

Image Bit-Depth

Image Processing & Analysis for Life Scientist

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Image Bit-Depth

1. Open a 16-bit image from Samples
File → Open... → m51.tif
2. Choose “Line selection” tool
3. Make a line

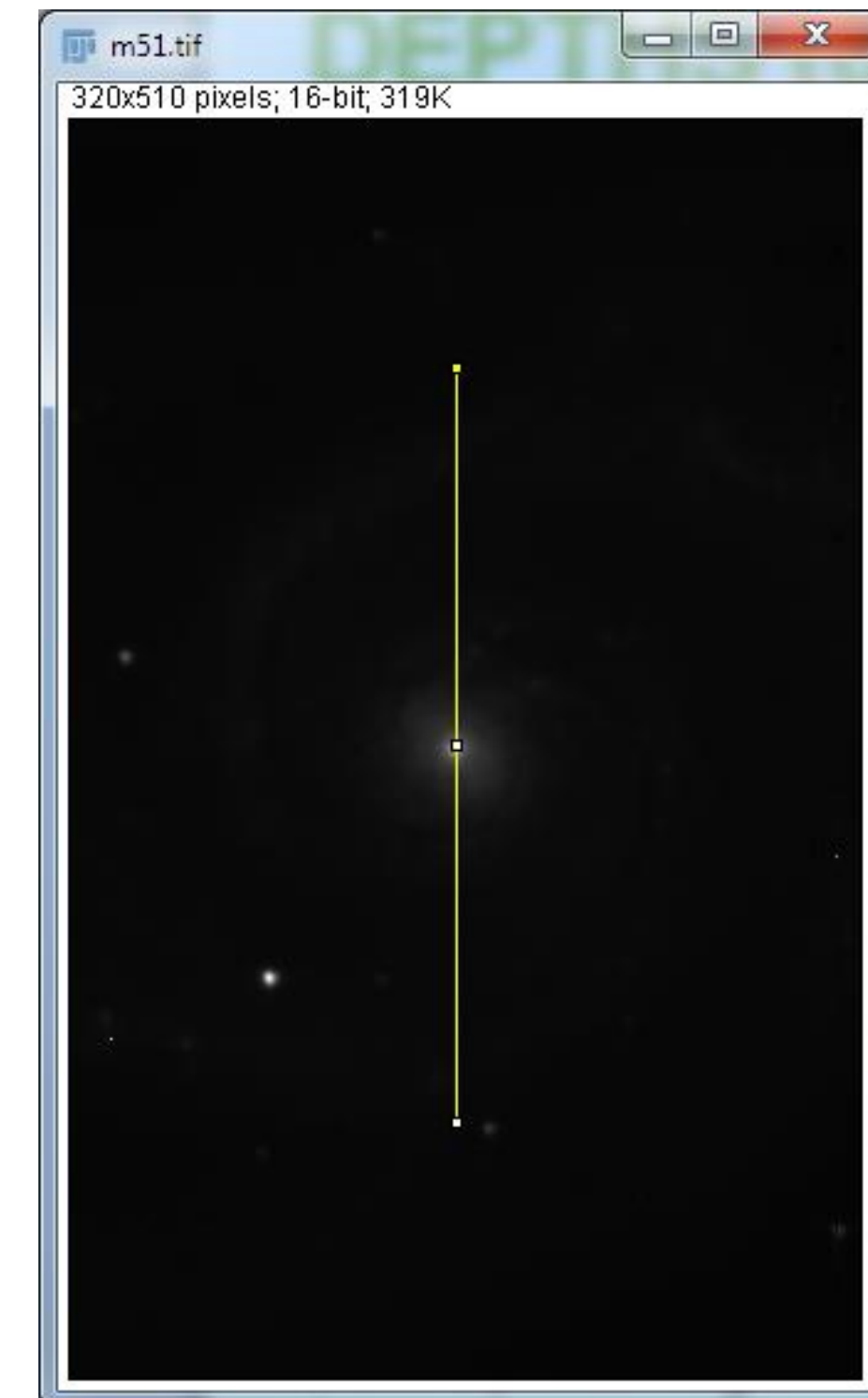
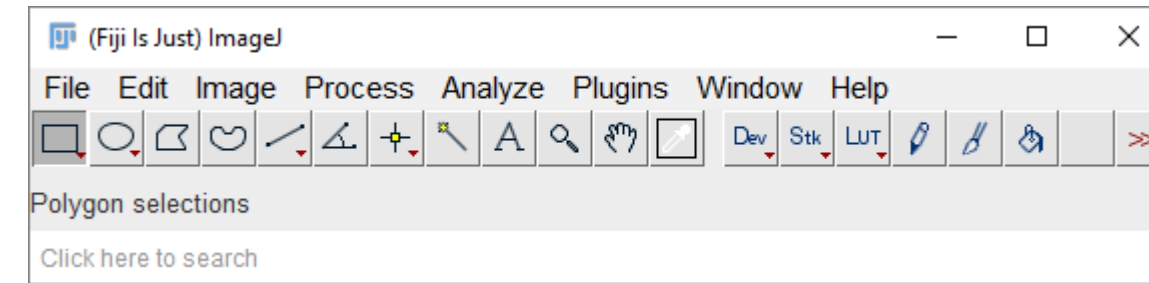
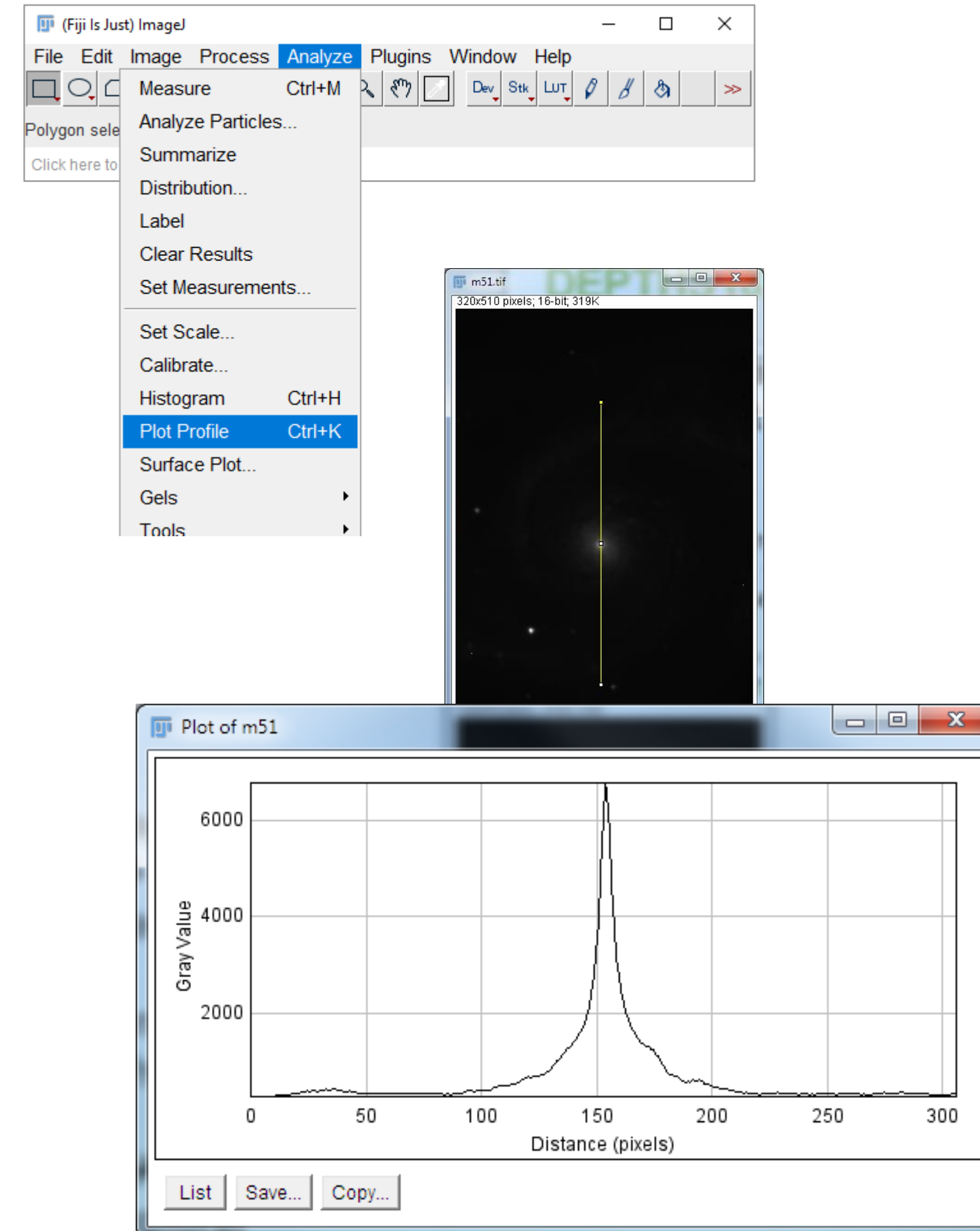


