

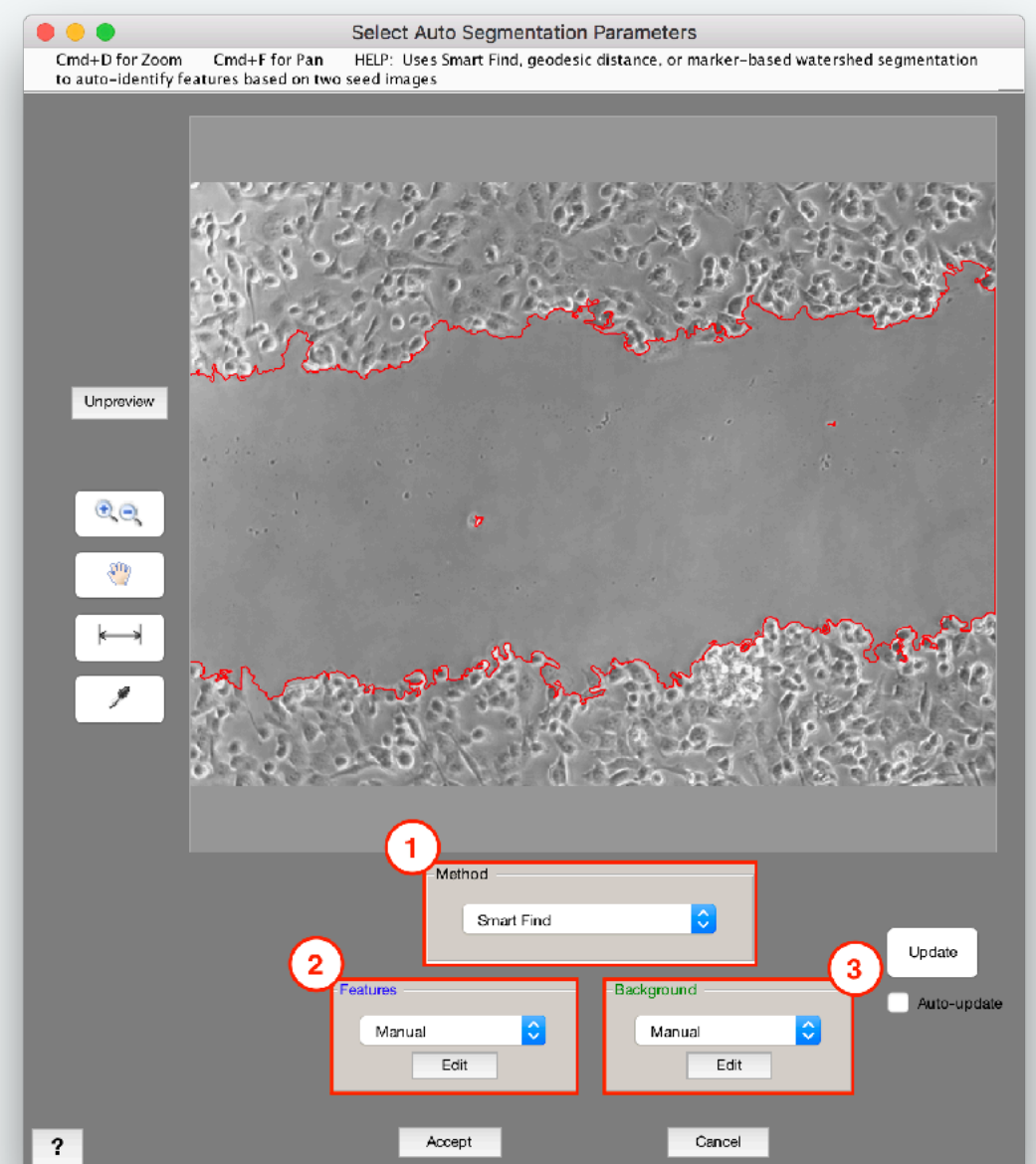
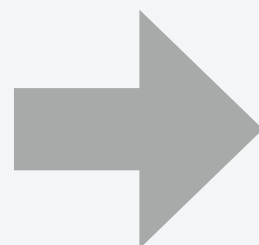
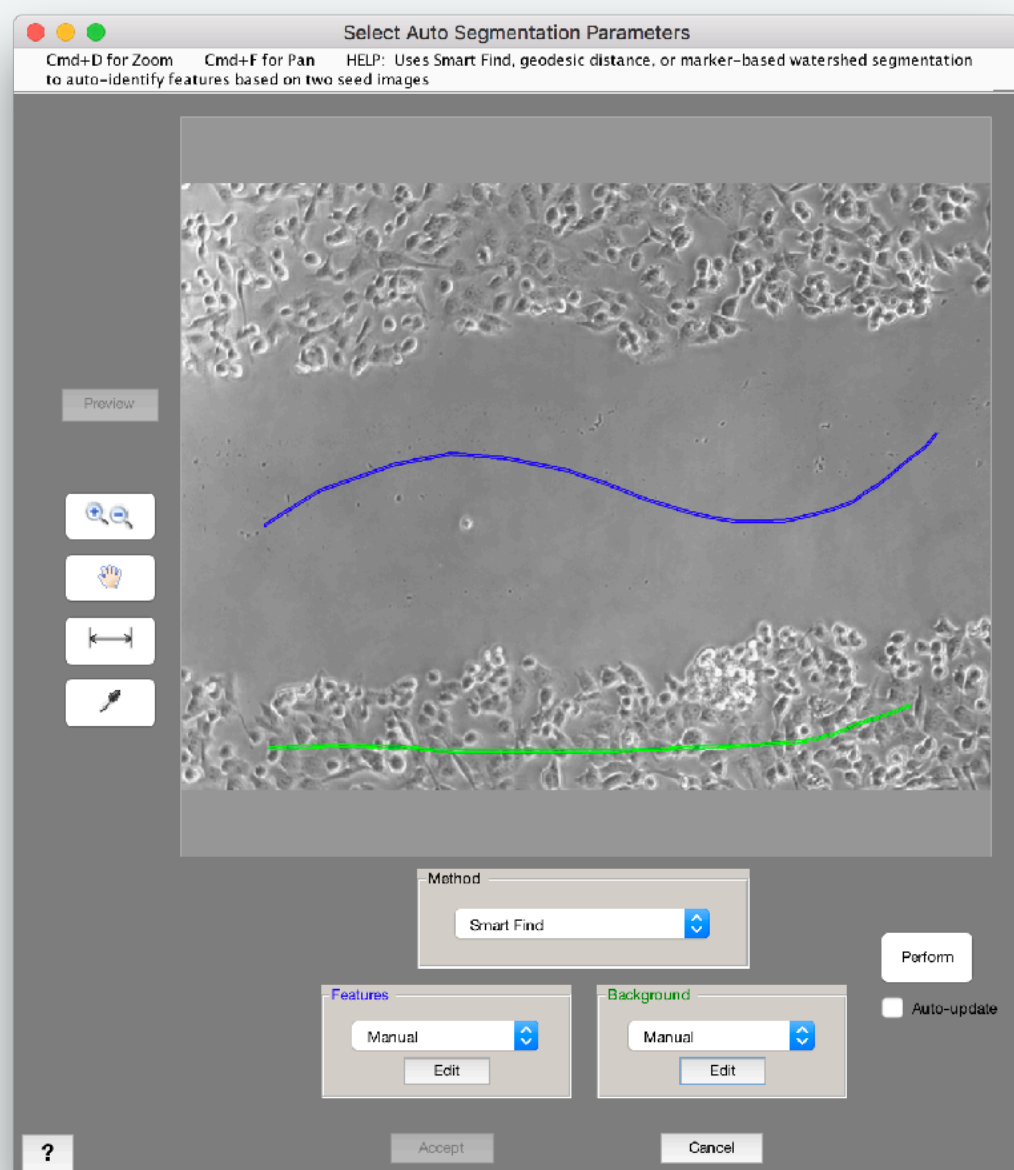


