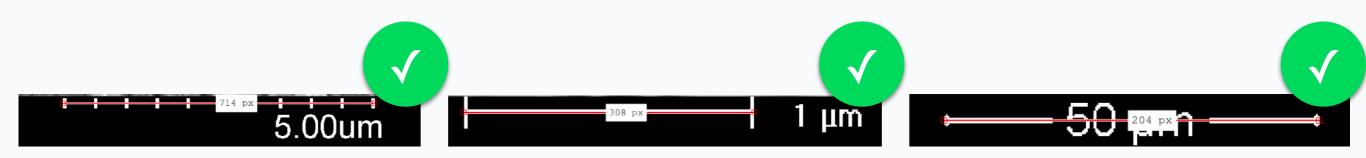


MIPAR

Release Notes

V1.4.0

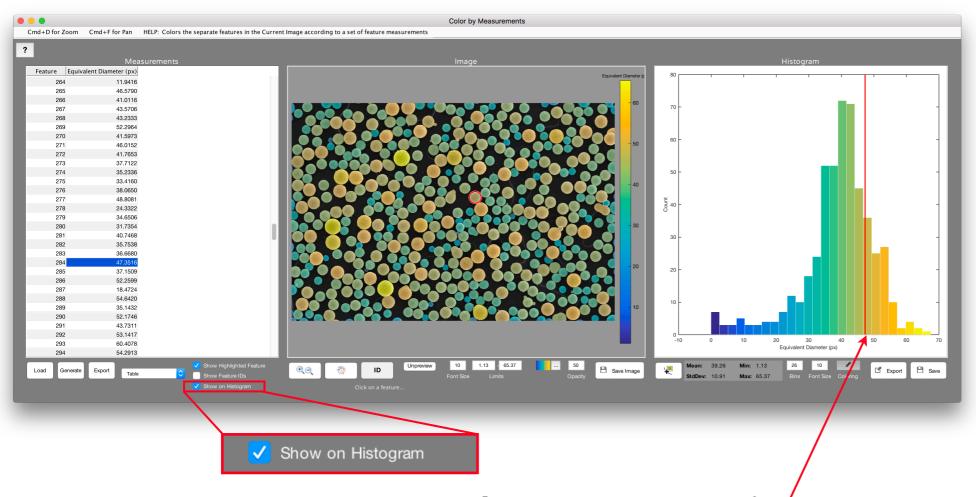
Even Better Scale Bar Detection



and so many more...

We've taken another step forward and can now detect the most challenging of bars!

Color-Coded Histograms



to single-color anytime.

Histograms

Match Images

Now in Color by Measure,

beautiful as your images.

Coloring is automatically

linked, but you may switch

your histograms are just as

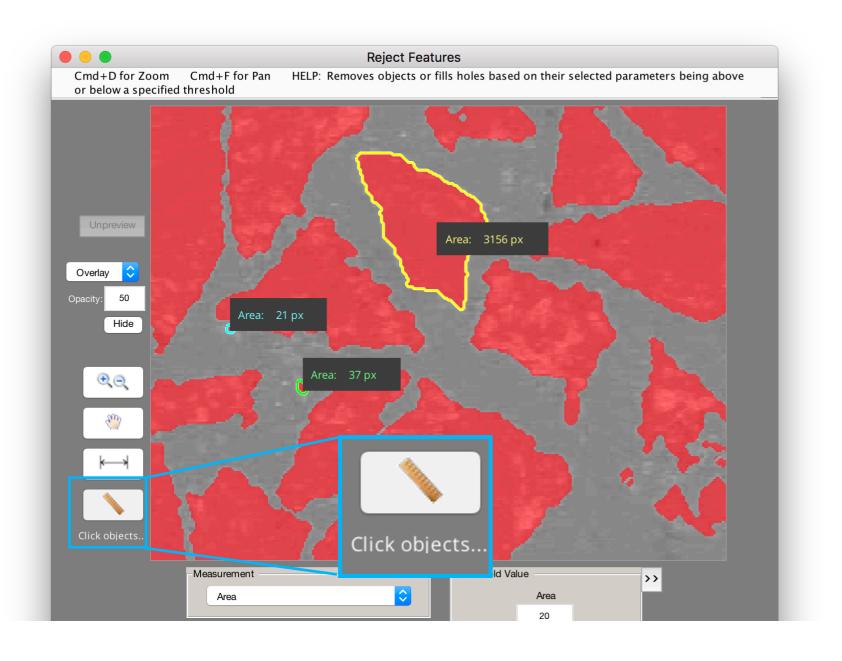
Show Feature as Line

Check "Show on Histogram" to place a line exactly where the selected feature lies.

