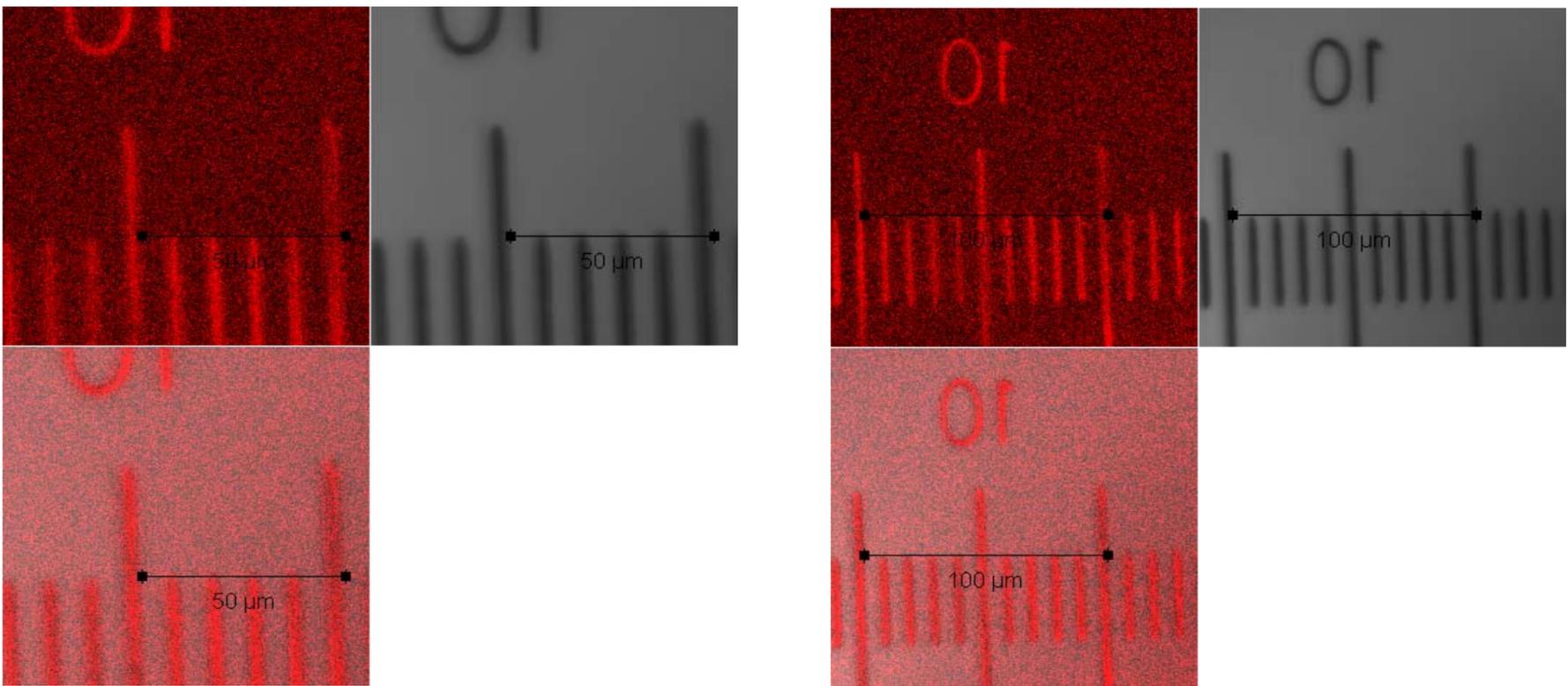


The Zeiss confocal internal calibration is correct - the calibration factor is stored with every image
 The calibration scale has been applied using Zeiss freeware LSM Image Browser v4.2 [Overlay, Scale]

