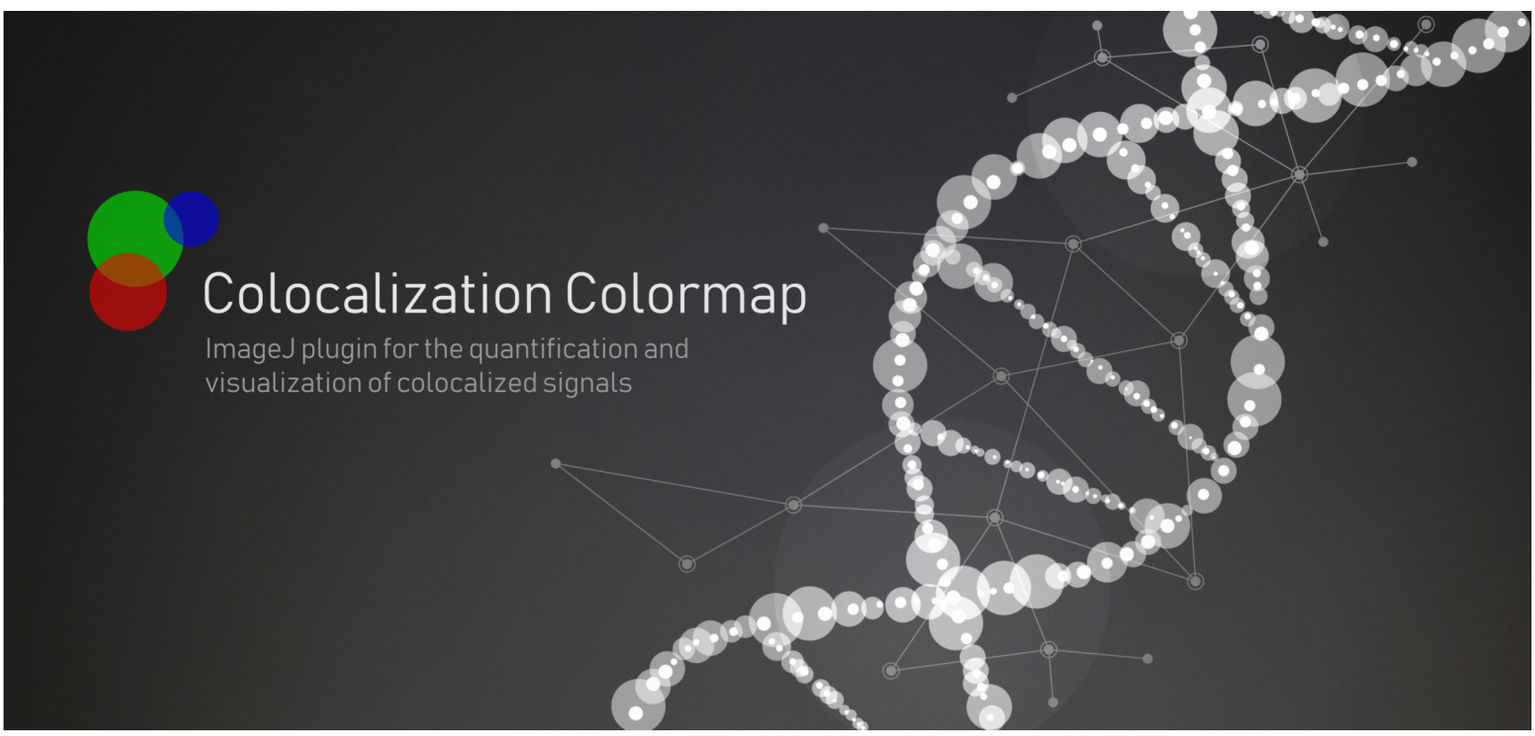
Quickstart guide



version 12_11_2019

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Specification

Colocalization Colormap requires an ImageJ version that includes java compiler (version 1.6 or later).It comes as a Colocalization_Colormap_.java file containing the following files:

1) Colocalization_.class
2) Colocalization_batch_processor_.class
3) Generate_color_bar_.class
4) Help_and_documentation_class

Colocalization Colormap operates on both 8-bit and 16-bit single plane images or stacks.

Colocalization Colormap requires either user-defined threshold value for ROI specification or executes isodata clustering algorithm for automatic thresholding.

The plugin utilizes 'jet' colormap to disply map of nMDP values.

