MIPAR™
Release Notes
v1.1.0

Smart Clustering

Original | Smart Cluster
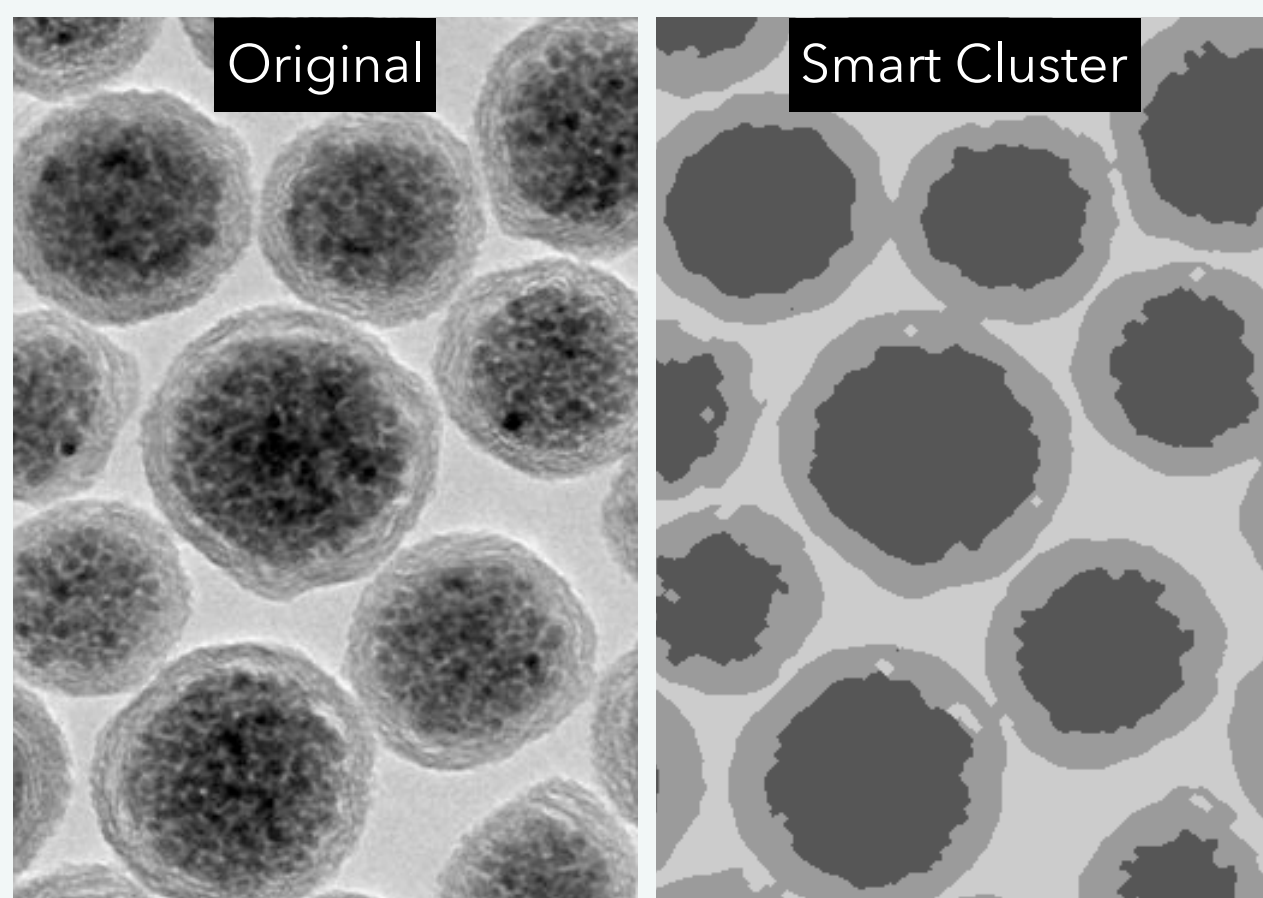
MIPAR now offers a fantastic technology for automatically clustering your image into 2 or more classes for objective and powerful segmentation. Find it under Segmentation > Smart Cluster.