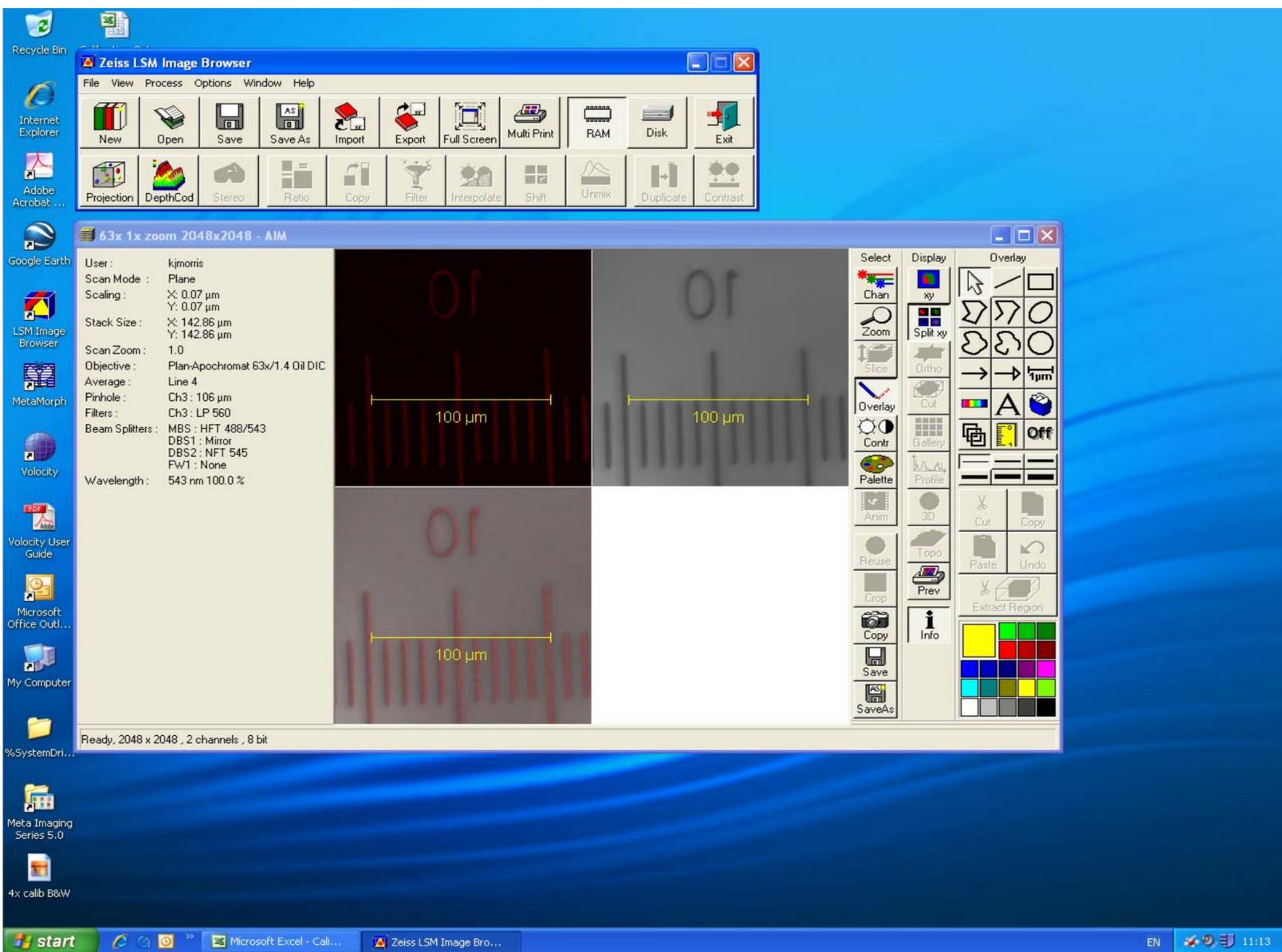


40x objective 2.5x zoom [512x512]

40x objective 1.5x zoom [512x512]

The internal Zeiss calibration is correct - this information is saved with every image you capture on the Zeiss LSM-510 confocal
 Use the Zeiss LMS Image Browser software to recover the calibration [um/pixel] data

You can obtain the calibration factors using the i - Info button in Zeiss LMS Image Browser, see screenshot below.



Zeiss LSM Image Browser v4.2

Image scaling information obtained using the [i - Info button] - um/pixel & image size in um

stack size	scaling	This image is 2,048 x 2,048 pixels
X 142.86	X 0.07 um	The maximum resolution on the Zeiss 510
Y 142.86	Y 0.07 um	
This is the frame size in um	This is the um/pixel calibration value	The internal Zeiss calibration is correct for
[i.e. image X & Y length]		all confocal objectives and any LSM optical zoom

Note: The 0.07 value is a little inaccurate due to rounding up errors - I would advise dividing the image width in um (142.86um) by the image pixel width [2,048 pixels in this image]. Thus 142.86/2,048 = 0.0698 um/pixel, granted not far from 0.07 in this case

The latest Zeiss LSM Image Browser can be downloaded from the Microscopy Core web pages

Zeiss Image Browser is freeware and runs on any XP/2000 PC - use the Image Browser commands 'export' or 'copy' to convert images to TIFF/JPG
 Note that 'copy' will retain the original LUT [blue/green: cyan] for DAPI, whereas export will convert the DAPI LUT to the RGB blue channel
 LUT = Look Up Table: the colour overlay on the Zeiss B&W confocal images, e.g. DAPI/CY5 = blue, FITC/GFP = Green, TRITC/Rhodamine = red