The program code with detailed description can be found at the GitHub repository under the following link:

https://github.com/AdamGorlewicz/Colocalization-colormap

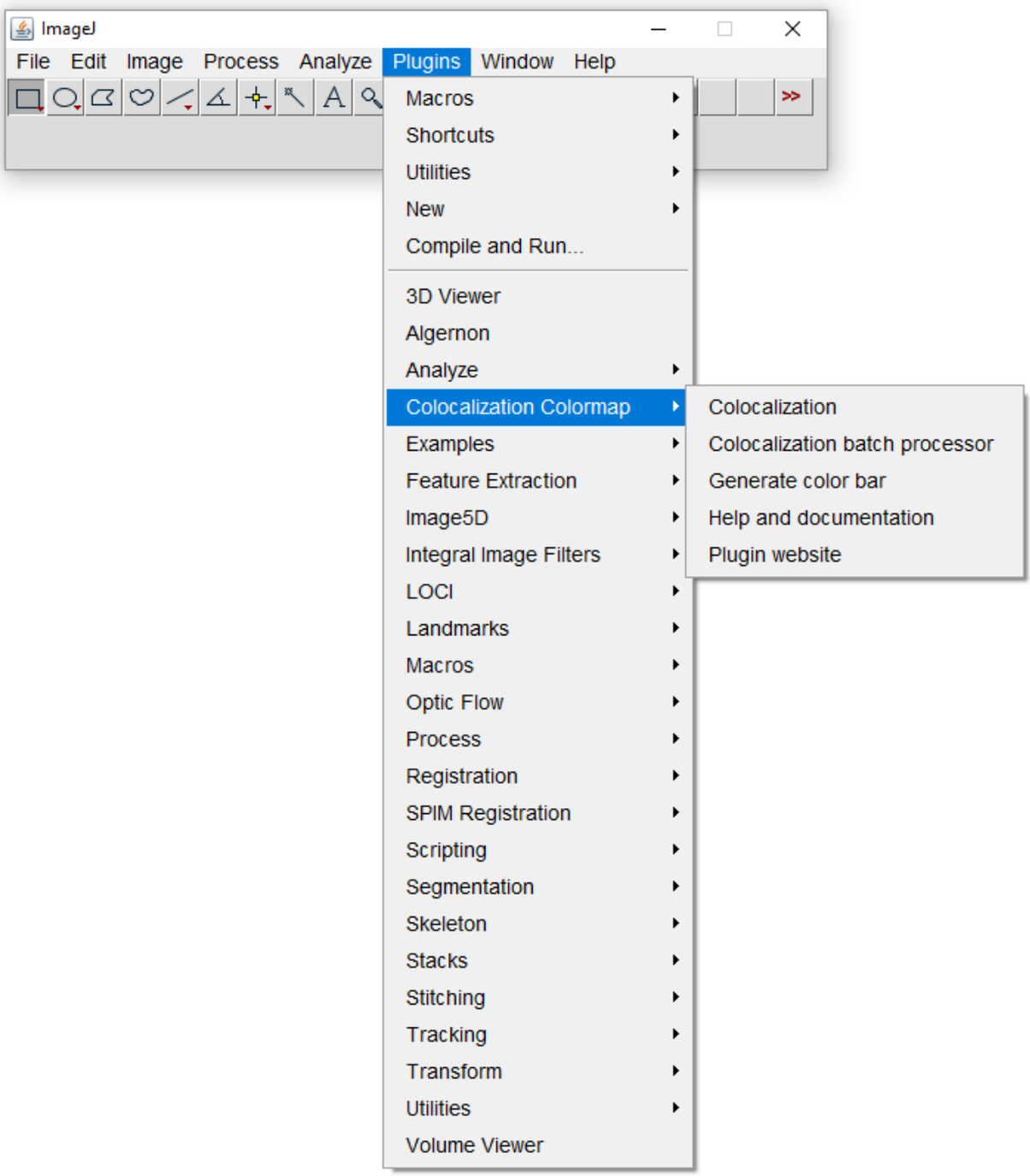
or at the plugin dedicated website:

https://sites.google.com/site/colocalizationcolormap

Instalation

To use the plugin:

1) Download Colocalization_Colormap_.jar.
2) Copy .jar file into the ImageJ plugin folder.
3) Run ImageJ.
4) Open 'Plugins' menu.
5) Open 'Colocalization Colormap' submenu.



