plusTipGroupAnalysis

This document explains how to use the plusTipGroupAnalysis interface.
1) Set up some groups for analysis
2) Run analysis function

CONTENTS

Select project(s)

This step allows you to choose one or more projects (i.e. roi_1 folders) for analysis. You may analyze many movies as a batch, provided they should use the same control parameter set.
If "Load projList" is checked, you will be asked to select one or more projList.mat files containing the directory paths to various projects you have previously created. This is a shortcut, as generating the project list can be time-consuming with large directory trees.
The projList.mat file is generated by the getProj function, which is called during project setup from plusTipAnalysis. You can also run getProj from the command line to generate more specific project lists. (see function header for details.) If "Load projList" is unchecked, you will select a parent directory containing previously-created projects.
If "Narrow down list" is checked, a window will pop up asking for one or more search strings. These are strings of characters that can be used to narrow down the number of projects you have to scroll through when selecting from a long list. For example, if "ctrl" appears anywhere in the file path to your control movies, you may enter "ctrl" into the search string list. Only those projects matching all the query strings will appear. If "Narrow down list" is unchecked, this step is bypassed and all the projects will appear in the list.
From the resultant list of projects, select one or more and use the arrow to move them from the left to the right. The selected projects will be loaded into the Matlab workspace as a cell array in case you want to reference them.

 Groups of selected projects can be created using the "Create Group(s)" button. The output is a file called "groupList," which is used by the Quadrant Scatter Plot tool (batch mode) and some stand-alone functions.
 If your data is arranged in a data hierarchy such that projects from different groups are stored at the same level, you may generate groups automatically by checking "Auto group from hierarchy." You will be prompted to select which levels of the directory tree should be used to create unique group names. If this option is unchecked, you will be prompted to choose groups of projects and name them. Avoid using spaces and hyphens in the group names.
 The "Create Group(s)" button calls plusTipPickGroups.m.

Pool data from groups

Pool data within groups: ss

Save distribution as text files:

Remove tracks at the beginning or end of movie:

Create histograms and boxplots:

Statistical analysis

Test stringency: value of the.

Detection method: this pop-up menu allows you to choose between the alternate detection methods. The default detection method uses a watershed-based algorithm and the second one performs an anisotropic Gaussian fit.