With the number of classes as the sole variable, the algorithm inspects the histogram, and assigns each pixel to the best class. Use the edge clean parameter to remove artifacts at interfaces.

Multi-phase segmentation problems just became easier by orders of magnitude.
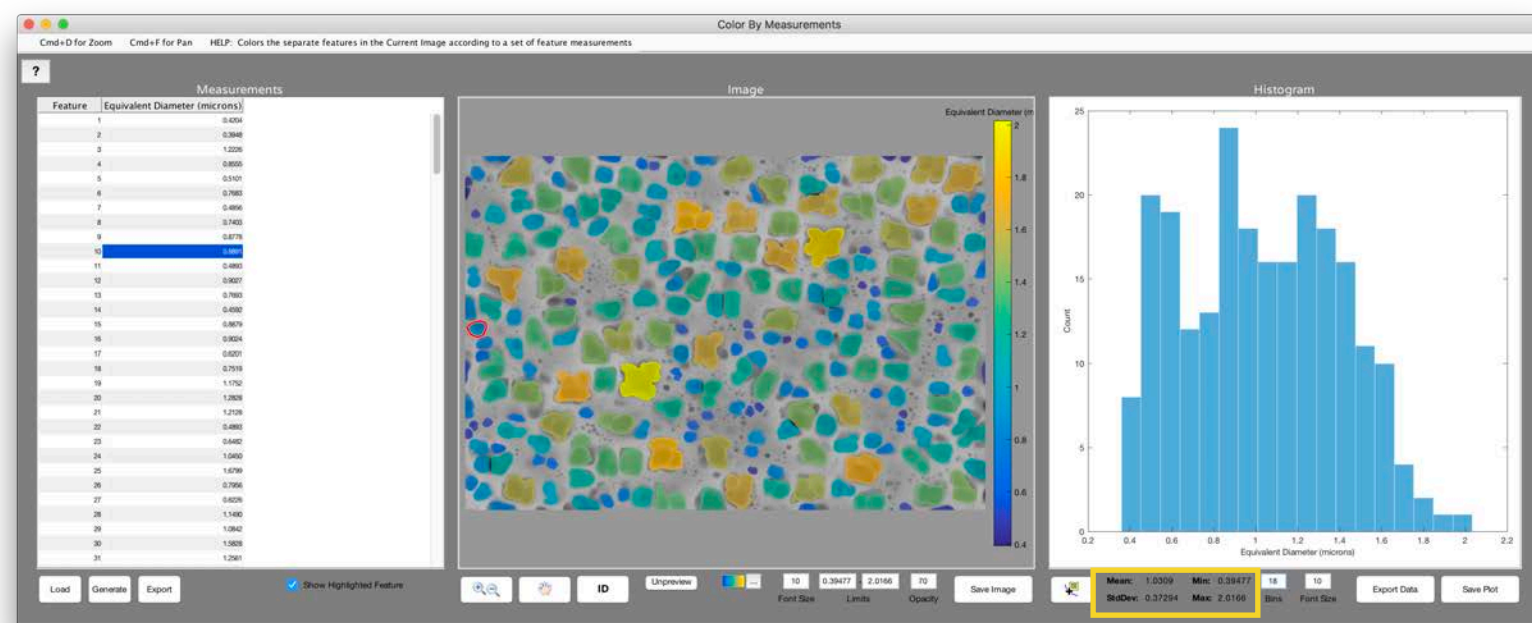
Histograms

You can now make histograms directly within MIPAR — and it couldn't be easier!

