The script 'find\_roi.m' locates a query image inside a map image. The map and query image designations are assigned to the last two modified .tif images in the directory not named 'result.tif'. The cropped result is stored in 'result.tif'.

If you are running multiple query images with a single map, do not clear the MATLAB workspace between runs. After the SIFT keypoints for the map are generated during the first query, these keypoints can be reused for subsequent queries, which will substantially improve run time.

If 'map.tif' is larger than about 10000 x 10000 pixels, try scaling down or dividing the map into pieces to avoid running out of memory.

SIFT keypoint matching is displayed visually as the program runs. Image registration quality data is stored in the struct 'matchResult'.

Image registration parameters usually should not need to be changed. To change parameters, see the commented code box at the beginning of 'find\_roi.m'.

The files inside the folder 'helpers' are for internal use and should not be modified.