# Centroid\_shifts.m Manual

‡This code is written to analyze two sets of images acquired by different time points to verify stable cells between sessions by applying cross-correlation and temporal coherence algorithms.

‡User must select a single image file subsequently from each reference and second day recordings with one of the extensions of .tif,.tiff or .jpeg. Selected filename must be consistent throughout all images and ends with no numerical parameters such as ‘Image.tif’. Other entries such as ‘Image1.tif’ will be returned to user to be corrected.

1. Select an image file in reference folder.
2. Repeat it for the second folder.
3. Ensure the filename:

- Leave blank and click ‘OK’ if the shown filename in the pop-up screen has no numerical ending: (‘ic’)

- If the shown filename in the pop-up screen is not correct ‘ic1’ 🡪 Enter the correct formation ‘ic’ then click ‘OK’.

1. Optional Entry: User can also add Ca2+ transients to run temporal coherence in spatially registered images (This option is only useful for divided concatenated datasets).