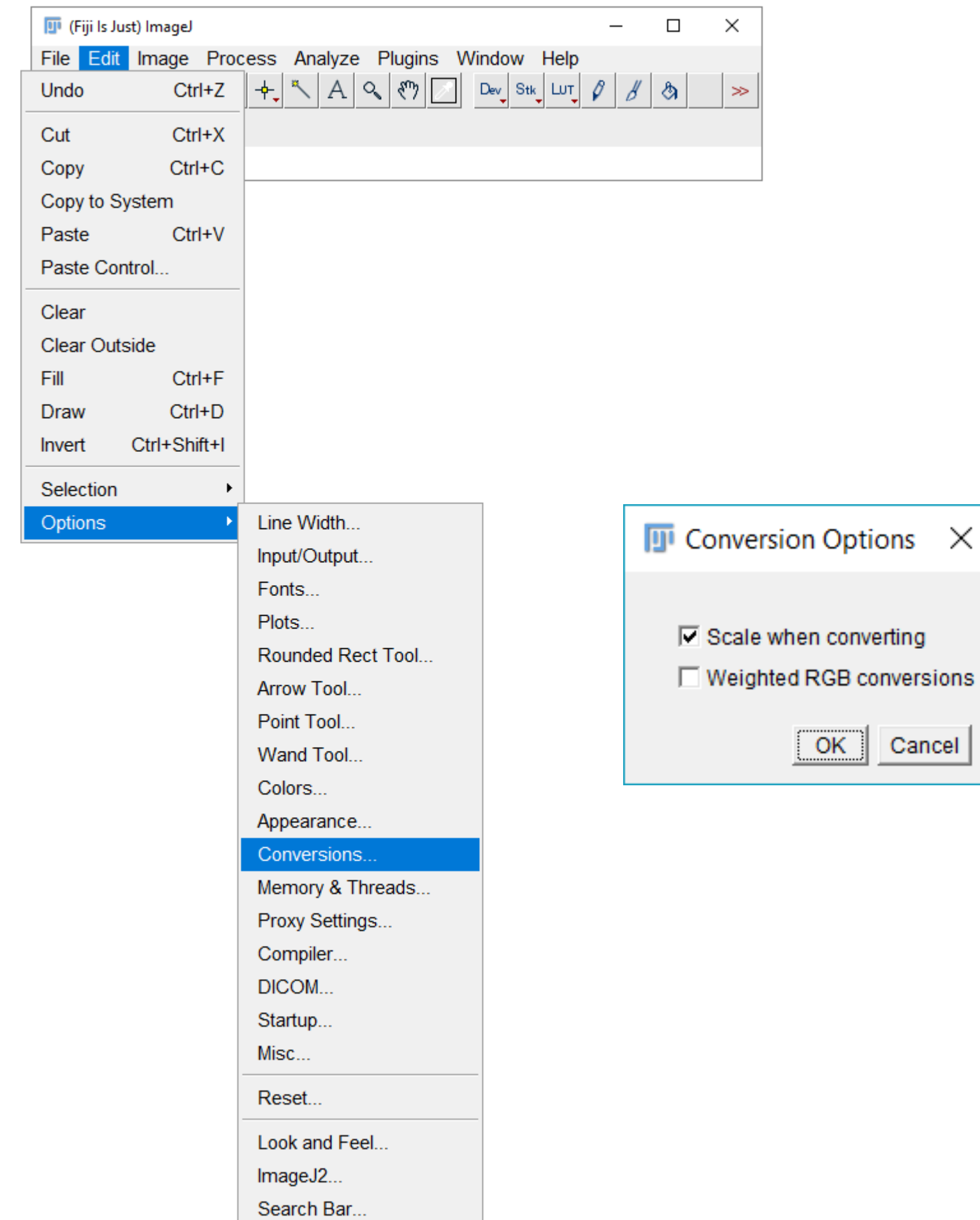
Image Bit-Depth

1. Open a 16-bit image from Samples
File → Open... → m51.tif
2. Choose “Line selection” tool
3. Make a line
4. Look at the line profile using
Analyze → Plot Profile... (Shortcut K)