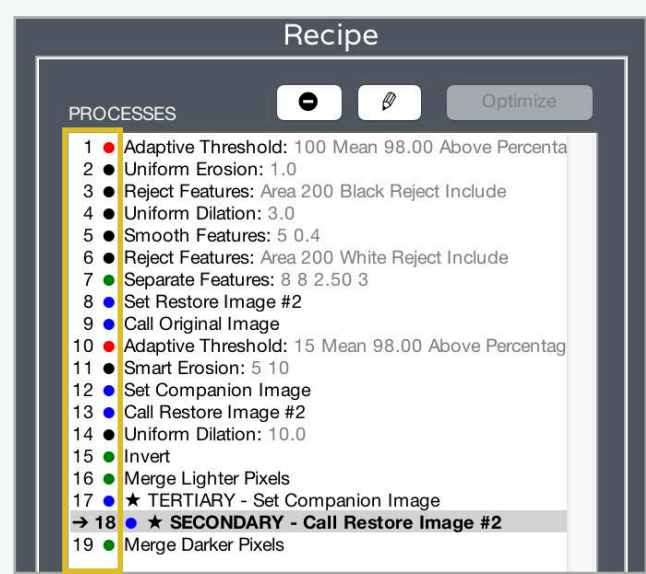Now see a histogram of your measurements alongside the image in *Color By Measurements.*

Do the same in *Local Measurements.*

Even make histograms of already-exported measurements in the stand alone *Histogram of Measurements*.
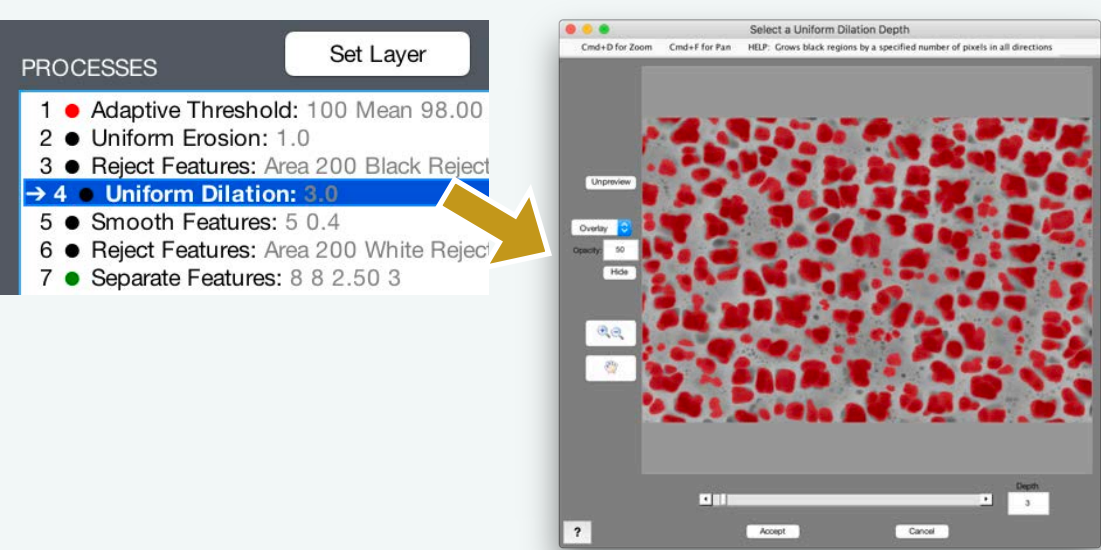

Also get quick stats like mean, min, and max!

Recipe User Experience

Numbered Steps

A highly requested feature. Recipe steps are now numbered. Surprising how little things can make such a difference. Toggle this on or off anytime from File > Preferences.
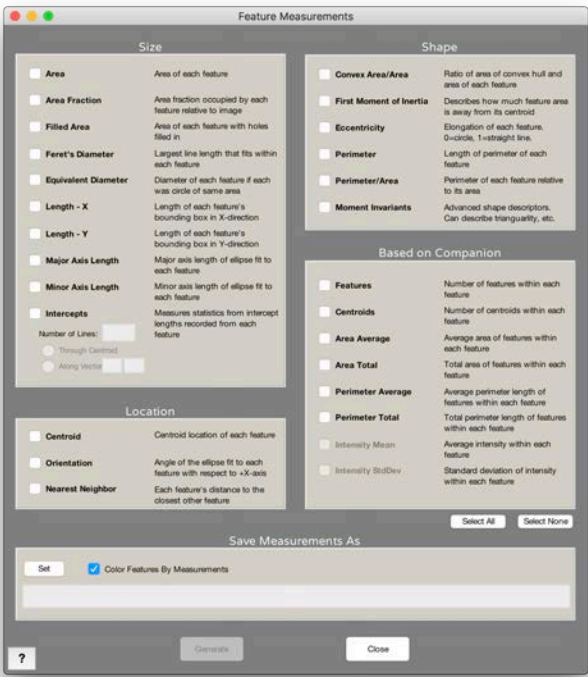
Double-Click to Edit