MIPAR™

Release Notes

v1.2.0

Smart Find



Yes, you are seeing that right. For many, this one is a game-changer.

MIPAR is proud to introduce a groundbreaking technology for incredibly simple feature detection. Based on the powerful “graph-cut” algorithm, features can be segmented from their background with just a few traces.

Set them up manually, or take them from other Recipe steps. Look for Smart Find in *Segmentation > Auto-Segmentation* from the Image Processor.

Want to see it in action? Check out our quick demo and tutorial!

[Watch Demo »](#)

[Watch Tutorial »](#)

All-New Manual Edit Tools

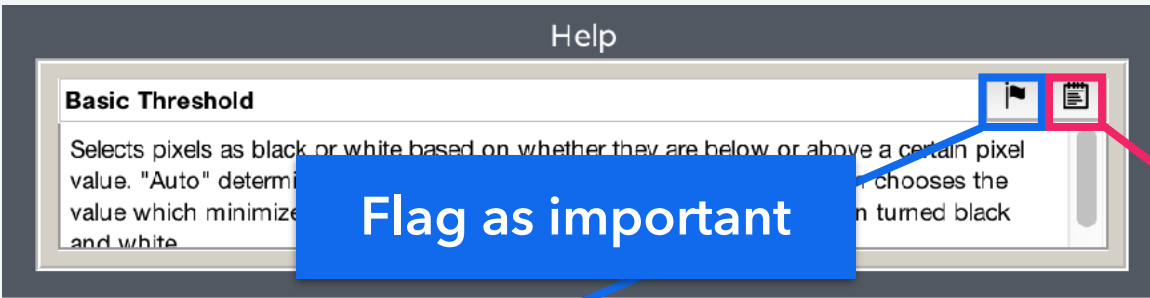


[Watch Now »](#)

We completely rewrote the manual edit experience throughout all 2D apps. It's awesome. You won't imagine a time before it. A video is worth a thousand words, so check it out above!