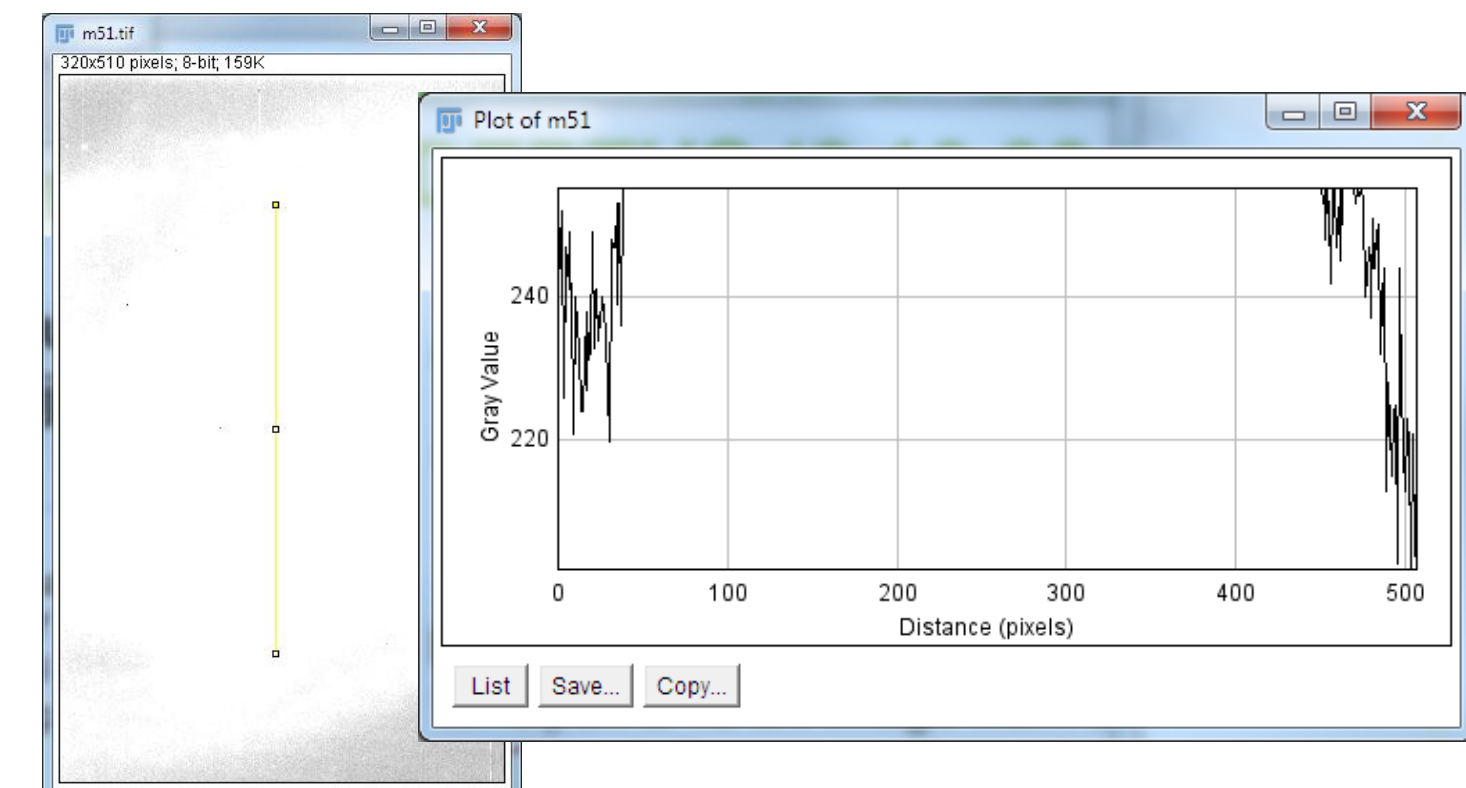
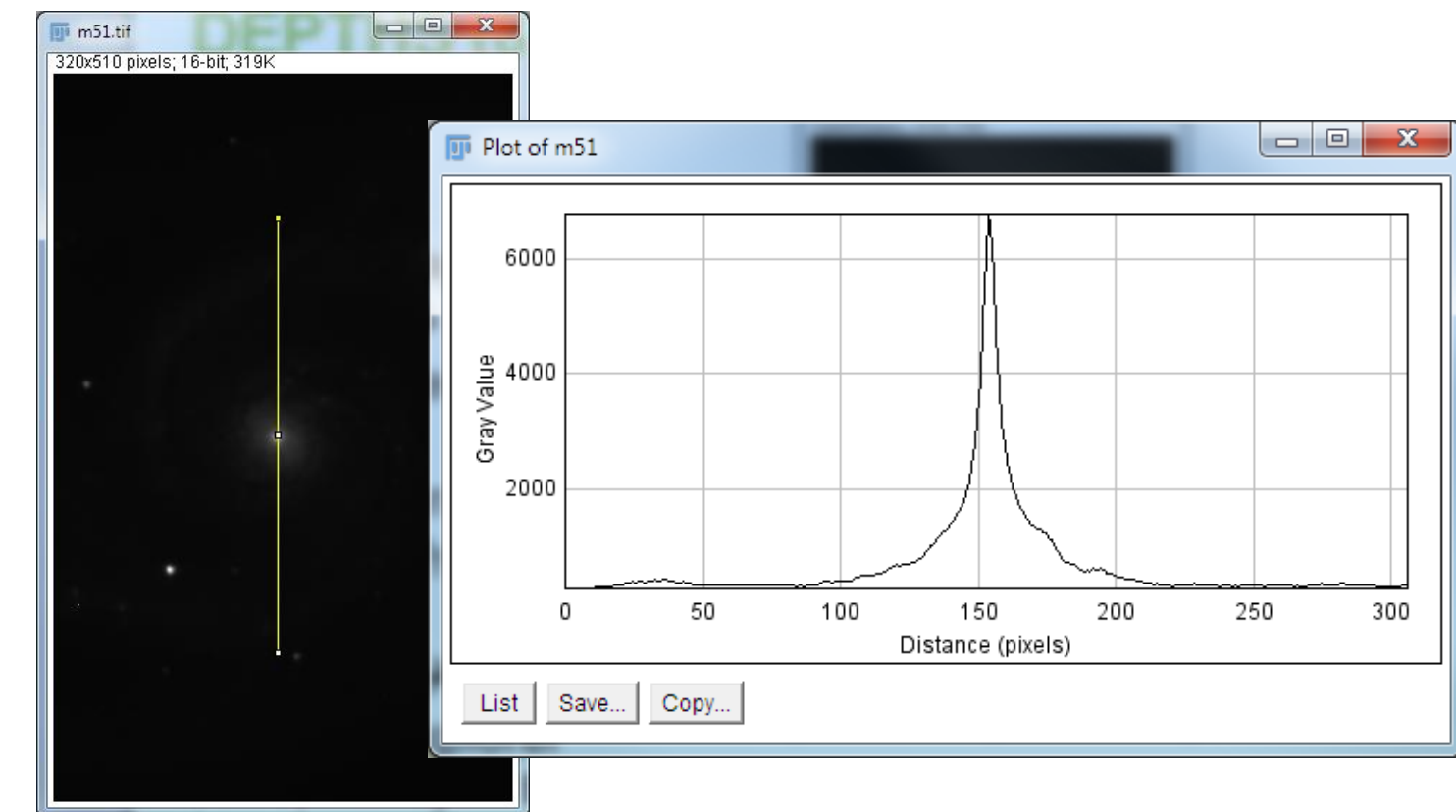
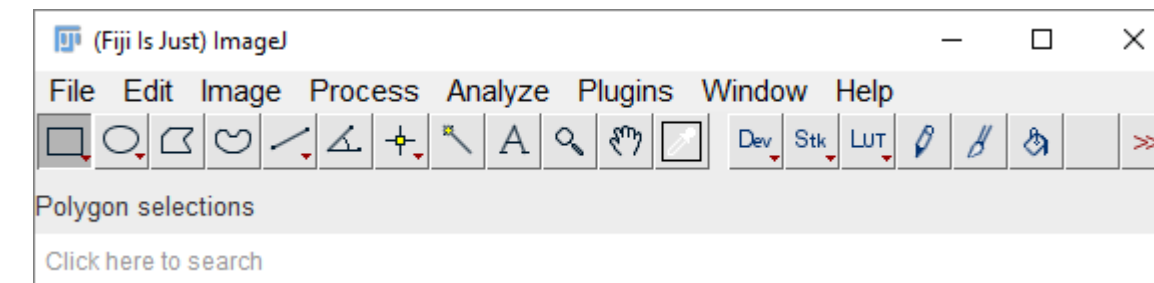