All-New Interactive Measurement Tools

"Wow, these are simply fantastic."

- Our Apps Specialist



Reject Features

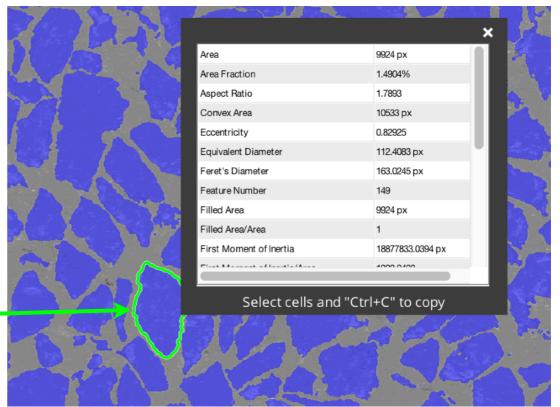
The new interactive measurement tool in *Reject Features* takes your capabilities to the next level.

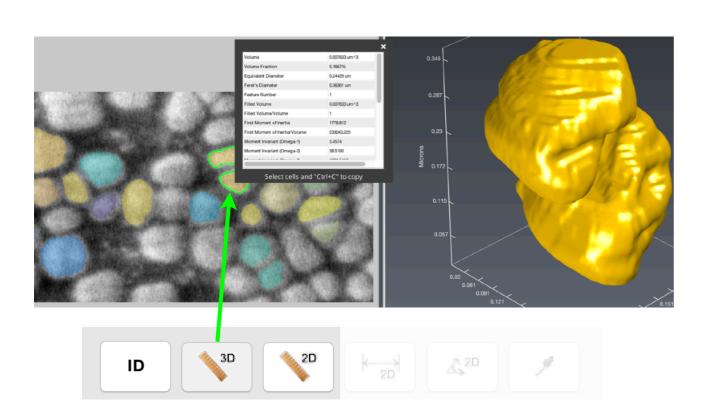
Fluidly click multiple features and measurements print right on the image. Even switch measurement type after clicking, and the display will update automatically!

Image Processor

We've brought the magic to the Image Processor! Interactive measurements and IDs are integrated seamlessly into the image.



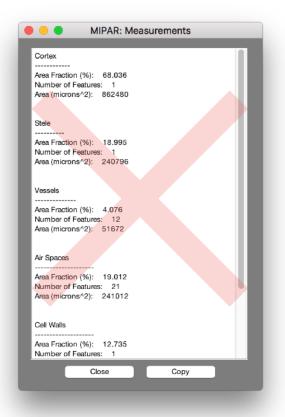




3D Toolbox

They've come to 3D! Interactive measurements in 2D and 3D, and IDs, are all printed right where you click.

All-New Global Measurement Reports



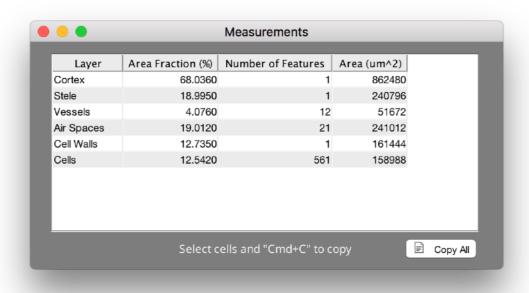


Image Processor

We've completely redone how global measurements are printed. They are better organized, easier to read, and a breeze to copy and paste!

