Automatic Line-Image Extraction Toolbox for Uncalibrated Central Systems with Revolution Symmetry (release v0.5 alpha) : User Guide

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In this document we show an example of using of the presented toolbox. To call the toolbox we have to execute the file *uncalibLineToolbox.m* . Once the toolbox is launched, the line-image extraction can be obtained by following the instructions located in the captions of the figures of this document. Notice that this is an alpha version of the toolbox and some features are not implemented.
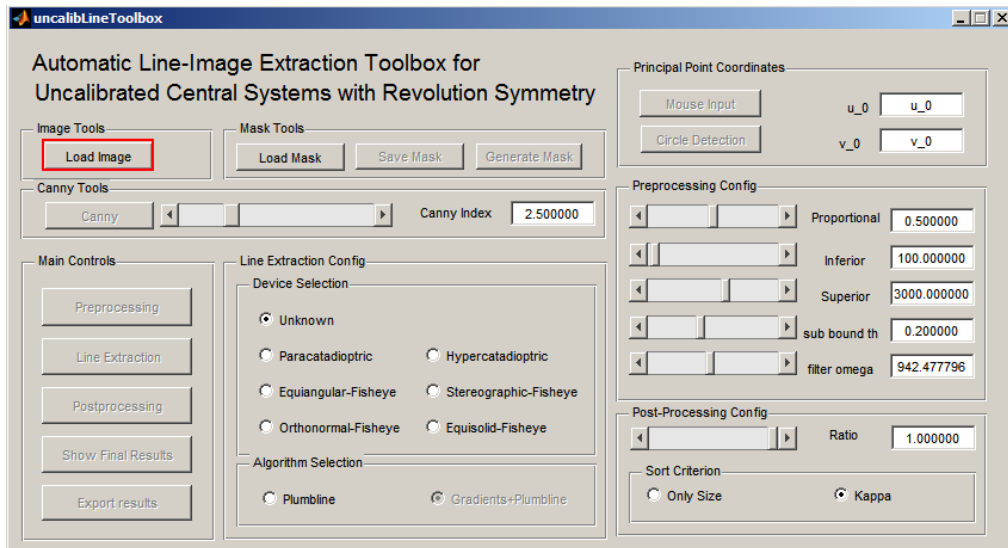
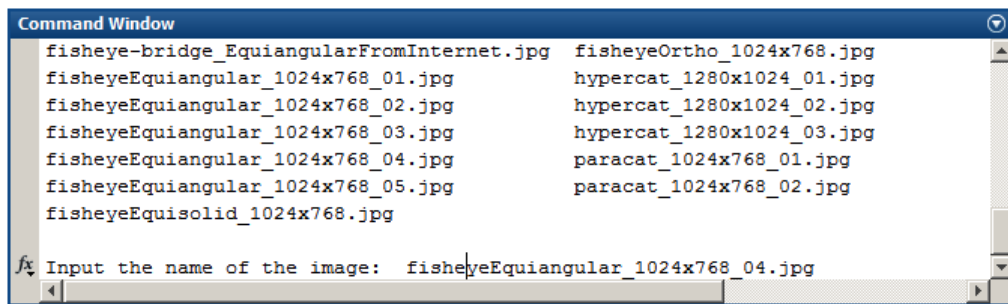Figure 1: To load an image first use the *Load Image* button.

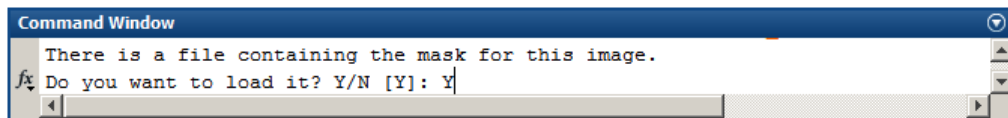Figure 2: The user is asked for the name of the image file.