1. Set “Scale when converting” to OFF

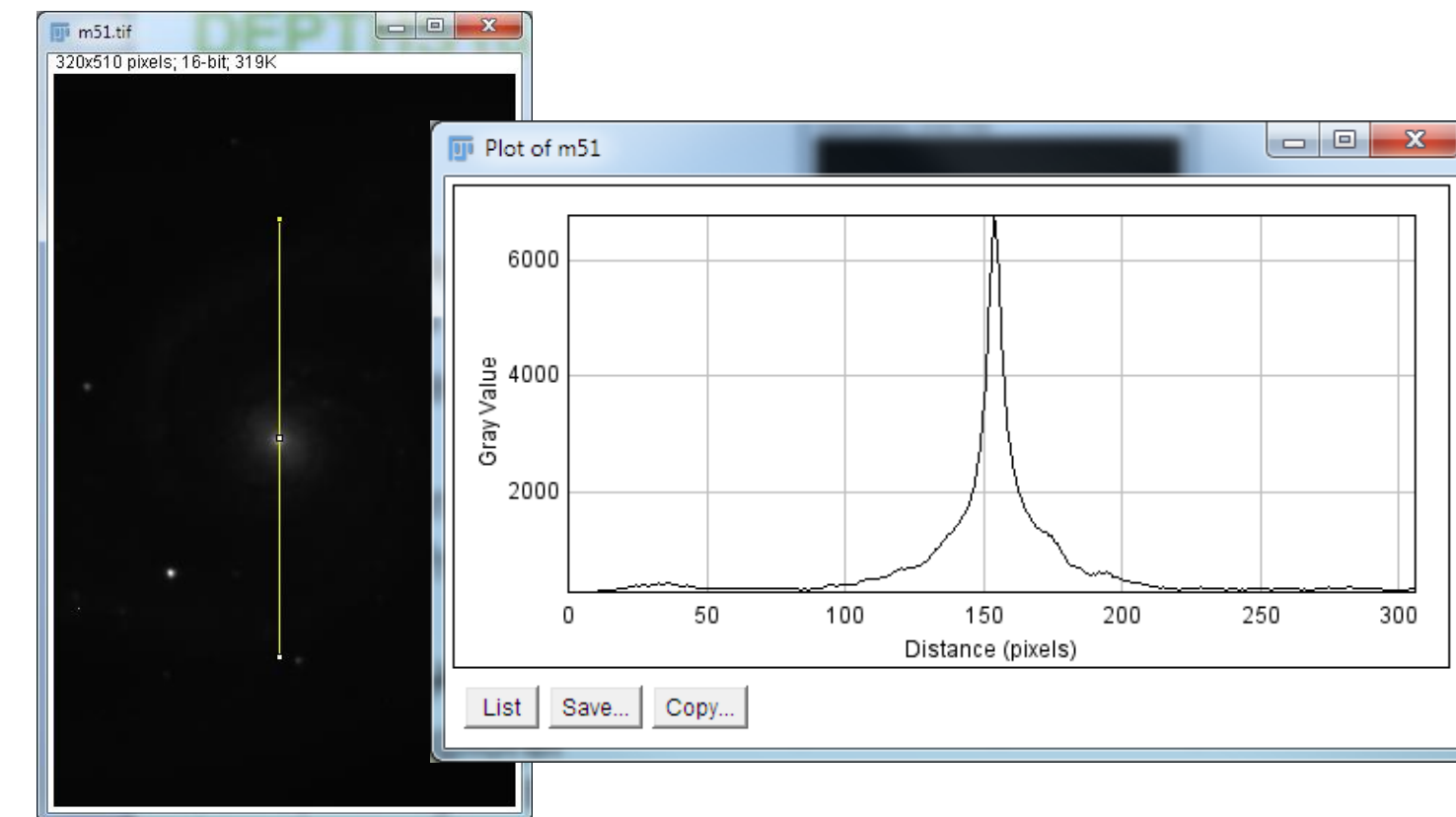
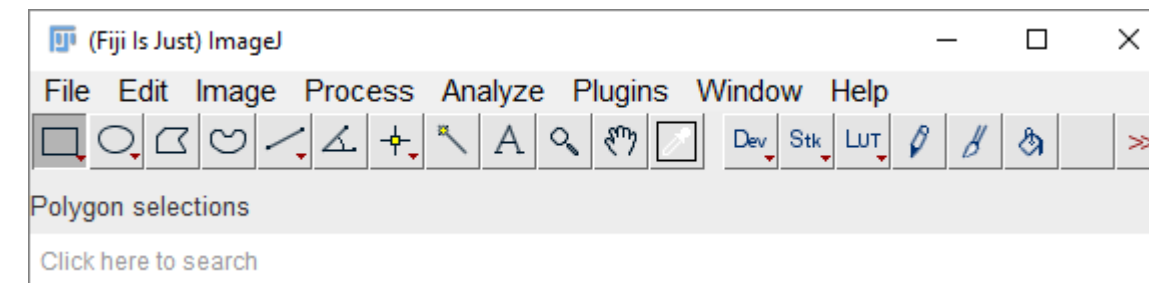
- Edit → Options → Conversions
“Scale when converting” : OFF