We are all about the finer points of user experience. Now double-click on the currently-shown Recipe step to quickly edit its settings.
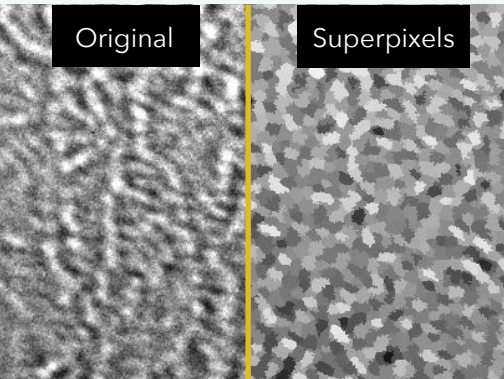
Redesigned Measure Features

Old

New

Measure Features just got a major facelift in both 2D and 3D. We think you'll like the descriptions next to each measurement too!
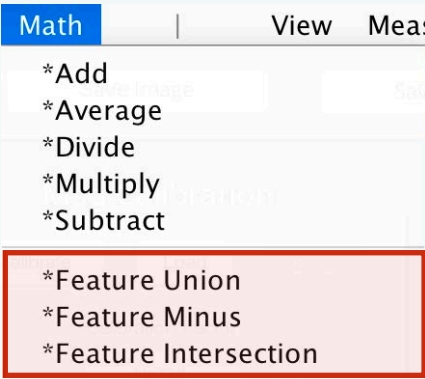
Also, area and volume fractions are now expressed as % throughout MIPAR!
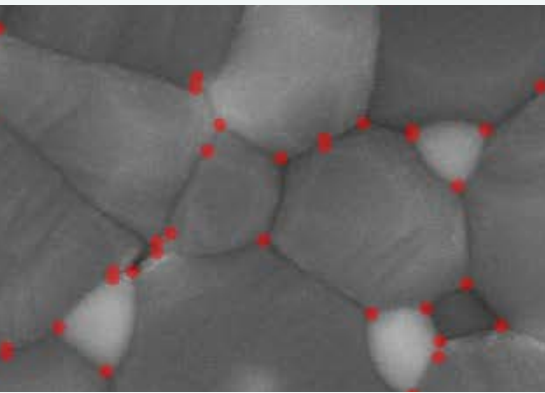
More New Functions

Superpixels

This clever tool automatically partitions your image in areas with similar pixel values.
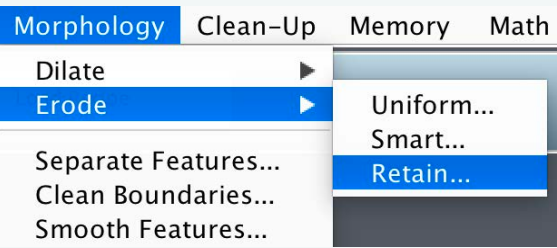
Union, Minus, Intersection

Combine features from two images, subtract features of one from the other, or keep the overlap. This just got even easier!