Figure 3: After selecting the image if there is a related mask file the user can directly load it.
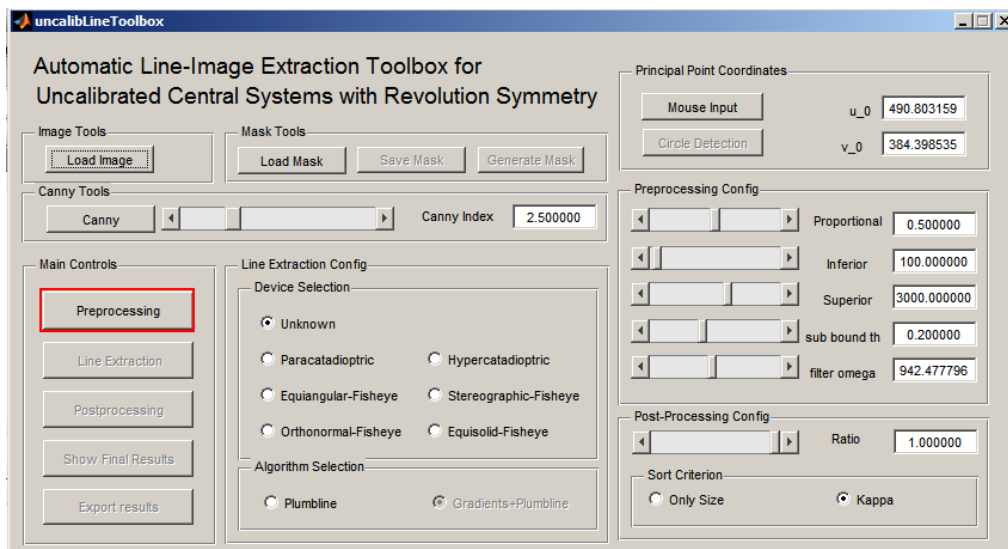

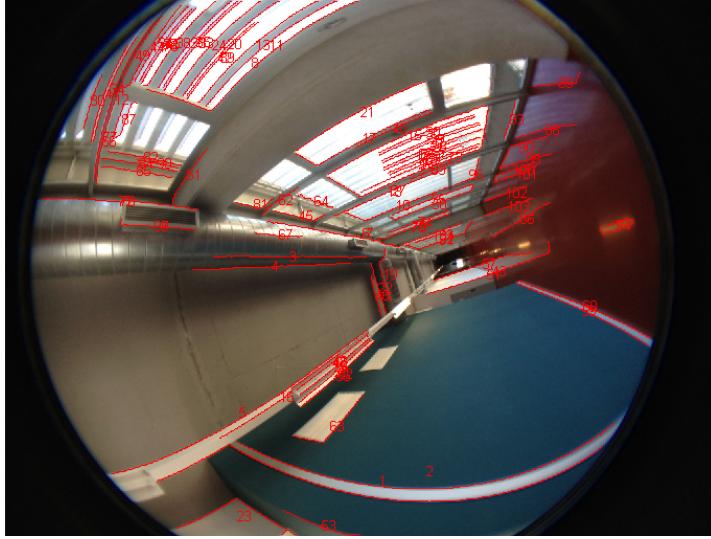Figure 4: Then the *Preprocessing* button is enabled and it can be executed.

Figure 5: Example of the connected components extracted in the preprocessing process.
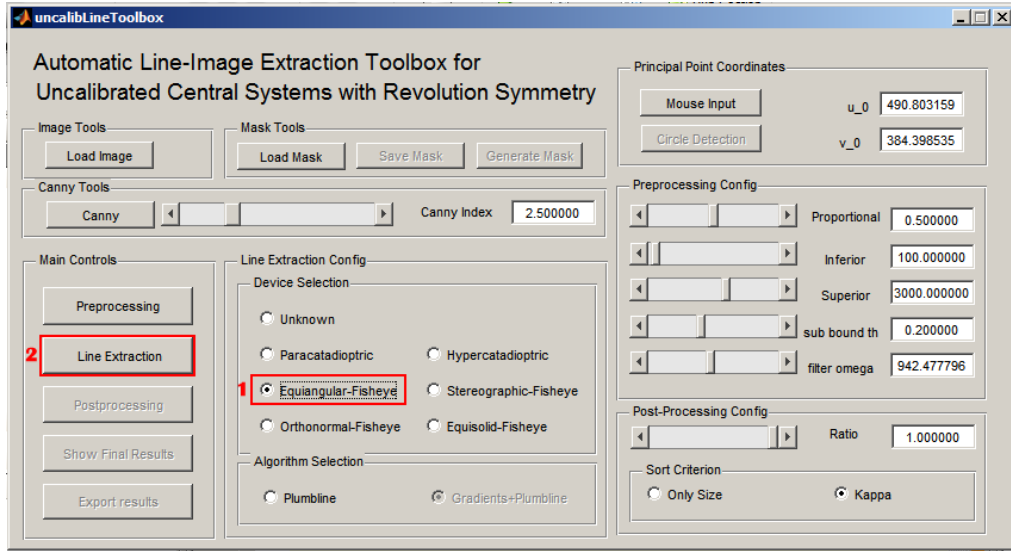

