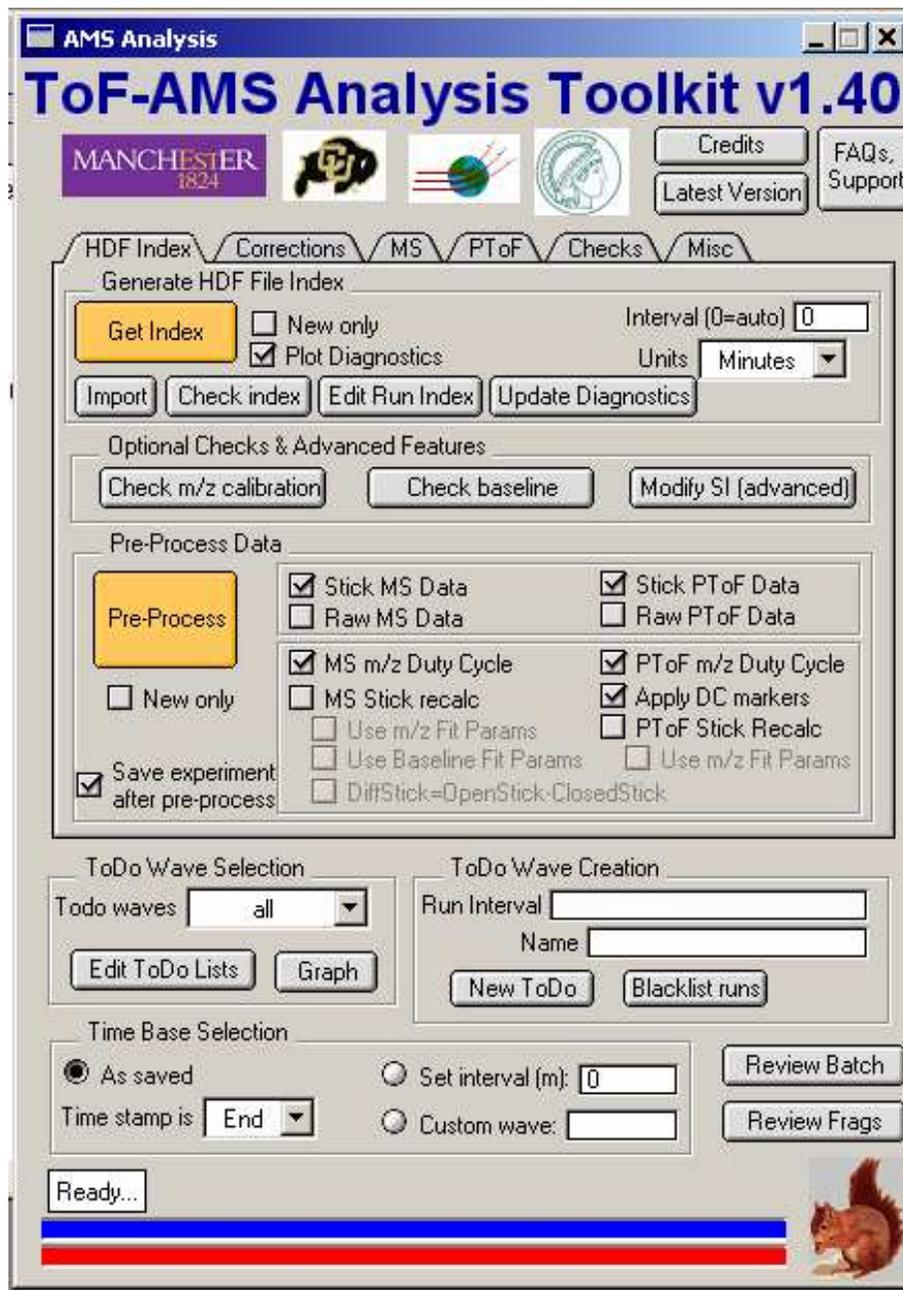


A very brief summary of running the AMS Analysis Toolkit (Squirrel) and creating a power point with 'quick look' snapshots of the data

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Steps to take a quick look at AMS data in Squirrel:

- 0) Install Igor by Wavemetrics <http://www.wavemetrics.com/>
- 1) Upgrade Igor to 6.1 or higher. Then:
 - Go to the folder C:\Program Files\WaveMetrics\Igor Pro Folder\More Extensions\File Loaders and find the files:
 - HDF5.xop
 - HDF5 Help.ihf
 - Make shortcuts to these two files.
 - Move the shortcuts to the folder C:\Program Files\WaveMetrics\Igor Pro Folder\Igor Extensions (or similar structure on a Mac). This will allow Igor to find the functions to load the hdf data properly.
- 2) Download Squirrel 1.49 from:
<http://cires.colorado.edu/jimenez-group/ToFAMSResources/ToFSoftware/index.html#Analysis2>
Contact any AMS user or Aerodyne Research for the username and password. Specifically, you can email sueper@aerodyne.com for the credentials.
- 3) Double click on ToF_AMS_Analysis_v1_49.pxt to start the program. You should see the panel on the next page.



“Squirrel” Analysis Software

(SeQUential Igor data RetRIeval)

Steps for brand-new users to create the major graphs that show overall characteristics of AMS data, summarized in a ppt.

- Put the hdf files for only one or two days in a folder.
- Click on GetIndex. Enter the pathname for the folder where your hdf files are. It is best to start with one or two days worth of data in the folder, so the experiment does not get too big.
- Look at the diagnostics panel that will pop up. Make a copy of the diagnostics graph and put it in a powerpoint file (Ctrl-C, Ctrl-V will work).
- Click on Pre-Process.
- Go to the MS tab. Uncheck Use MS AB correction.
- Click the Calculate button under Time Series. This will give you mass loading vs time for the listed species. Make a copy of the graph and put it in the powerpoint file.
- Click the Calculate button under Average Mass Spectrum. This will give you the average mass spectrum for the entire time period, colored by species. Make a copy of the graph and put it in the powerpoint file.
- Go to the PToF tab. Uncheck Use MS AB correction.
- Go back to the Time Series graph and look for a time period with high mass loadings. Left click on the graph and drag the box across the high mass loading times. Right click in the box and drop down to New ToDo Wave, and over to Simple. This will put the run numbers for the time period you have selected in the ToDo Wave Creation box. Pick a name and hit New ToDo.
- Now go back to the PToF tab. Click on Calculate Size Distribution. Copy the graph and put it in the powerpoint file.

If you are completely confused about your AMS data this ppt can be sent to sueper@aerodyne.com for reassurance or advice.