Keep Branch Points

With one click, keep only the branch points from your skeleton. Very useful for highlighting nodes of boundaries.
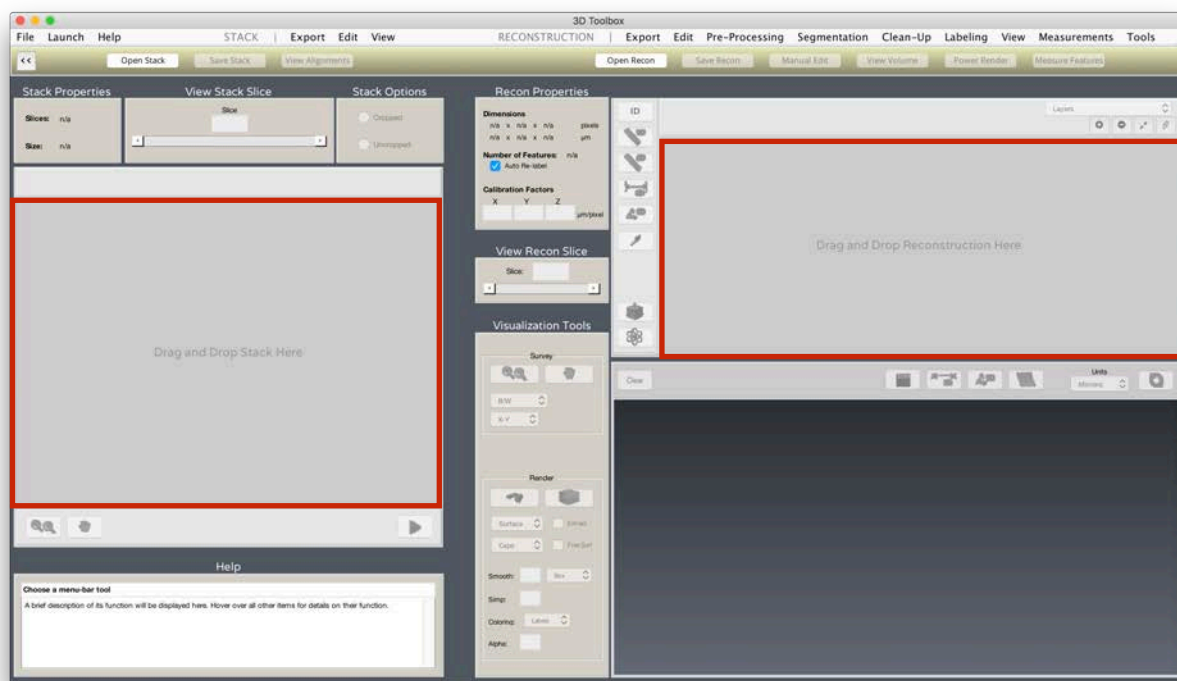
Retain Erosion

Now erode features without letting them split! Tremendously useful after a dilation to heal missed connections.

Drag and Drop in 3D

Now it's everywhere. Drag and drop Reconstructions and Image Stacks into the 3D Toolbox.
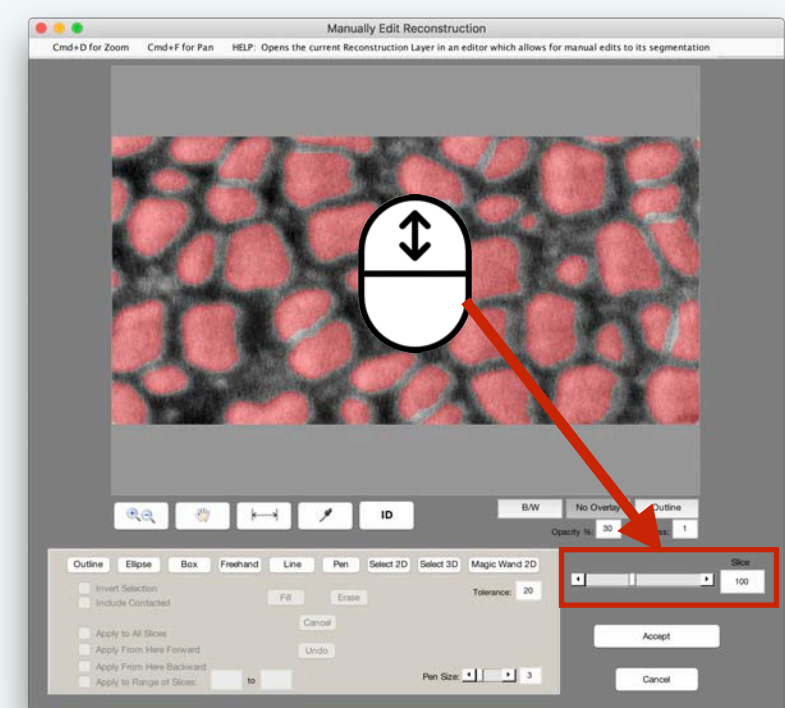
Scroll Wheel Streamlining