Figure 6: After the preprocessing the line extractor can be launched. First, the user has to select the kind of camera.
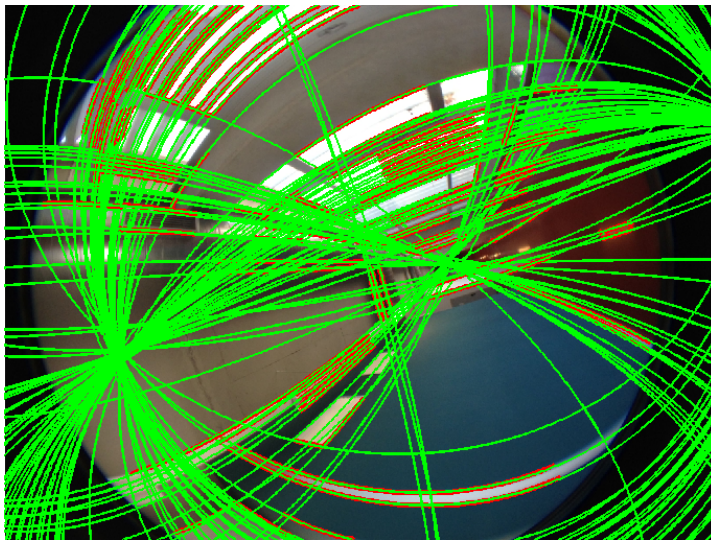

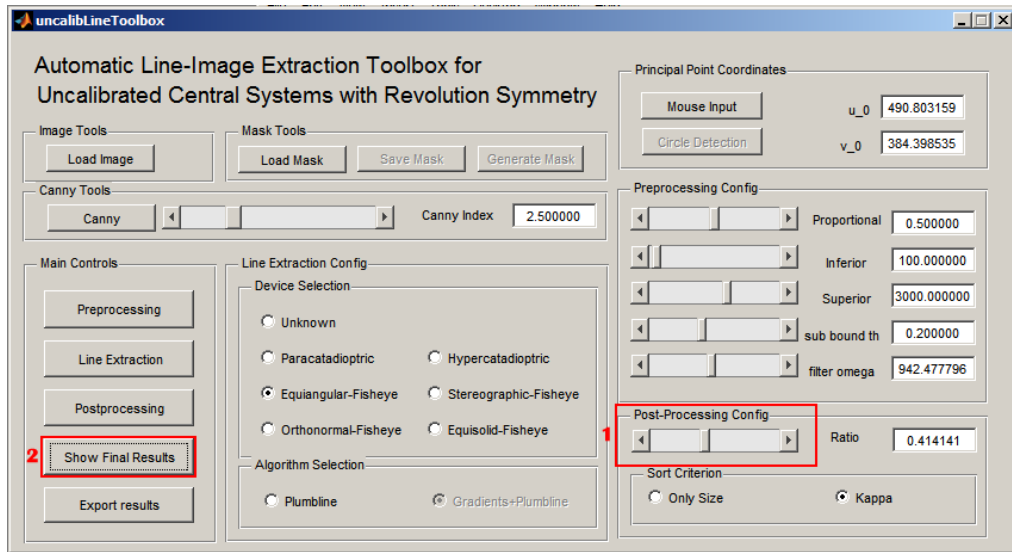Figure 7: Example of the extracted line-images.

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Figure 8: After the extraction the user can reduce the number of represented line-images with the ratio control on the Post-processing group. Finally the results can be saved with the *Export results* button.
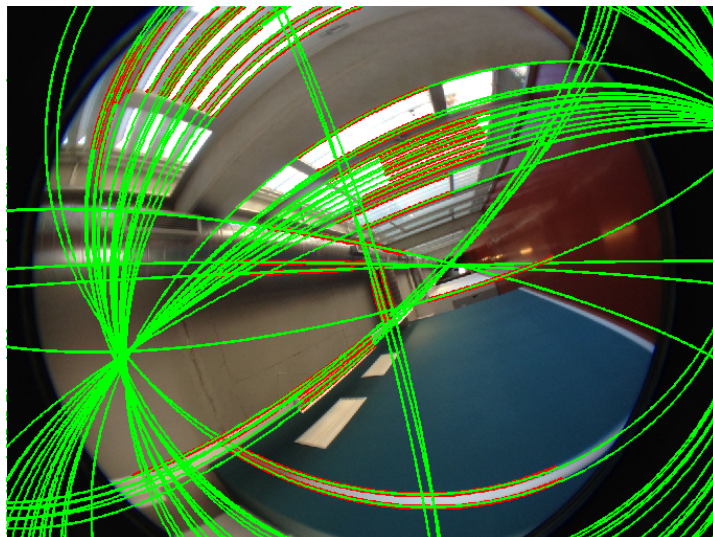

Figure 9: Example of the extracted line-images representing less lines.