

# Main Analysis Steps :

```
test=HistPlotter();
```

1) Load in tracked .spt datafiles you would like to analyze. You can select multiple files.

2) Determine if you would like to analyze each file individually or group them together. Note that you can select some files, add them, and then search again and add more.

3) If you choose to 'Group Files' you must give the group a name. Default is GroupName

4) Default save directory is subdirectory of the directory of the .spt file titled 'TrackLengthGroups'. Change this here if manually, or search for an existing directory using the button if you would like a different save directory

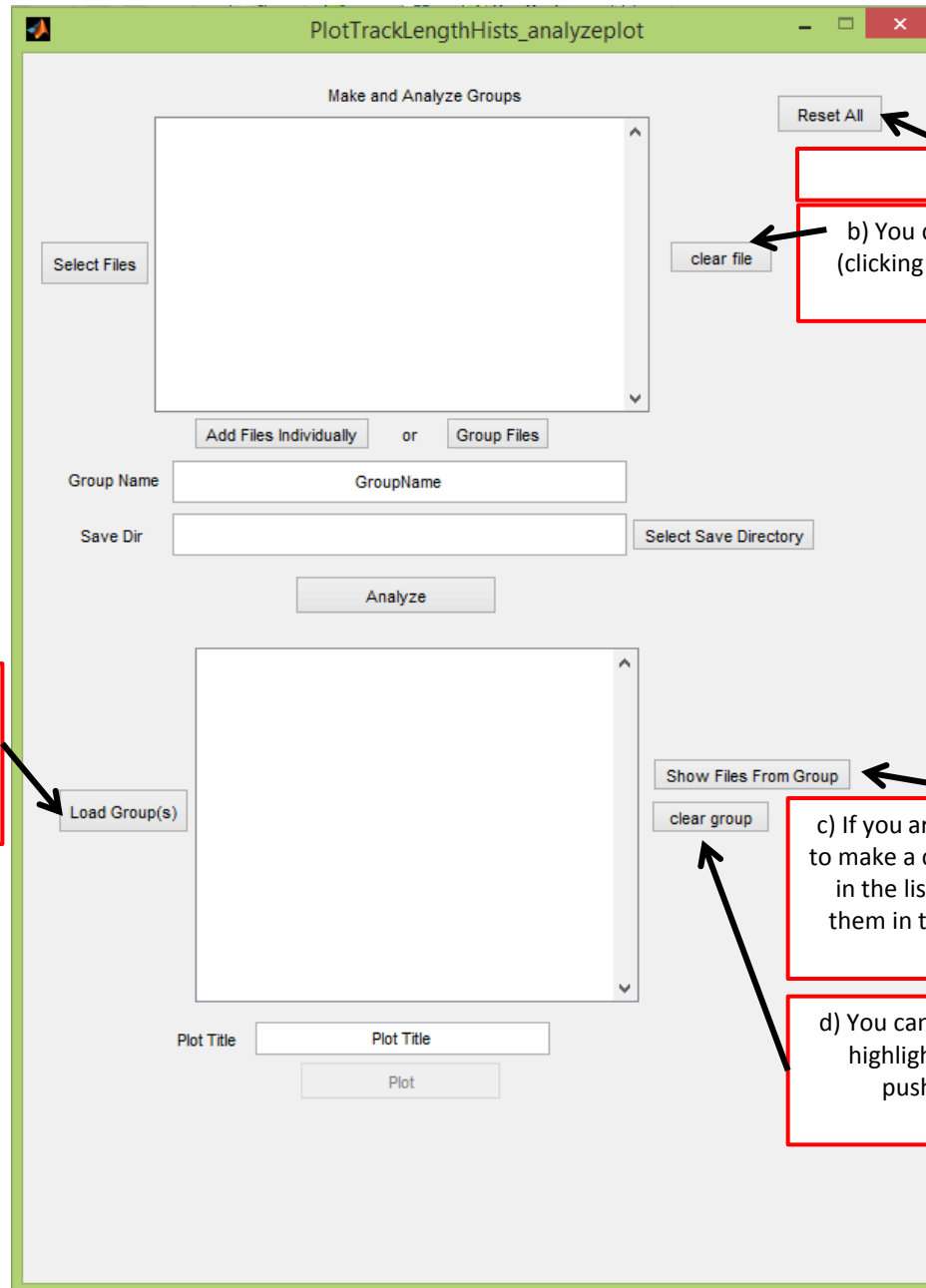
5) Click the 'Analyze' button to extract the track lengths. This will create and save a file in the Save Dir titled with the GroupName or the original file name if 'Add Files Individually' was used.