Once you experience gliding through your slices with the scroll wheel, you'll never look back. Image Stacks, Reconstructions, even 3D volume views, it's all so good.

Applying manual edits to multiple slices at once just became a dream too!
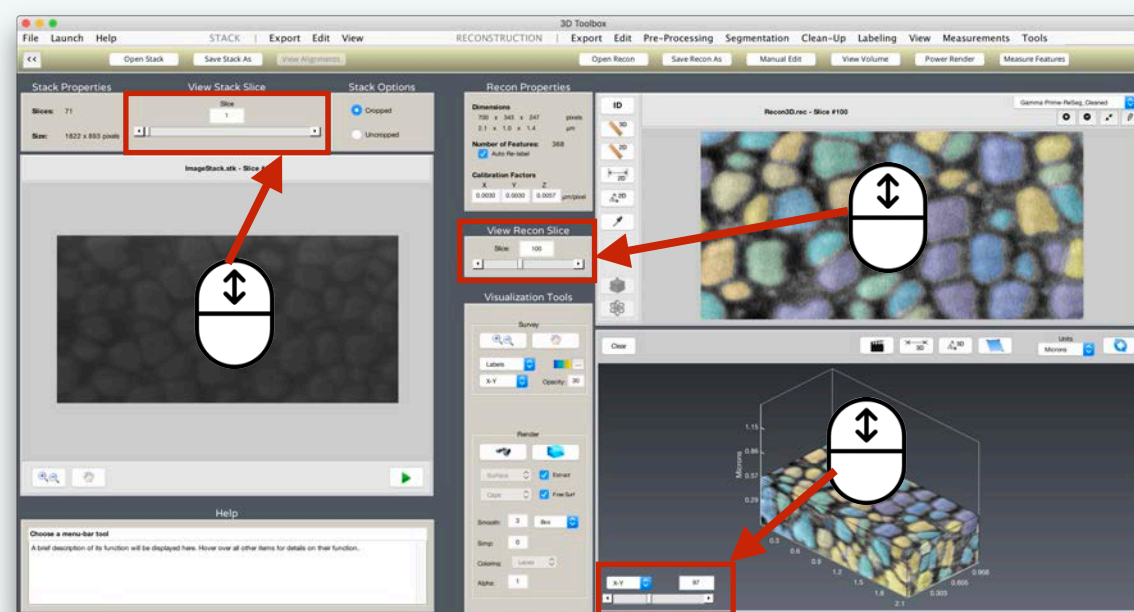
3D Toolbox

Manual Edit 3D

Bugs Fixed

We've fixed several bugs and improved stability throughout.

As always, we greatly appreciate any feedback you can provide regarding bugs, usability, and feature requests. Feel free to submit any feedback anytime to support@mipar.us.

Other Changes

- *Basic Threshold* now has a "Select" parameter which lets you toggle between selecting pixels below and the threshold value.

- You may now toggle off "Auto Re-label" in the 3D Toolbox prior to opening a Reconstruction. This will prevent the separate features from being automatically labeled upon opening, which can be resource intensive for some Reconstructions.

- The *Thicken Skeleton* function has been removed. The same can be done using *Retain Dilation* with a depth of 1.

- *Restore Image* functions have been renamed as *Memory Image*