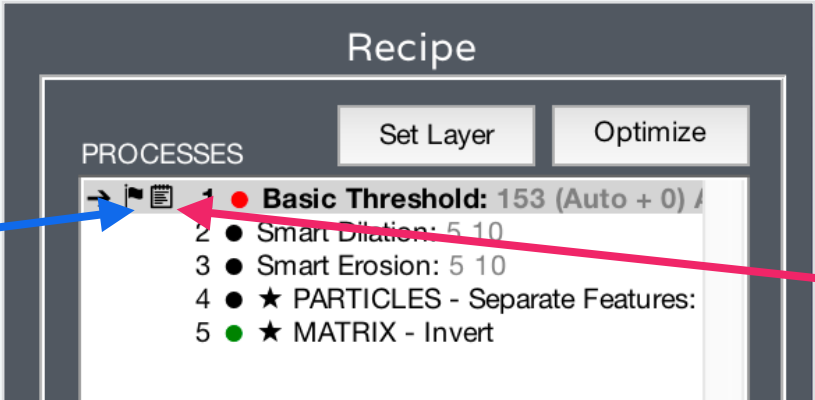
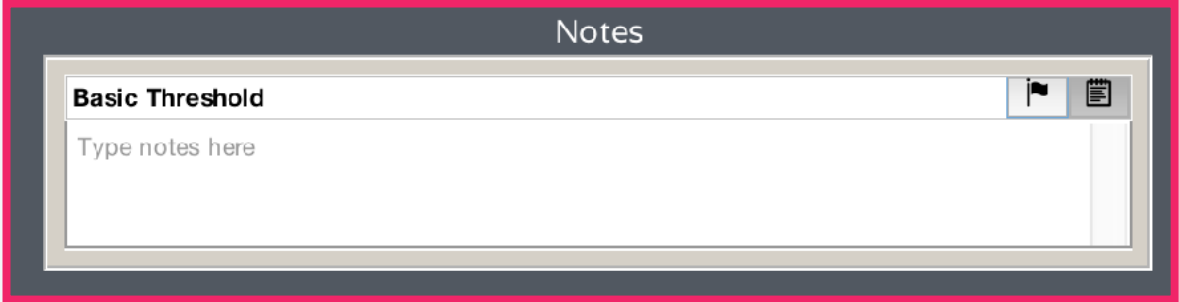
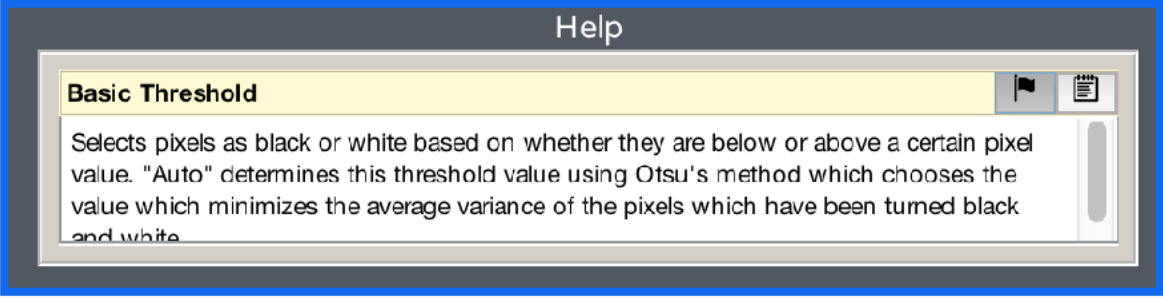
Notes & Flags

[Watch Tutorial »](#)



Flag as important

Add custom notes



Flag icon next to step

Note icon next to step

Headings

OLD

Pre-ProcessingSegmentation

Adjust Contrast...

Histogram Equalization...

*Histogram Match

Flatten Background...

Gaussian Blur...

Average Blur...

Sum Filter...

Median Filter...

Wiener Filter...

Non-Local Means...

StdDev Filter...

Entropy Filter...

Gradient Filter...

Grayscale Dilate...

Grayscale Erode...

Sharpen...

*Grayscale Interpolation...

*Grayscale Reconstruction...

FFT Filter...

NEW

Pre-ProcessingSegmentation

CONTRASTpe

Adjust Contrast...

Histogram Equalization...

*Histogram Match

Flatten Background...

BLUR

Gaussian Blur...

Average Blur...

Sum Filter...

NOISE-REDUCTION

Median Filter...

Wiener Filter...

Non-Local Means...

TEXTURE

StdDev Filter...

Entropy Filter...

Gradient Filter...

Grayscale Dilate...

Grayscale Erode...

Top-Hat Filter...

Bottom-Hat Filter

CORRECTION

Sharpen...

*Compressed Sensing...

*Grayscale Interpolation...

*Grayscale Reconstruction...

FREQUENCY

FFT Filter...

OLD

SegmentationFeature-Finding

Invert

Blank

Basic Threshold...

Range Threshold...

Adaptive Threshold...

E-M Threshold...

Smart Cluster...

Superpixels...

Watershed...

*Local Threshold...

*Region Grow...

*Fast Marching Method...

*Active Contour...

*Auto Segmentation...

Find Global Maximum

Find Global Minimum

Find Local Maxima...

Find Local Minima...

NEW

SegmentationFeature-Finding

Invert

Blank

THRESHOLD

Basic Threshold...

Range Threshold...

Adaptive Threshold...

E-M Threshold...

*Local Threshold...

ADVANCED

Smart Cluster...

Color Cluster...

Superpixels...

Watershed...

SNAP

Auto Segmentation...

*Region Grow...

*Fast Marching Method...

*Active Contour...

EXTREMA

Find Global Maximum

Find Global Minimum

Find Local Maxima...

Find Local Minima...

Functions: Better organized. Easier to find. More obvious to use.