6) Select a title for the plot. This will also be the saved figure name.

7) Plots all the data groups/files listed in the listbox above. Note that this is only available when there are analyzed files in the list box- not before the 'Analyze' has been run.

The screenshot shows a software window titled "PlotTrackLengthHists\_analyzeplot". The window contains a "Make and Analyze Groups" section with a large listbox for files. To the left of the listbox is a "Select Files" button. To the right are "Reset All" and "clear file" buttons. Below the listbox are "Add Files Individually" and "Group Files" buttons, separated by "or". Below these are "Group Name" and "Save Dir" text boxes, with a "Select Save Directory" button to the right. An "Analyze" button is centered below these fields. At the bottom left is a "Load Group(s)" button. To the right of a second listbox are "Show Files From Group" and "clear group" buttons. At the bottom are "Plot Title" and "Plot" buttons. Arrows from numbered text boxes point to various elements: 1) points to "Select Files"; 2) points to the "Add Files Individually" / "Group Files" area; 3) points to the "Group Name" text box; 4) points to the "Select Save Directory" button; 5) points to the "Analyze" button; 6) points to the "Plot Title" text box; 7) points to the "Plot" button.

# Extra Features



a) This resets everything.

b) You can remove a file by highlighting it (clicking it in the list) and pushing the 'clear file' button.

e) You can load in previously analyzed datasets here for plotting. This is a little buggy currently if you have files you just analyzed in the listbox and then try and add more. Hopefully I'll fix this soon.

c) If you are curious which .spt files were used to make a certain grouping, selecting the group in the list and pressing this button displays them in the top list box. Note this is an easy way to modify groups.

d) You can remove an analyzed group/file by highlighting it (clicking it in the list) and pushing the 'clear group' button.

# Everything Together

The image shows a software window titled "PlotTrackLengthHists\_analyzeplot" with a light green border. The window contains a "Make and Analyze Groups" section with a large listbox at the top. Below the listbox are buttons for "Add Files Individually" and "Group Files", separated by an "or" label. Further down are input fields for "Group Name" (containing "GroupName") and "Save Dir", with a "Select Save Directory" button to the right. An "Analyze" button is centered below these fields. At the bottom of the window is another listbox, and below it are input fields for "Plot Title" (containing "Plot Title") and a "Plot" button. On the right side of the window, there are several buttons: "Reset All" at the top, "clear file" below it, "Show Files From Group" and "clear group" further down, and "Load Group(s)" on the left side of the bottom listbox. Arrows point from numbered text boxes to these various UI elements.

**1)** Load in tracked .spt datafiles you would like to analyze. You can select multiple files.

**2)** Determine if you would like to analyze each file individually or group them together. Note that you can select some files, add them, and then search again and add more.

**3)** If you choose to 'Group Files' you must give the group a name. Default is GroupName

**4)** Default save directory is subdirectory of the directory of the .spt file titled 'TrackLengthGroups'. Change this here if manually, or search for an existing directory using the button if you would like a different save directory

**5)** Click the 'Analyze' button to extract the track lengths. This will create and save a file in the Save Dir titled with the GroupName or the original file name if 'Add Files Individually' was used.

**6)** Select a title for the plot. This will also be the saved figure name.

**7)** Plots all the data groups/files listed in the listbox above. Note that this is only available when there are analyzed files in the list box - not before the 'Analyze' has been run.

a) This resets everything.

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