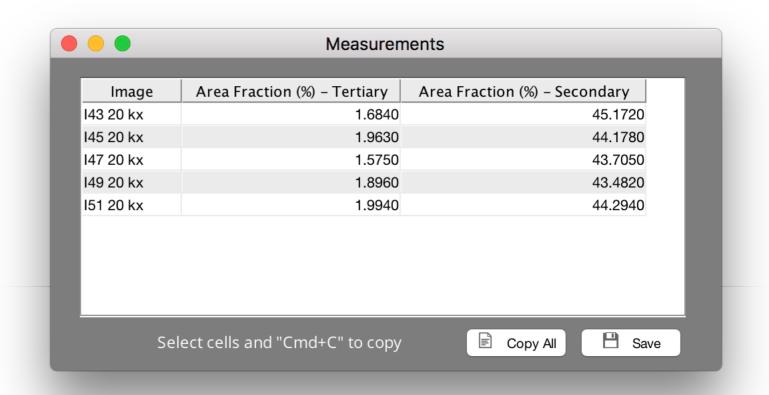




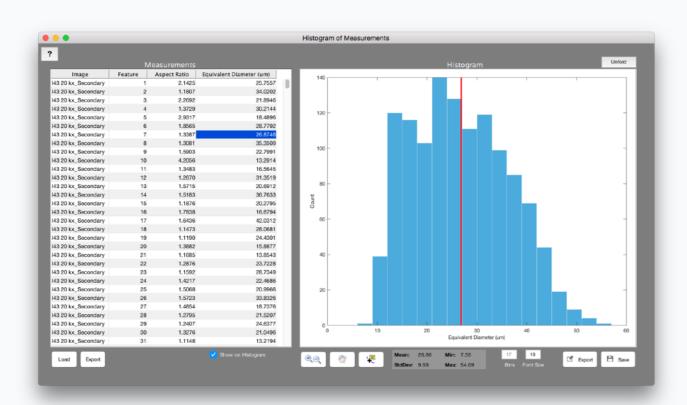
Processed Image Editor

Now you get instant display of your bulk global measurements. All layers, all measurements, one table.

With just a click, copy or save them away.



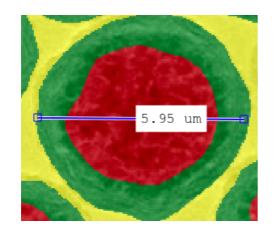
Bulk Feature Measurements → Straight to Histograms



Processed Image Editor

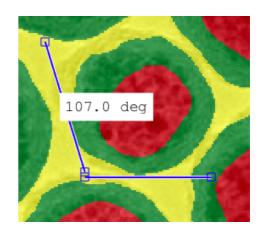
Generating feature measurements from hundreds of images at once? Now they print directly into the *Histogram of Measurements* tool for instant viewing and plotting!

New Distance and Angle Tools



Distance Tool

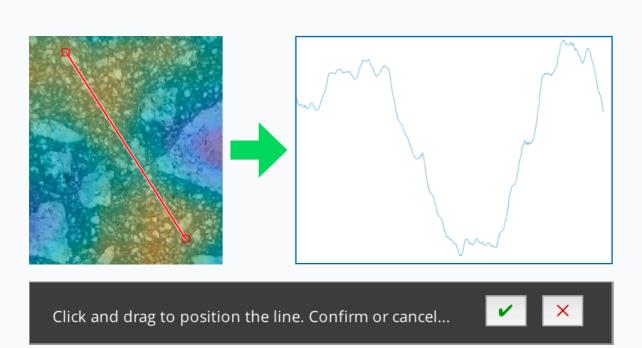
The all-new distance tool fluidly updates in pixels or microns as you move it about. Check the "Show Vector" box to have its vector do the same!



Angle Tool

The all-new angle tool fluidly updates as you move it about. Make quick angle measurements in a fraction of the time.

New Line Profile Tool



You'll have an even better experience taking line profiles in the Image Processor and *Local Measurements*

