

**Ratioing Pre-Processing Plugin for *OpenPolScope* software**

**Ratioing processing with Pol-Acquisition and Pol-Analyzer plugin v. 2.0,**

Last Modified: April 16, 2013; Revision 1.00

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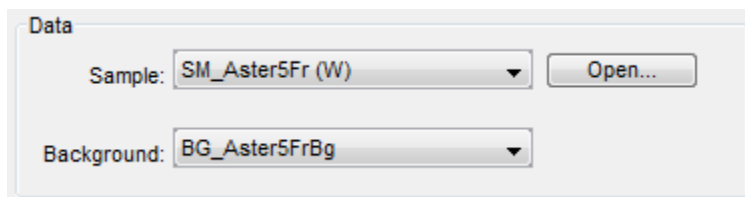
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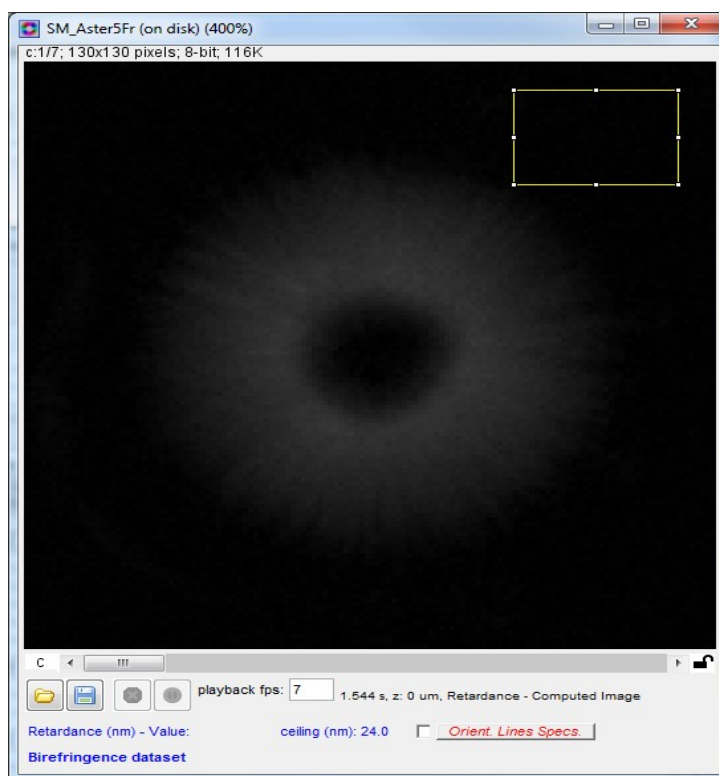
### Overview

Ratioing is a process in which the background is utilized to normalize the intensities in the Sample dataset. This reduces flickering that may be due to the light source or changes in sample density.

To enable Ratioing a corresponding background for the sample dataset must be acquired first.



On the sample window create a Roi that is clear of any sample data and is most similar in terms of its appearance to the background. A Roi selection may also be made on the Live view window if sample is yet to be acquired.



Once the sample is acquired or re-processed the data associated with Ratioing is inserted in the image metadata.

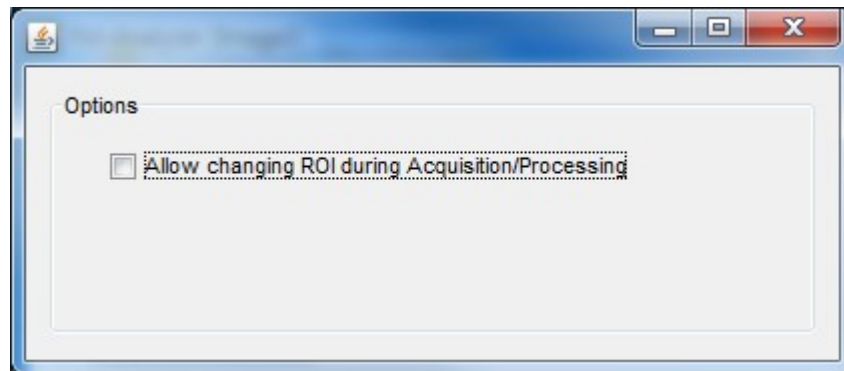
~ BlackLevel	4
~ Mirror	No
~ Processed Using	5-Frame
~ Ratioing	[x=92,y=6,width=31,height=21] Correction factors: 0.998,1.003,1.015,0.988,0.0
~ Retardance Ceiling (nm)	24

## Selecting Pre-Processing: Ratioing

On the Pol-Acquisition or Pol-Analyzer interface, select the checkbox corresponding to the Ratioing Pre-Processing plugin. If Ratioing is not listed as available then you may need to install it via the OpenPolScope Setup.

#	Pre-Processing ...	Enabled	Description	Options
0	ImagejMacro-Pre	<input type="checkbox"/>	ImagejMacro applies th...	...
1	MatlabDemoPlugin...	<input type="checkbox"/>	MatlabDemoPlugin is a t...	...
2	Ratioing	<input checked="" type="checkbox"/>	Ratioing use a ROI sele...	...

## Overview of Options



*Allow changing Roi during Acquisition/Processing:* In the case of a length time-series it is quite possible that the sample may move and overlap the selected Roi. In that event this selection can be enabled and a new Roi can be defined which will become the active Roi.

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