



Neurolucida 360

Release Notes

Version 2018.1.1 (5/4/2018)

NEW FEATURES AND ENHANCEMENTS

Neurolucida 360 overall

- Large Volume Reconstruction mode: Reconstruct from a very large image volume; define subvolumes and trace in 3D.
- Batch image filtering: Apply filters (Golgi, in vivo, closing, projection) to multiple images without opening them.

Neurolucida 360 3D environment

- Movie production: Redesigned and expanded functionality.
- Tree tracing: Display all trees as centerline while the tree being traced is displayed with the actual thickness.
- Automatic spine and varicosity detection: Voxels in a single location cannot be identified as both a varicosity and a spine (155664062).
- Varicosity detection: Detection is restricted to the varicosities whose center is located at least one radius away from the start or the end of a branch (155942643).
- Mouse wheel: Function toggles between zooming and focusing depending on cursor location (155004776).
- Improved automatic tracing in image volumes with numerous Z planes (150129185).

ISSUES RESOLVED

Neurolucida 360 3D environment

- Tree editing: Crash after detaching several trees using the marquee method (153644584); single point branches cannot be deleted / using marquee to select and delete two-point branches generated by a detach operation leads to crash (154252196); crash after tree deletion then image rotation (153989977); tree can be selected but is not recognized as selected (i.e., not reported in tree count) upon using Connect mode then exiting Points mode (156317806).
- Spine detection: Axial smear option slows down detection for very large trees (152236198).
- Varicosity/spine/synapse detection: Nothing detected on axons (153710309).
- Display: When two adjacent nodes are very close, they are displayed as a single node (151252633); delayed response to image adjustments when toggling between YZ and 3D views (148449287); crash when using Image Sync with 2D (153510513); Image Sync with 2D not supported with Image Slice view (153572883); crash when selecting Partial Projection after connecting two branches (153830864); crash when selecting new color for bounding box (153575559).

Neurolucida 360 overall

- Tree tracing: Potential crash resulting from first tracing in one image and modifying Z in 2.5 window, then loading a second image and starting tracing in 3D (155433947).
- Tree editing: Potential crash when deleting a point in 2D after deleting another point in 3D (152289226); the ending of detached trees/segments is slightly curved (154998780).
- VSI images: Now loading full dynamic range and correctly reading files that were cropped using Olympus software.