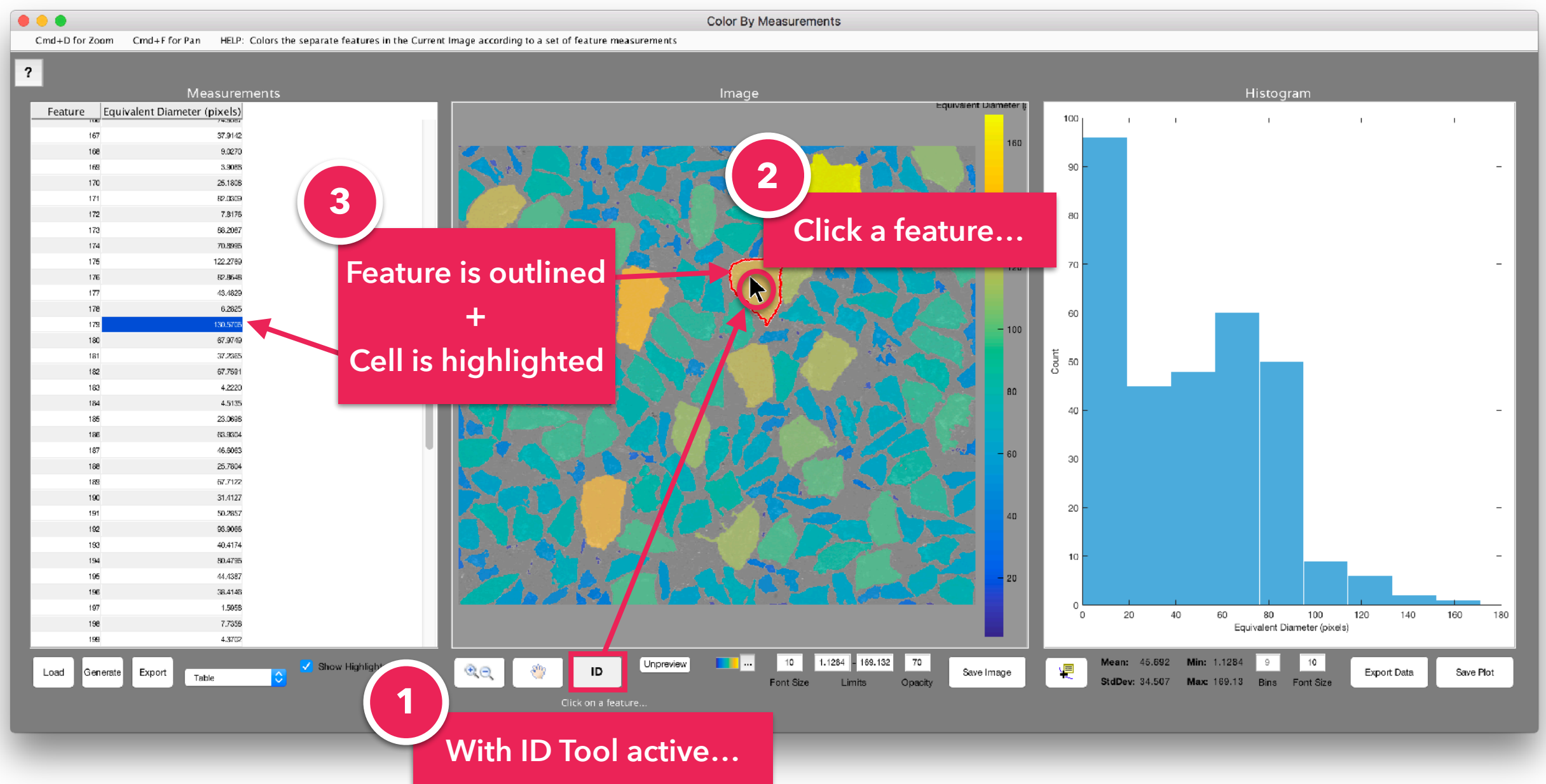
Status Indicators

Launching...

Working...

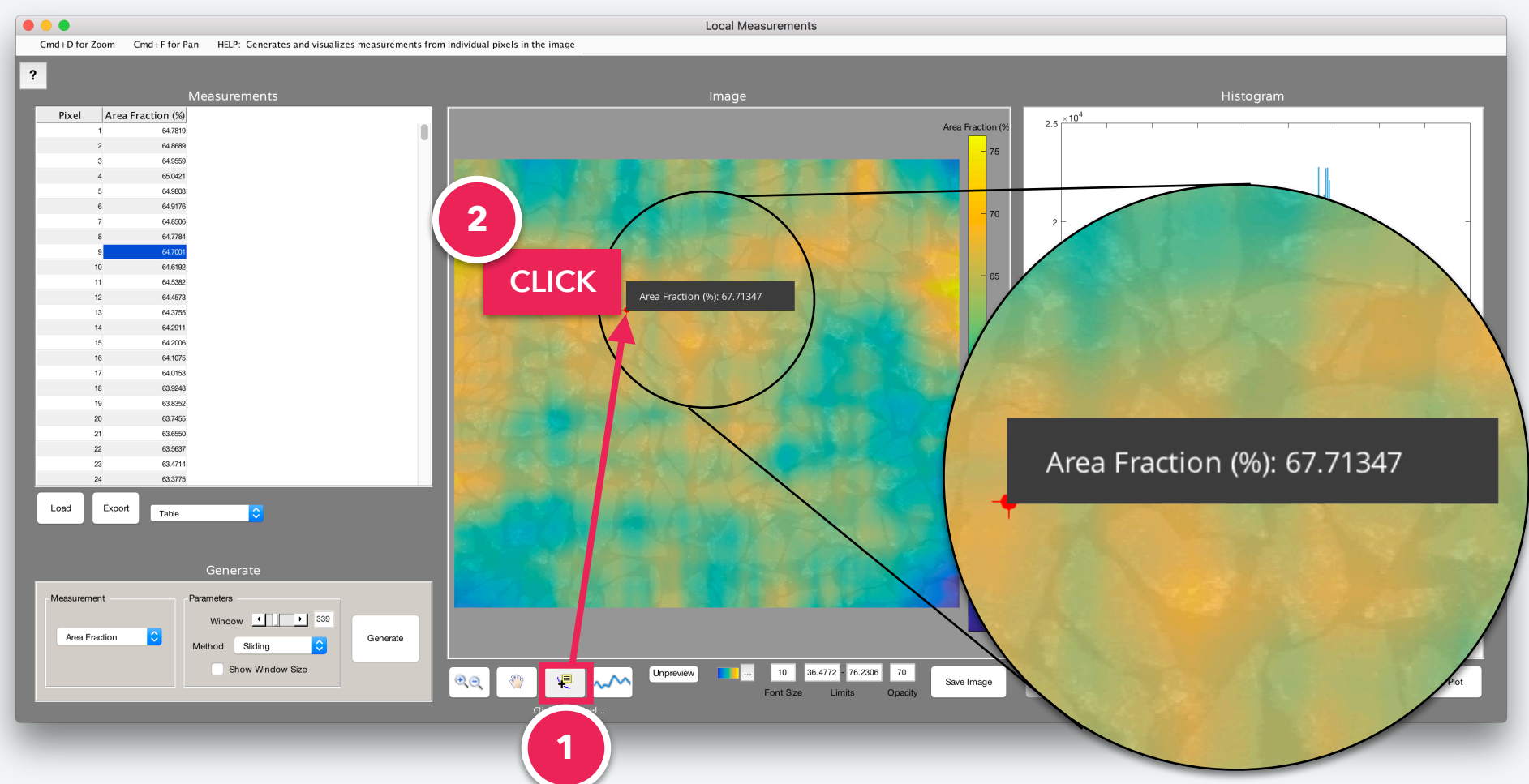
You'll find these throughout the user-experience of MIPAR and feel more confident and comfortable with process execution.

