Process Description:

This process allows you to export the ratio images you have created in step 9 (or step 10, if photobleach correction has been applied) as .tif images. This requires multiplying the images by a large number, called a "scale factor". This is necessary because the ratio images themselves are small, non-integer values (usually between .5 and 5), while .tif images can only store positive integer values. If these ratios are converted to integers without multiplying by a scale factor, there would be severe rounding error in the images. Alternatively, you can use the ratio images themselves, which are stored as floating-point matlab .mat files in the movie's output directory.

Parameter Descriptions:

Ratio Channel:

This box allows you to select the channel which is the NUMERATOR of the ratio images you want to export (usually the FRET channel).

Scale Factor:

This is the number that the ratio images will be multiplied by before being saved as .tif images. It is recommended that this number be fairly large (1000 is a good starting point) to minimize rounding error. It is also important that this number be kept constant among different experiments, if the resulting ratio images are to be compared.

Select Path:

This allows you to specify the directory to save the .tif ratio images to. They will be saved to a sub-directory of this folder, called "ratio_tiffs", with one .tif file per ratio image.