Software content

The plugin contains five executable options:

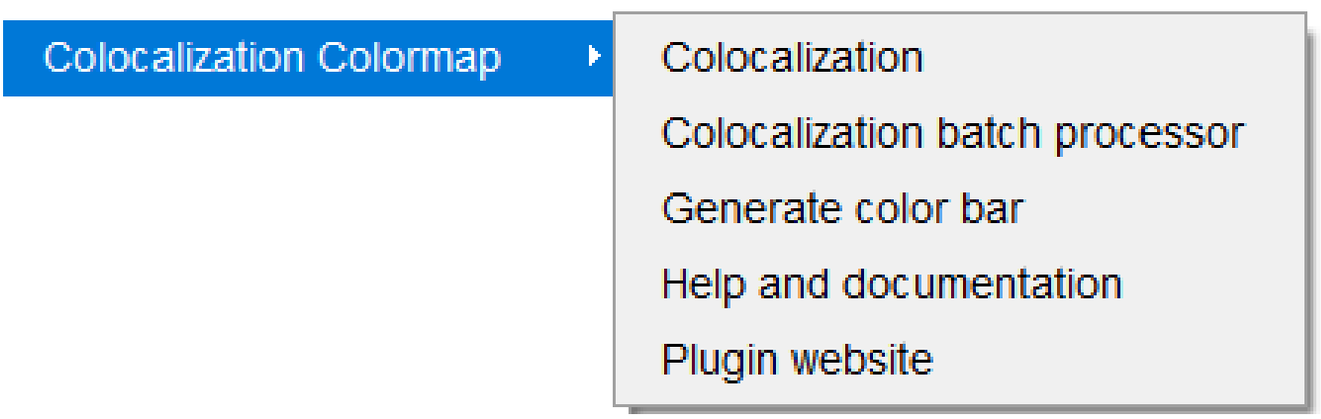
1) Colocalization.
Use it to compute colocalization between two images.

2) Colocalization batch processor
Performs colocalization of multiple pairs of images.

3) Generate colorbar
Creates a color scale bar for NMDPs distribution heatmap

4) Help and documentation
Opens GitHub website containing Colocalization Colormap repository.

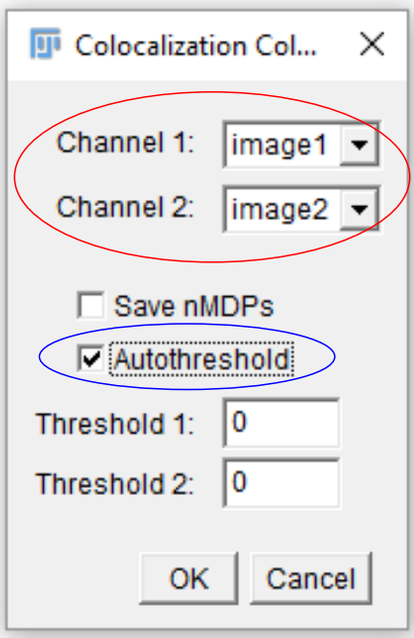
5) Plugin website
Opens plugin dedicated website

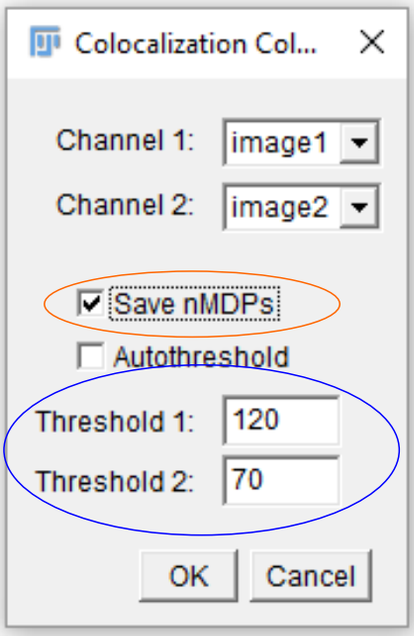


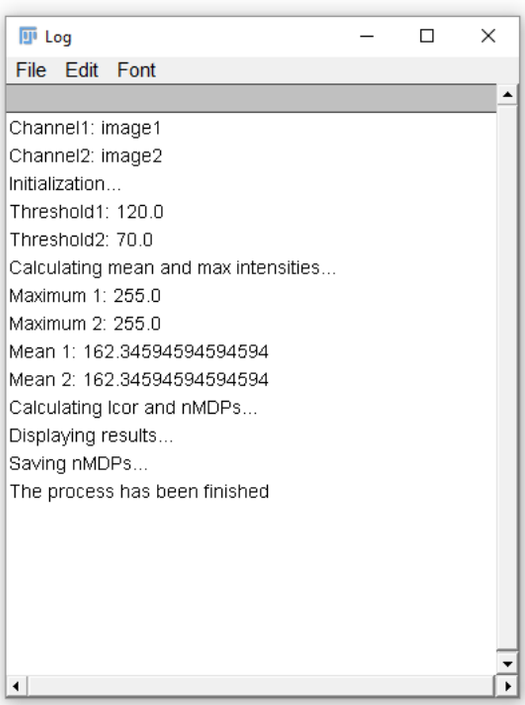
How to perform colocalization?