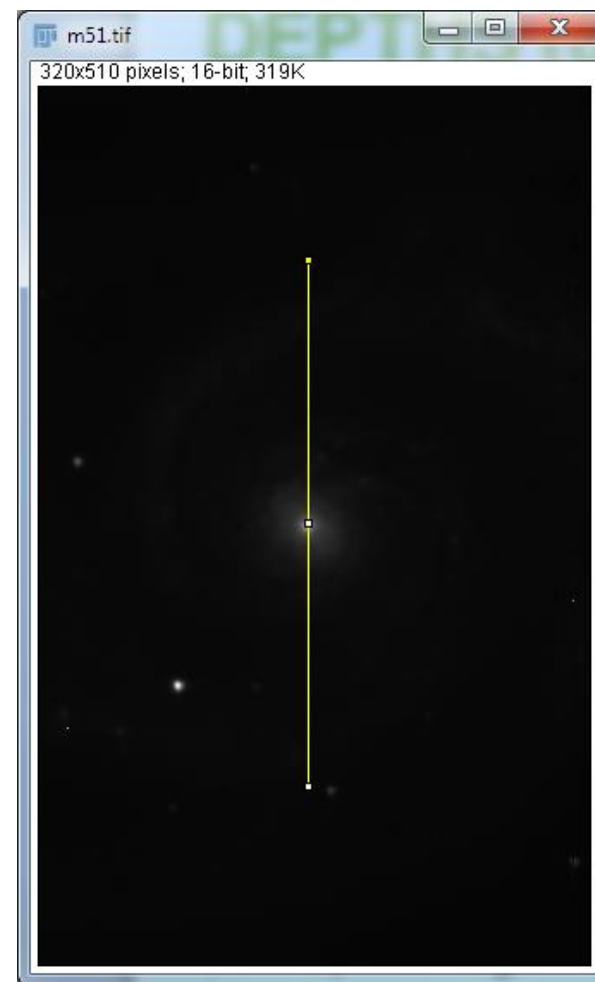
1. Set “Scale when converting” to OFF
 - Edit → Options → Conversions
“Scale when converting” : OFF
2. Convert the image to 8-bit
Go to Image → Type → 8-bit
3. Plot the line profile again
4. Compare the two profiles.



