

Ometafluor_intensity_2images (ImageJ macro)

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Macro to measure mean intensity of one large object (ex: artery) at two wavelength (pairs of images), using each image to create a mask and measuring both images with both masks.

INPUT:

Structure of the data to be analysed:

- Serie of 2 images (2 wavelength, tif) from Metafluor, named with no blank and wavelength code (from 1 to 5) at the end of the name and extension indicating the rank (from 000 to 999). Ex: *photo3.012 and photo4.012, photo3.013 and photo4.013*

Modifications to do within the script:

- wavelength code (from 1 to 5) of first and second image **MUST** be indicated in the variables "mywave1" and "mywave2"

When launching the script:

- Asks to choose Image1 of the first pair of images and the macro automatically opens Image2 based on the wavelength codes, and then ask for the next Image1,

OUTPUT:

- A formatted file (called by default: analyse.txt) with image names, Mean intensity of Image1 measure with Mask1, idem for Image2 with Mask2, idem for Image1 with Mask2, idem for Image2 with Mask2, Area of Mask1, Area of Mask2, Ratio of Images 1 and 2 measured with Mask1, Ratio of Images 1 and 2 measured with Mask2, Ratio of Images 1 measured with Mask1 and Images 2 measured with Mask2,
- Results window contains the same results but with one line per measurement (4 lines for each pair of images).

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Step 1: Choose Image1

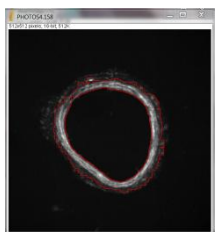
Step 2: Adjust threshold to determine the object in Image1



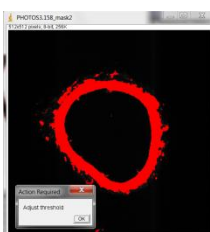
Step 3: Delete bad pixels to create a clean Mask1 from Image1 (filtering to remove small objects)



ImageJ measures Image1 & 2 with Mask1 (area and averaged intensity in Results window)

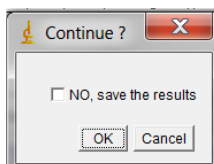


Step 4: Adjust threshold for Image2



Step 6: Three choices:

- OK
- Cancel
- No, save the results



Macro is aborted (values are still in Results window, 1 measurement / line)

Results are formatted (4 measurements / line) and saved in "analyse.txt"

ImageJ measures Image1 & 2 with Mask2 (area and averaged intensity in Results window)



Step 5: Delete bad pixels for Mask2 from Image2