1) Select input images ('Channel 1' and 'Channel 2') from the list of open images.

2) Check 'Autothreshold' option. Alternatively specify your own threshold values.







3) Check 'Save nMDPs' option if you wish to save all calculated nMDP values as text file.

4) Press 'OK'

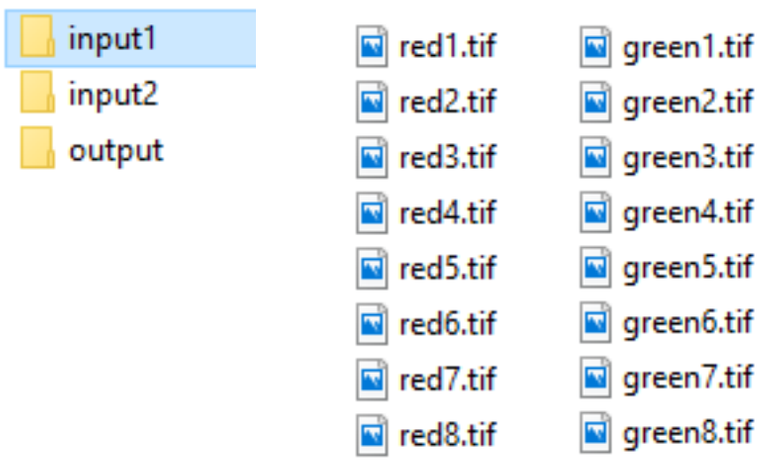
5) Progress of the process will be reported in log window.

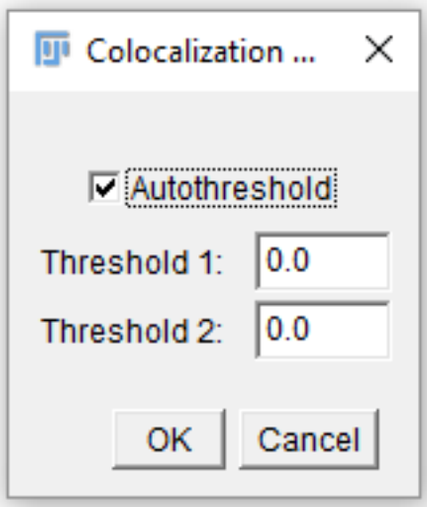
6) If 'Save nMDPs' was checked, at the end of the process you will be asked to specify save location for nMDPs containing text file.

Batch processor

1) You will be asked to specify two input folder and the output folder. Thus, prepare your data first.

Create two separate folders containing 8-bit or 16-bit greyscale images. Colocalization Colormap will colocalize the first file from the first folder with the first file from the second folder, then the second file from the first folder with the second file form the second folder...so make sure that they match.

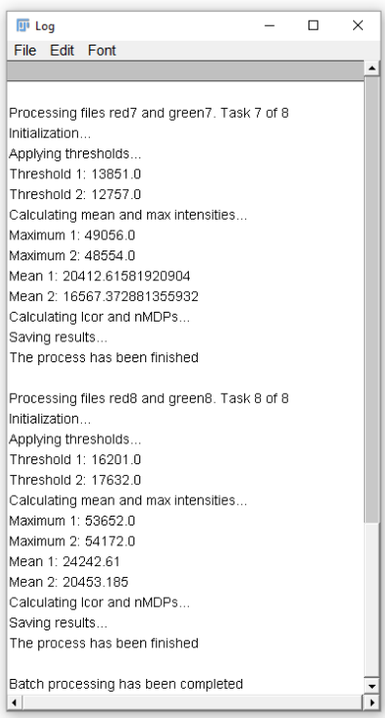




2) Check 'Autothreshold' option. Alternatively specyfie your ovn treshold values.

3) Press 'OK"

4) Progress of the process will be reported in log window.



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