Color by Measure: The Other Direction



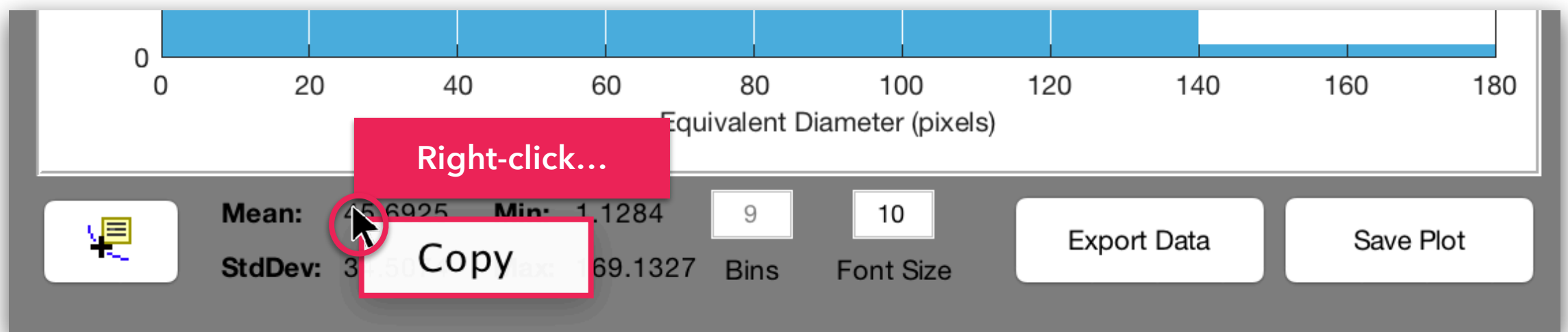
Ever have the urge to just click on a feature in *Color By Measure* and find out what cell it is?
Now you can!

Local Measure Probe: Next Generation



Quickly probing a map in *Local Measure* has just gotten better. Much better.

