

Release notes

Amira–Avizo Software

Version 2020.1

3D data visualization and analysis

The aim of this document is to inform you about the most important new features, improvements and changes in this version of Thermo Scientific™ Amira-Avizo™ Software.

Please read these Release Notes carefully.

We would appreciate your feedback regarding this version. If you encounter any problems or have any suggestions for improvement, please do not hesitate to contact us at FRBOR.3d_hotline@thermofisher.com.

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Avizo Software Lite and Amira Software: Enhancements and new features

New Look and Feel

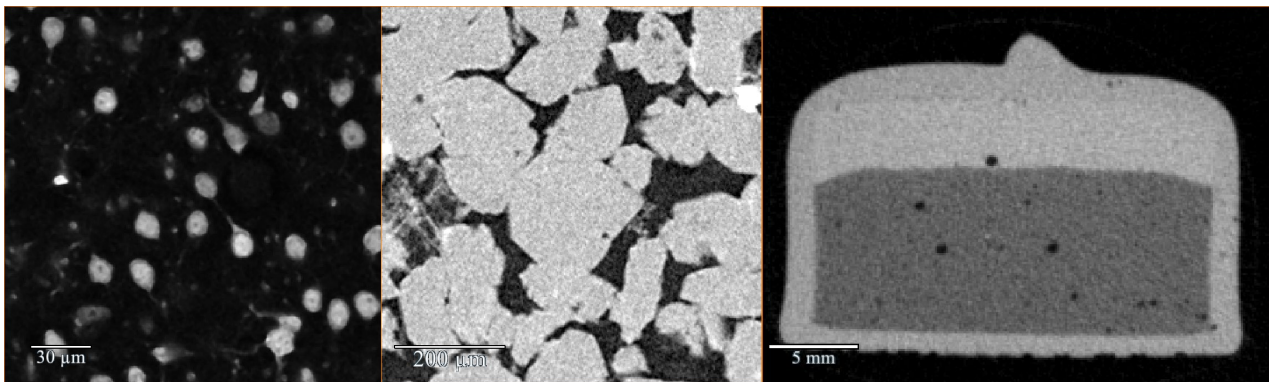
With this release, we are introducing a new look and feel based on dark, contrasting visuals. The primary goal is to offer a more modern presentation scheme.

For those of you using other Thermo Scientific electron microscopy applications, the user experience will be improved, as the look and feel is consistent across software suites.

Support for 4K displays has also been greatly improved.

Scale Bar

The 2D ScaleBar module has been enhanced to enable the display of bar length using the currently selected display unit, improving visibility regardless of image contrast.



End of support

XScreen support will be discontinued with the release of Avizo-Amira Software 2020.1. This feature will be removed from the products in version 2020.3.

Avizo XFiber and Amira XTracing extensions are no longer supported on macOS. The Cylinder Correlation module uses CUDA GPU computation, which is not supported on macOS Mojave (10.14) and macOS Catalina (10.15).

Operating systems

Amira-Avizo Software version 2020.1 runs on:

- Microsoft Windows 8/10 (64-bit).
- Linux x86 64 (64-bit). Supported 64-bit architecture is Intel64/AMD64 architecture. Supported Linux distribution is Red Hat Enterprise Linux 7.
- macOS Mojave (10.14) and macOS Catalina (10.15). The application runs on macOS Catalina (10.15) with a known limitation: the application cannot run in debug mode.

Avizo Software 2020.1 for Industrial Inspection and Inline Extension runs on:

- Microsoft Windows 8/10 (64-bit)

To add custom extensions with Amira-Avizo XPand extension, you will need:

- Microsoft Visual Studio 2013 (VC12) Update 4 on Windows
- gcc 4.8.x on Red Hat Enterprise Linux 7
- XCode7 or greater on macOS

Solved issues

Animation Director	AA-22331	Exported movie resolution could be poor during camera movements. Export is now done at the maximum possible resolution at all times.
Arithmetic	AA-20725	The result of the Arithmetic module was not correctly updated when re-applying the module on a Surface's data. This has been fixed.
Fractional Anisotropy - Relative Anisotropy	AA-21499	The formulas given for the fractional and relative anisotropy, when expressed directly from the tensor component, in the Diffusion Tensor Tutorial and in the convenience modules Fractional Anisotropy and Relative Anisotropy, were not in agreement with those found in the literature. The formulas and modules have been updated according to literature from Kingsley (Concepts in Magnetic Resonance Part A, Vol. 28A(2) 123-154, 2006) and Sun et al. (Magnetic Resonance in Medicine 46:1088-1092, 2001). In addition, the modules can now be used with any symmetric tensors, ignoring errors occurring from 0-valued tensors. Note: The Fiber Tracking module was not affected by these incorrect formulas.
MacOS - Retina	AA-20296	When activating antialiasing, the Volume Rendering display was corrupted on retina screens. This has been fixed.
Marker Based Watershed Inside Mask	AA-22330	Marker Based Watershed Inside Mask computation would sometimes raise an error. This has been fixed.
Project View	AA-22036	To prevent overwriting of some objects when saving projects, the module name check is no longer case sensitive. This means that "Ortho View" and "ortho view" are now considered as equal names.
Properties Area	AA-22297	The viewer toggle button could sometimes disappear from the Properties Area. This has been fixed

Python	AA-21502	In order to avoid conflicts between different versions, the EDM configuration file used to configure the Python environment is now read from the local installation <INSTALLATION FOLDER>\python folder.
Segmentation Editor	AA-20669	Remove Islands filter did not behave exactly as described in the documentation. The algorithm has been fixed.
Viewers	AA-22280	Camera manipulation is now smoother when the four viewers are all linked together.
Volume Rendering	AA-15265	Due to a limitation of the graphics card driver, Volume Rendering display issues could occur with GeForce GTX cards when setting Video Memory Amount to more than 4 GB. In order to prevent display issues, the Video Memory Amount is now limited to 4 GB for this type of card.

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