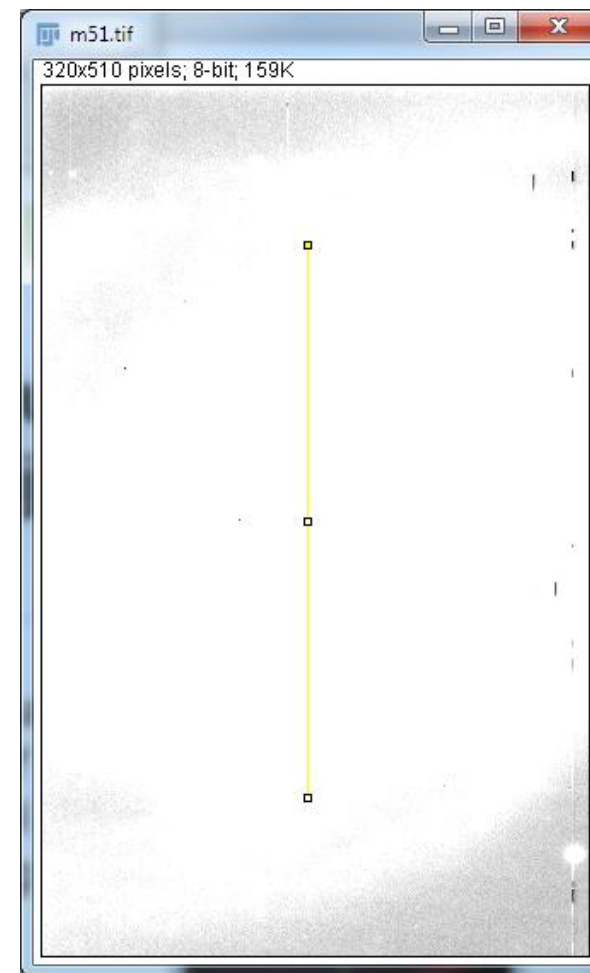
1. Re-open the image *m51.tif*
2. Set **“Scale when converting” to ON**
 - **Edit → Options → Conversions**
“Scale when converting” : ON
3. Convert the image to 8-bit again
4. Reload the ROI
 - Use **Edit > Selection > Restore Selection**
5. Use: **Analyze → Plot Profile...** again