Estimate Count: A New Measurement



Problem: Count Trees



Solution: Circle a Few Trees

Use *Manual Edit* Set as *Memory Image*

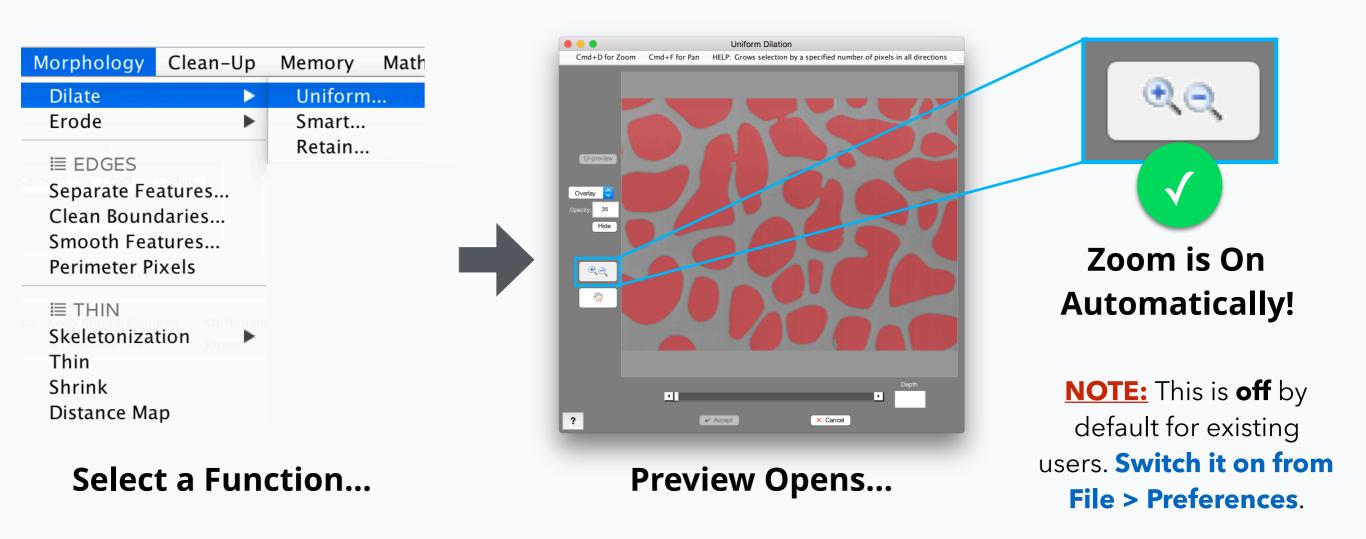
+ Find Tree Patches

Measurements > Estimate Count

When You Need It, Nothing Else Will do

Sometimes features just cannot be adequately separated for you to have confidence in their count. Our new *Estimate Count* measurement solves this problem.

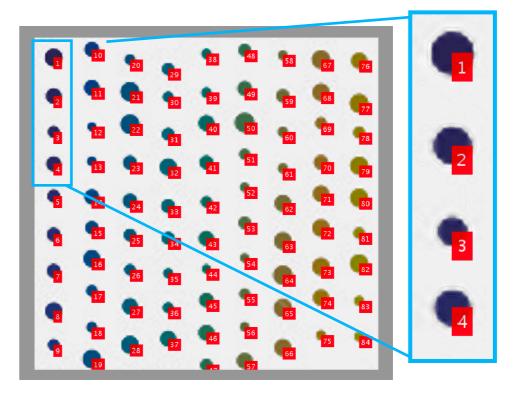
Auto-Zoom in Preview Windows



Left-to-Right (standard)

Features are numbered from left-to-right, regardless of vertical position

Alternate Labeling Order

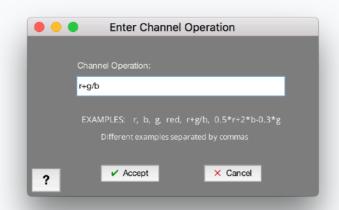


Top-Down Grid

Features are numbered top-down in columns from left-to-right. Tolerance controls search width for columns.

