1. Automated raster, peri-event time, histogram and functional cell calculations.

‡ Dependency: dataread.m

‡ Recommended dataset: Events and cell images.

1. Run **>> RasterPlot(sampling rate, start time, end time, first cell, last cell) % Time in seconds. Cells must be in columnar order in the excel or text file. Example:**
   * 1. **RasterPlot(5,200,600,2,100,5);**
2. Select [Events] or [Events + Transients] (Transients will be used on the original plot only).
3. Locate the dataset(s). Transients are first if user preferred both data.
4. Events will be used on peri-event and histogram calculations. (Transients will be used on the original plot only).
5. User will be asked for image deposition (Y/N). If yes:
   1. Locate a single image file; e.g. ‘ic.tif’
   2. Program requires non-integer ending on the file path. Thus, user has to confirm the entered image path is correct. For example (‘ic2.tif’🡪 Correct as ‘ic’)
6. Illustration of (Original data in cell by time sorting, peri-event, ∑event histogram with respect to entered bin width and functional cell map.

‡ Color code for the functional cell map will be equivalent of #of events/cell for the given time course (start - end time).