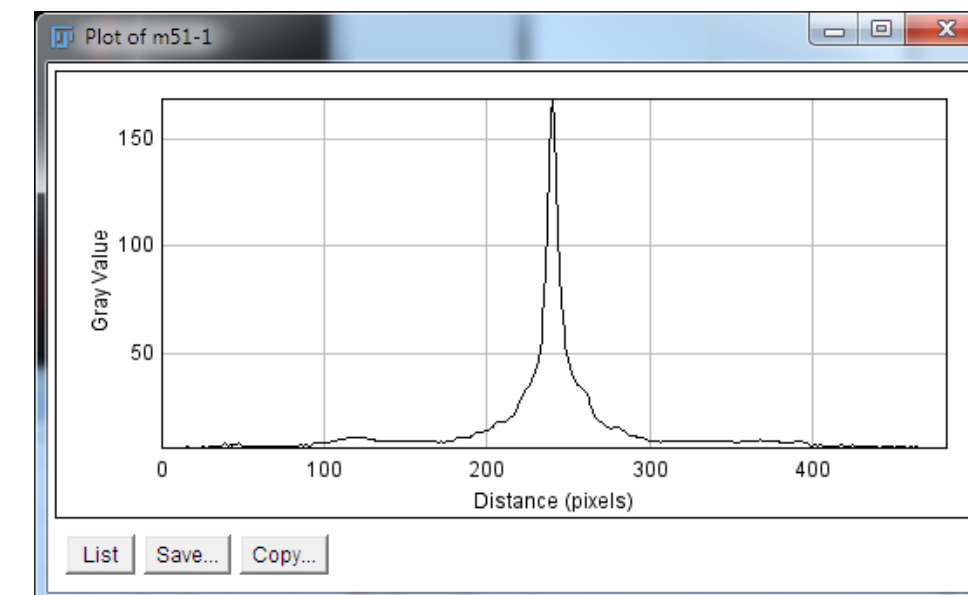
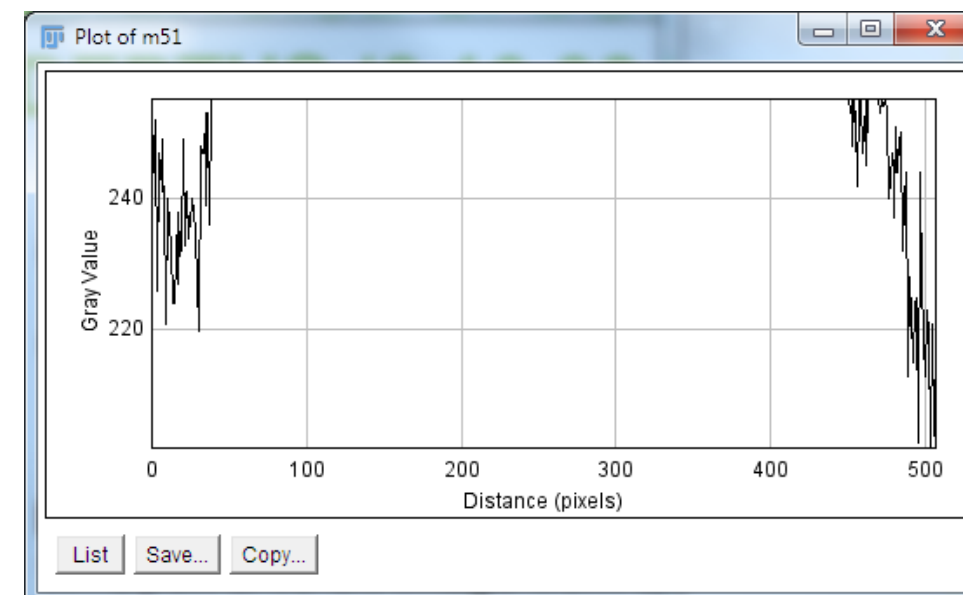
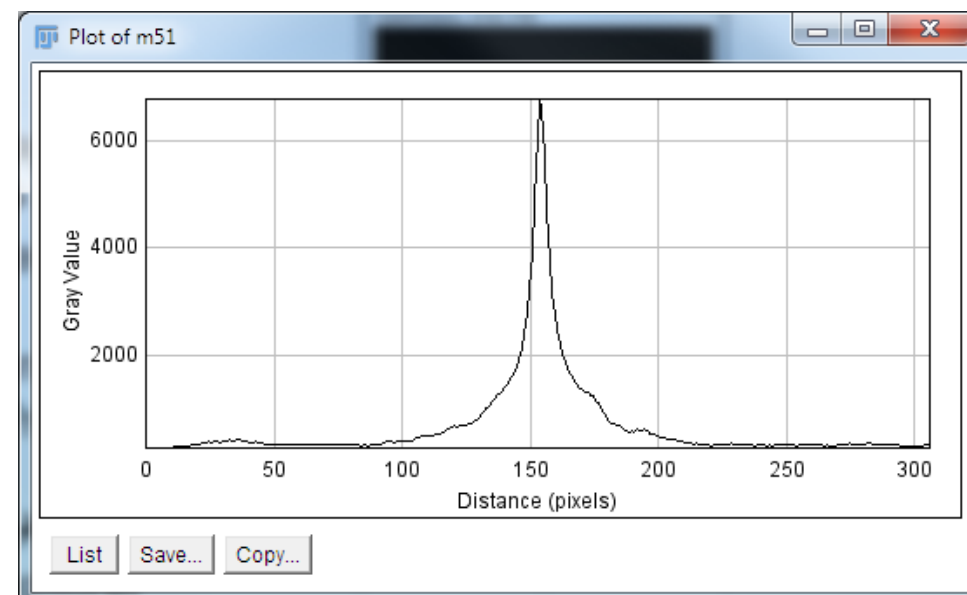
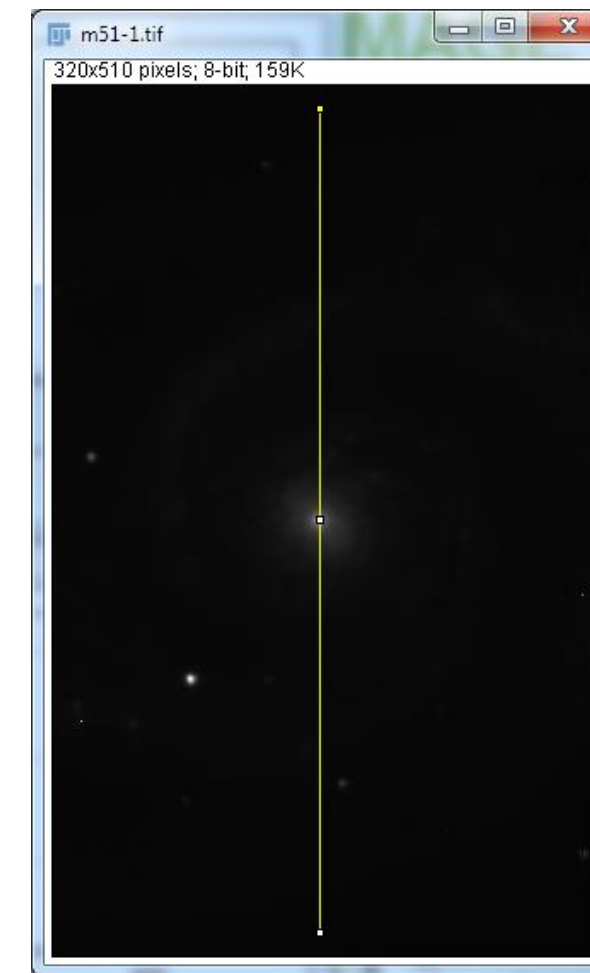
16-bit



8-bit no scaling



8-bit scaling



1. Turn bit-depth scaling off
 - **Edit → Options → Conversions**
“Scale when converting” : OFF
2. Convert the image to 8-bit
Go to Image → Type → 8-bit
3. Plot the line profile again
4. Look at the new line profile.