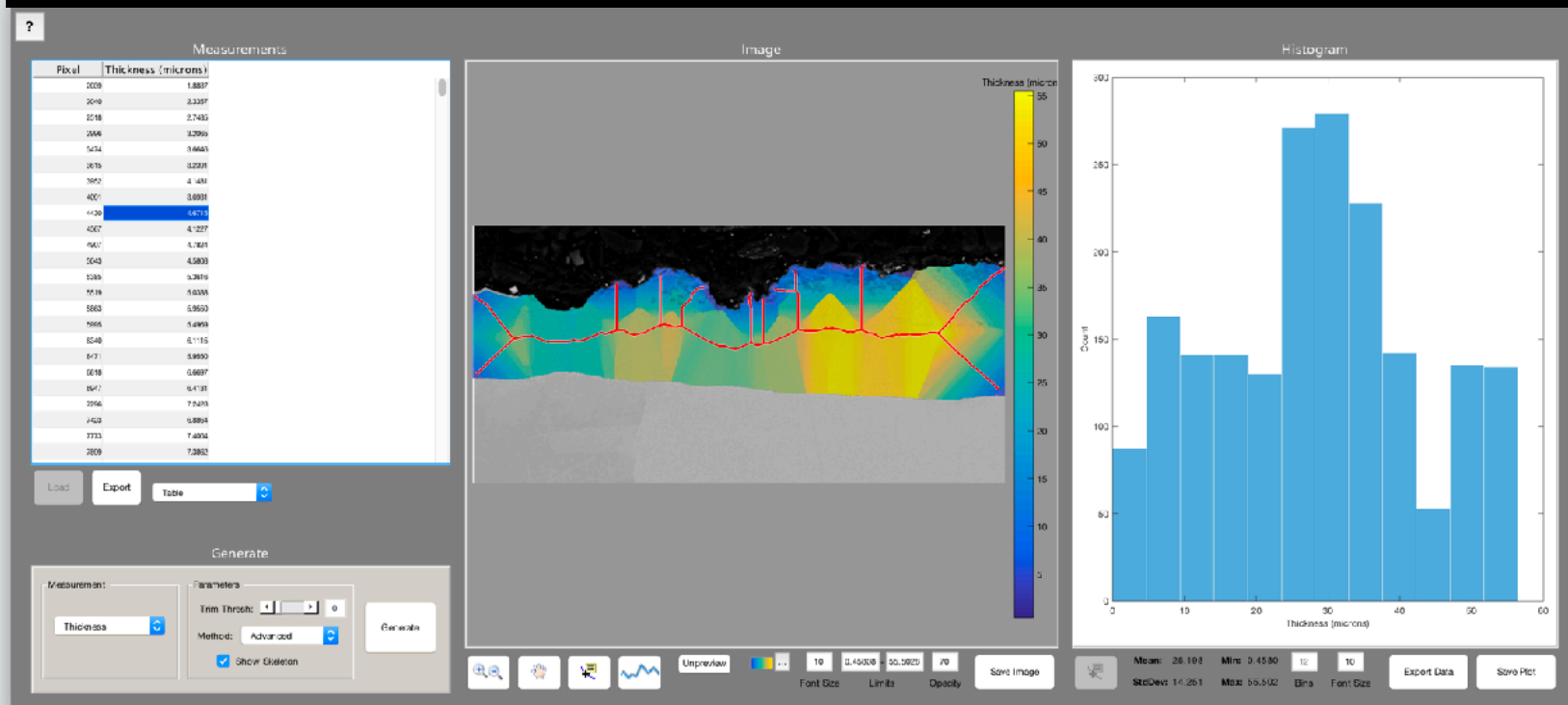
Copy Histogram Stats



A simple right-click on histogram stats now allows you to copy them to the clipboard for easy exporting.

Better Thickness Measurements

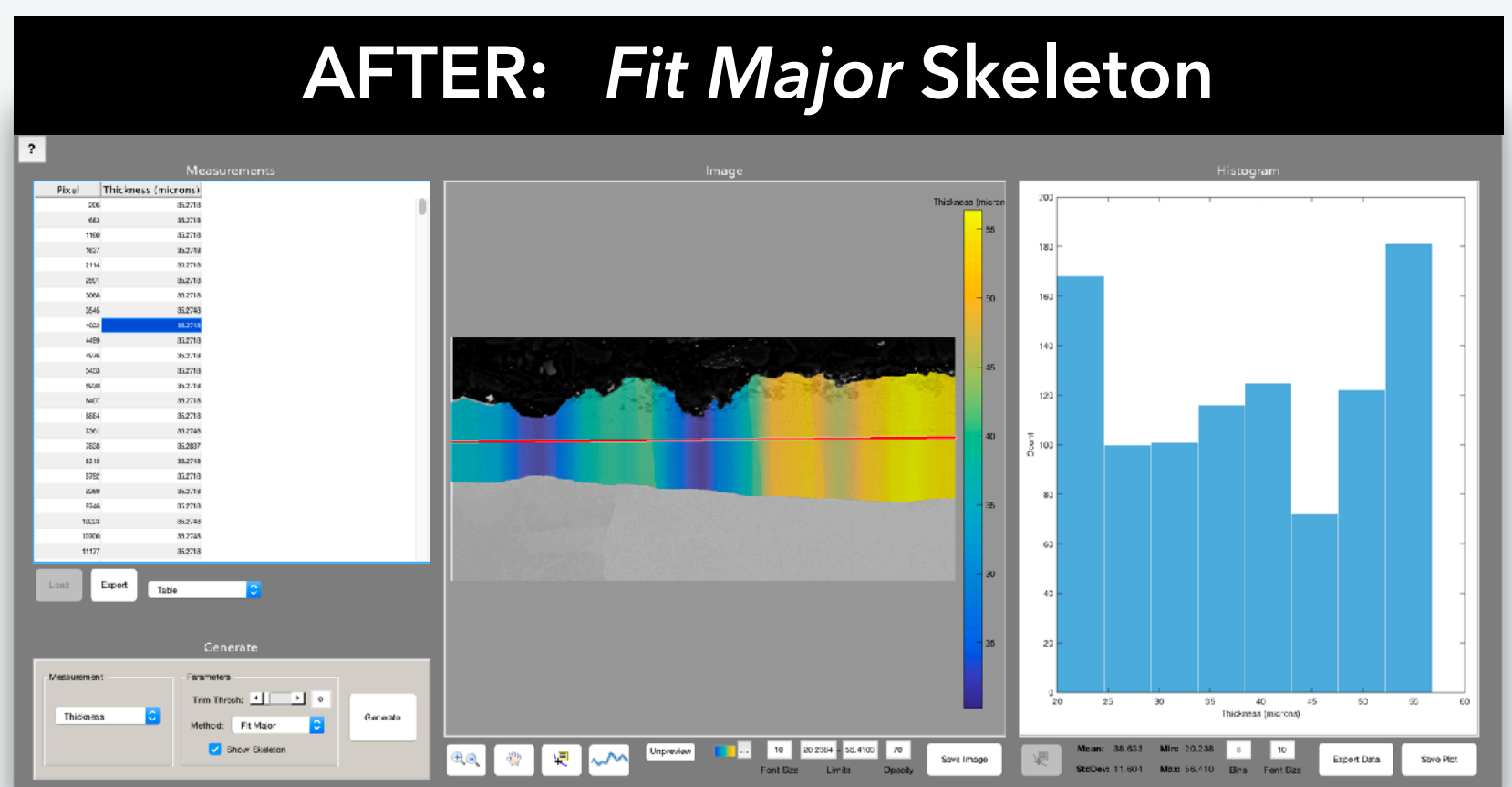
BEFORE: *Advanced Skeleton*



Previously, the only two methods for measuring local thickness, “Advanced” or “Classic”, did not perform so well on single layers.

The new “Fit Major” and “Fit Minor” modes in *Local Measure* offer much better solutions for visualizing and quantifying thickness variations across layers.