Choose from File > Preferences

New Channel Operation and Resize Image Windows



Channel Operation

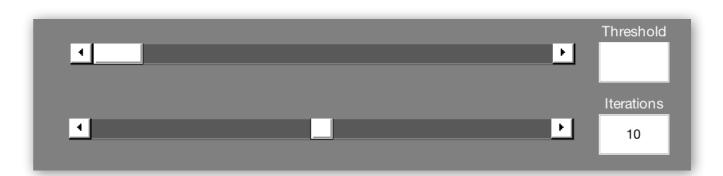


Resize Image

A fresh user-interface new size-factor opt

UI Enhancements





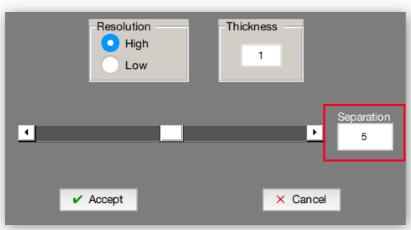
Icons

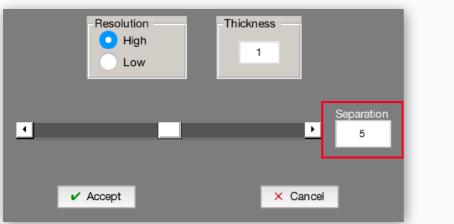
We've added icons throughout for more clarity and comfort in the MIPAR experience.

Sliders & Text

Sliders have been given dark backgrounds, and text is now white throughout all preview windows. We take UX seriously and down to the last detail.

Cleaner Settings





Proximity Awareness Greater Than / = Less Than / = Within Distance atures < / = Average Area Local Window Number Total Area × Cancel Feature Area

Separate Features & Watershed

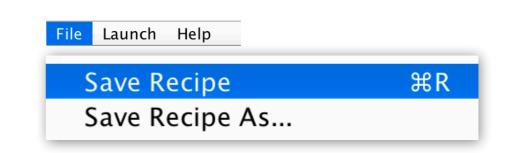
"Weakness" is now called "Separation" Increasing the slider increases number of feature separations (for Separate Features) and the number of detected outlines (for *Watershed*)

Reject Features

"Neighborhood Conditionals" is now "Proximity Awareness" This is panel is now hidden by default.

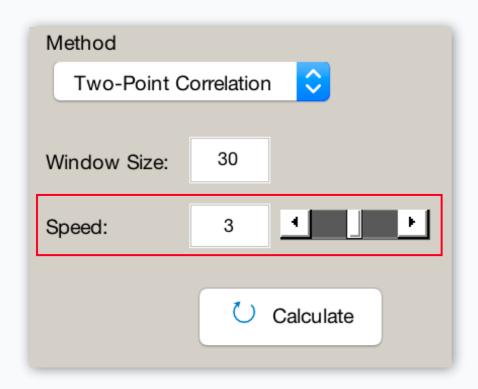
Save Recipe vs. Save Recipe As





After a Recipe is saved, you now have the option for a quick "Save". Choose "Save As" to save with a new name. This is a big deal for the power users who save Recipes often.

Pattern Mapping Enhancements

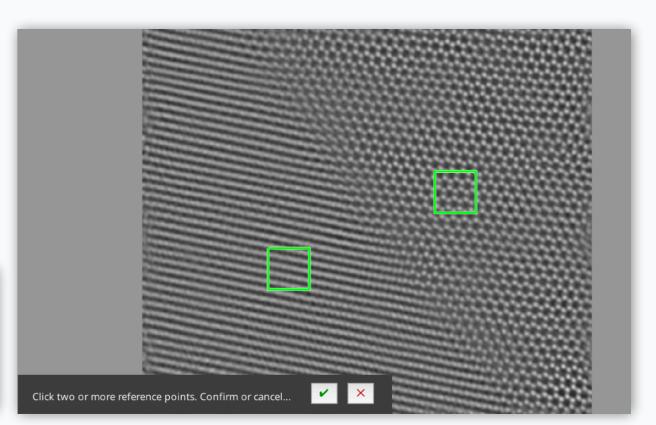


Speed Setting

Have more control over speed vs. precision. Crank it up for blazing fast mapping, or turn it down for high precision.

Better Tools Choosing references for "FFT Matching" has never been easier or clearer!





Other Fixes and Changes

- Bug fixes, stability improvements, and speed enhancements throughout
- Selection overlay improved in Color by Measure and Local Measure
- Axes rescale has been improved in all preview windows
- No more 2-image minimum in Processed Image Editor
- In Optimization, "Intra-class Variance" is now called "Selection Match"
- "Image Type" panel has been removed from Batch Processor making more room for Recipe
- "Image Type" and "Instrument" panels have been removed from Real-Time Processor
- Fixed bug where Scale Factor was changed by moving backwards across a Crop Image