AFTER: *Fit Major Skeleton*



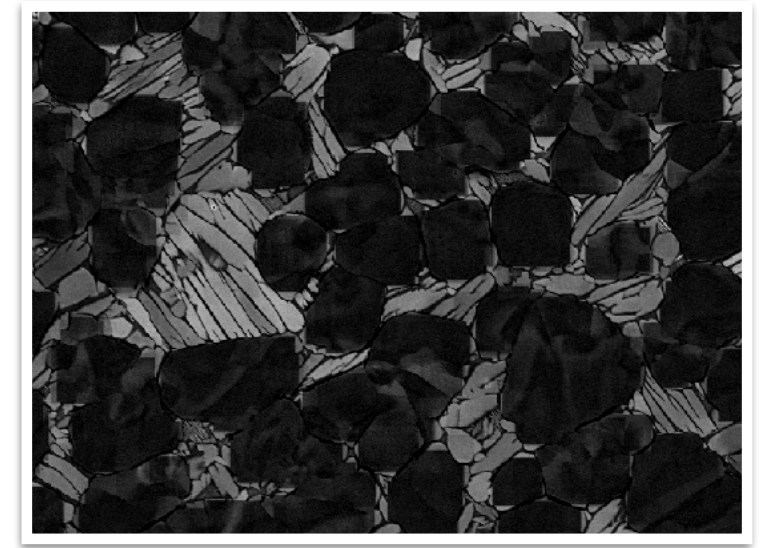
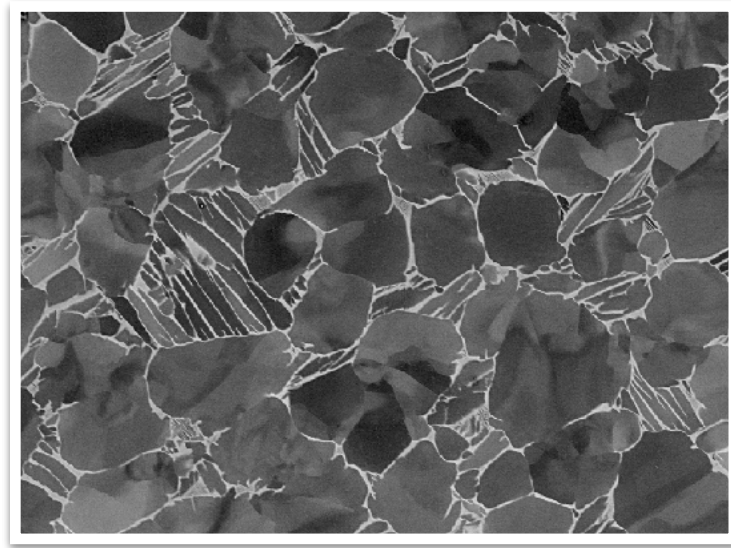
New Texture Filters

Bottom-Hat Filter

Highlights dark features of heavily textured regions

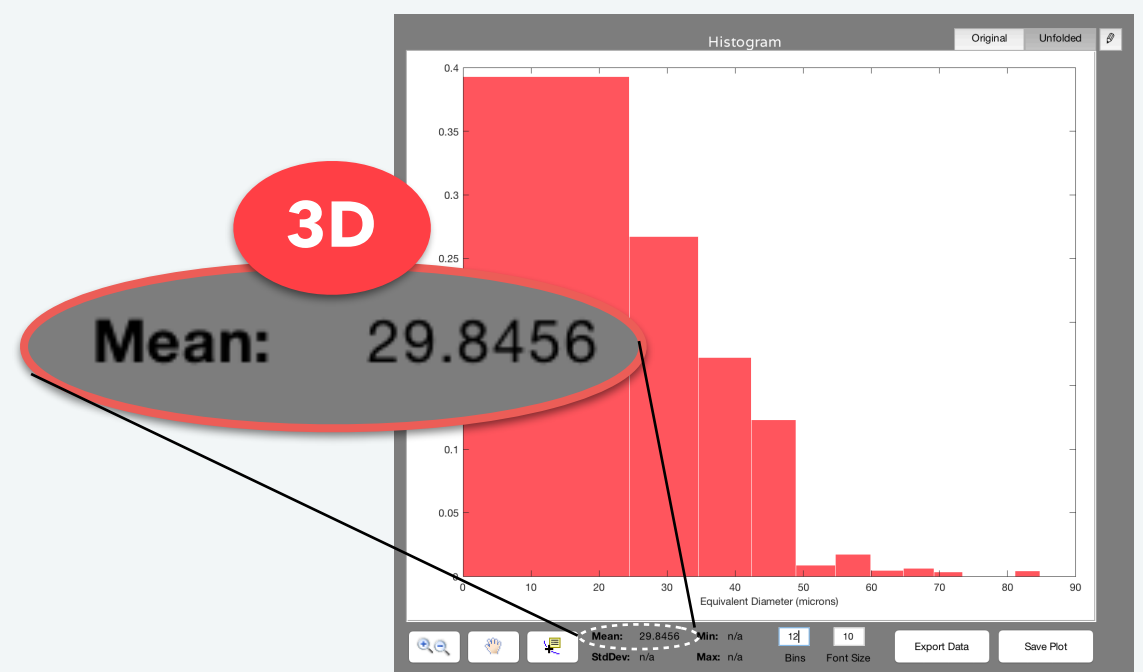
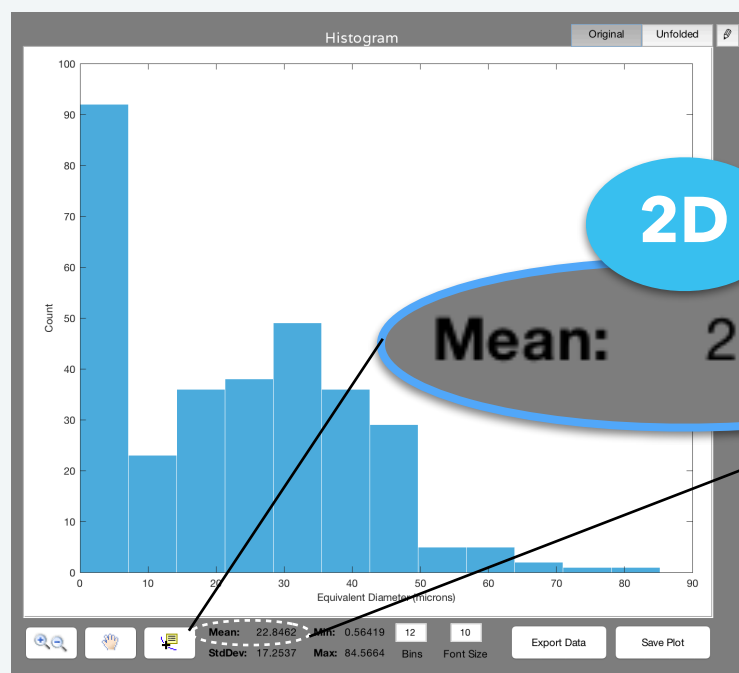
Top-Hat Filter

Highlights bright features of heavily textured regions



Bottom-Hat Filter used to highlight textured regions in bimodal microstructure

Histogram Unfolding

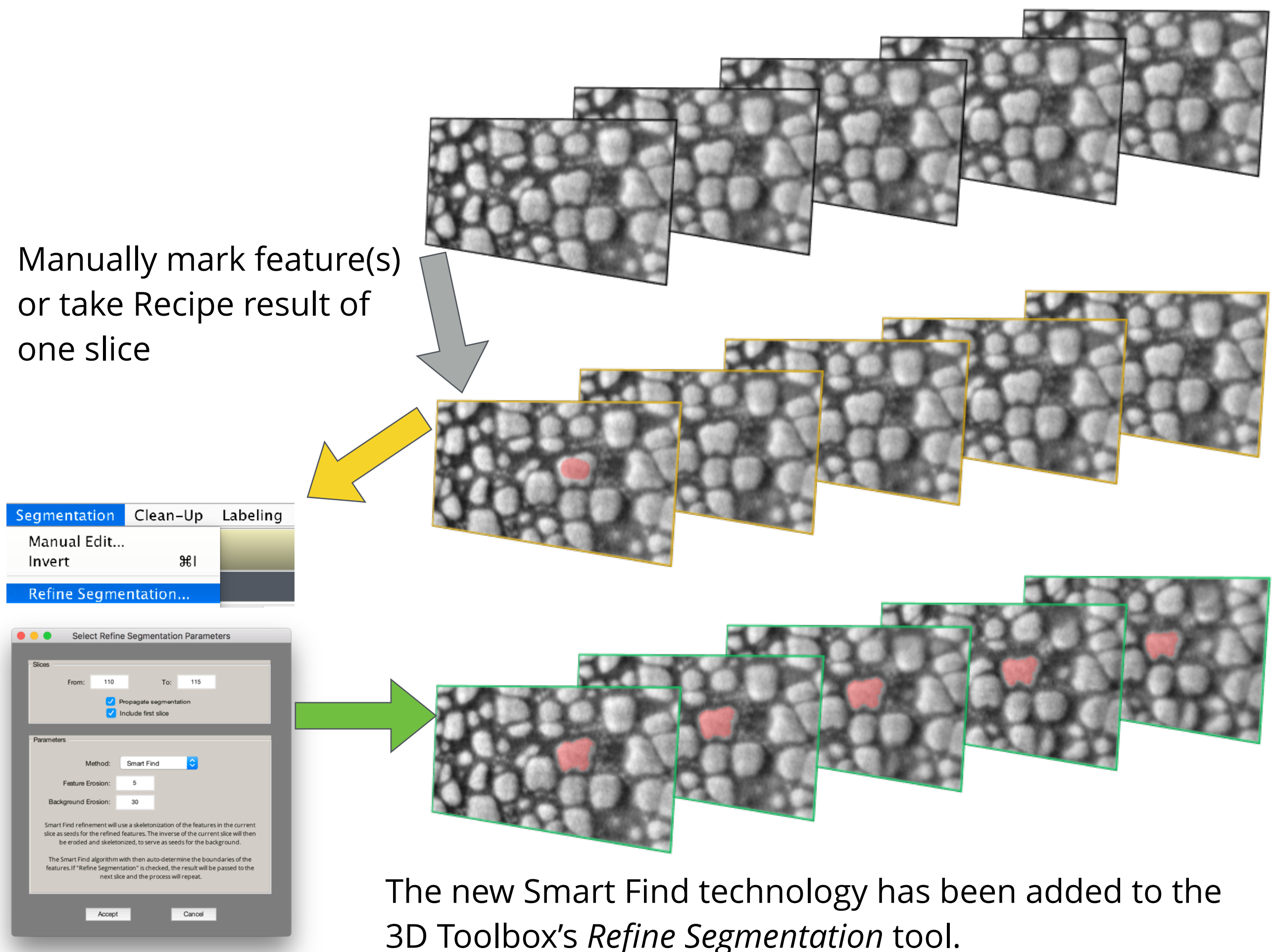


MIPAR's Tools > *Histogram of Measurements* adds a powerful new tool for revealing the 3D diameter or volume histogram which underlies a 2D diameter or area distribution.

Read more [here!](#)

Better Segmentation Propagation

Manually mark feature(s)
or take Recipe result of
one slice



The new Smart Find technology has been added to the 3D Toolbox's *Refine Segmentation* tool.

Bugs Fixed

- Fixed bug which caused some preview windows to open partially off-screen in certain monitor resolutions
- Fixed bug with *Watershed* preview/unpreview for certain viewing modes
- *Translate Image* now outputs as selection image if the result is B/W
- Fixed bug with running *Reject Features* with certain neighborhood conditionals
- Fixed bug which occasionally caused 3D Extension to be un-detected by License Manager
- Many other fixes and stability improvements