

From Eye to Insight



# Viventis Deep Post Processing Software

**Release Notes for Viventis Deep Post Processing Software  
Version 3.0.5**

# **Release Documentation for Viventis Deep Post Processing Software 3.0.5**

This document describes the 3.0.5 release of the Viventis Deep Post Processing Software for post processing of image data acquired on the Viventis Deep Platform.

Please read this document before installing a copy of this software.

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**Date: May 21<sup>st</sup>, 2026 applying to PPS version number 3.0.5**

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# 1. Compatible Microscopes and Technical Requirements

## 1.1 Compatible Microscopes and Hardware Requirements

The Viventis Deep Post Processing Software 3.0.5 is a release for the Viventis Deep platform. Accordingly, the Viventis Deep Microscope Post Processing is not compatible with data acquired from other microscope platforms from Leica Microsystems CMS GmbH, i.e., Viventis SCAPE. We recommend for offline processing and analysis Leica-supplied CUDA workstations for compatibility and product security reasons. For optimal performance we recommend the Diamond workstation.

## 1.2 Operating System Requirements

Viventis Deep post processing software 3.0.5 is a genuine 64-bit program and runs on Windows 11 64bit.

## 1.3 Product Performance and Security Recommendations

For optimal performance and the safety of the product, Leica Microsystems CMS GmbH strongly recommends the installation of/upgrade to Viventis Deep Post Processing Software 3.0.5 for processing and analysis of data acquired on the Viventis Deep platform. Furthermore, Leica recommends the installation of all available security updates and hotfixes for Microsoft Windows. Please check regularly on our [Product Security web page](#) to get the latest news regarding product security vulnerabilities and mitigation strategies (if applicable). If you need further information or are not sure about security fixes suggested by a system component manufacturer, please [get in touch with us](#).

# 2. Viventis Deep 3.0.5 Post Processing Software Release

**Viventis Deep Post Processing Software 3.0.5** is a new release version introducing new functionalities and bug fixes.

### **3. Recommendations**

For optimal performance and the safety of the product, we strongly recommend the installation of/upgrade to Viventis Deep Post Processing Software 3.0.5 for processing of data acquired with systems of the Viventis Deep platform.

Updates from version 3.0.0 and newer can be done automatically.

Viventis Deep Post Processing Software 3.0.5 can only open data acquired with Viventis Deep Microscope Control Software 2.2.0.0 or newer.

For opening and processing data generated with older versions of Viventis Deep Microscope Control Software tools used with those older versions must be kept.

## 4. New Functionalities

- **New processing tab allowing post-processing of Viventis Deep images:**

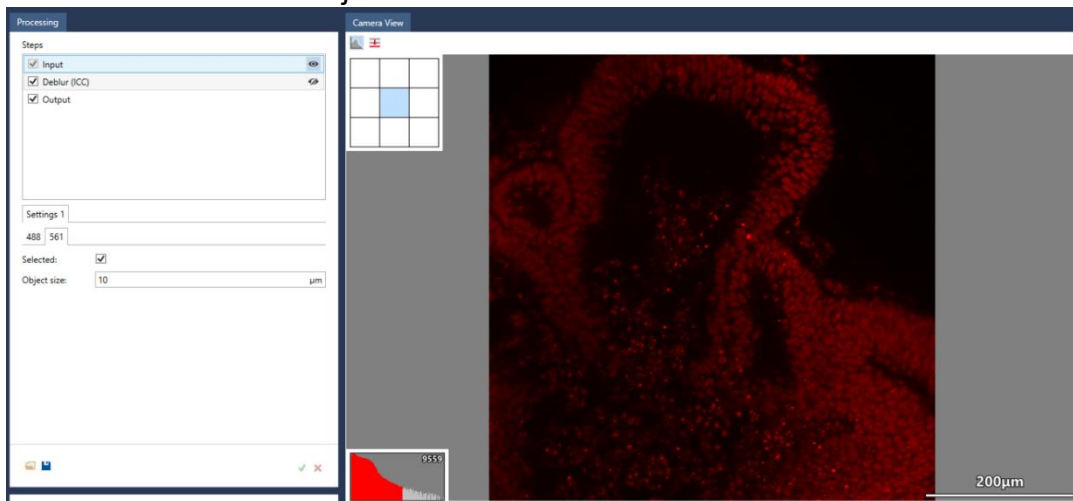
The processing tab allows users to select which processing step to execute on the image open.

- **New shading correction step.**

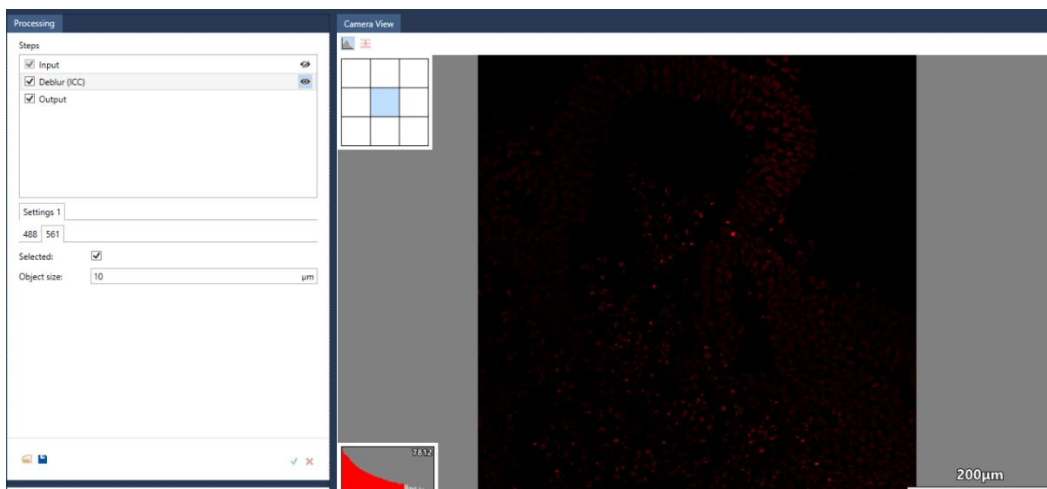
To improve image quality, correct the shading across the field of view. Shading correction factors can either be embedded in the image metadata or imported from the Microscope Control Software.

- **New Instant Computational Clearing (ICC) deblur step.**

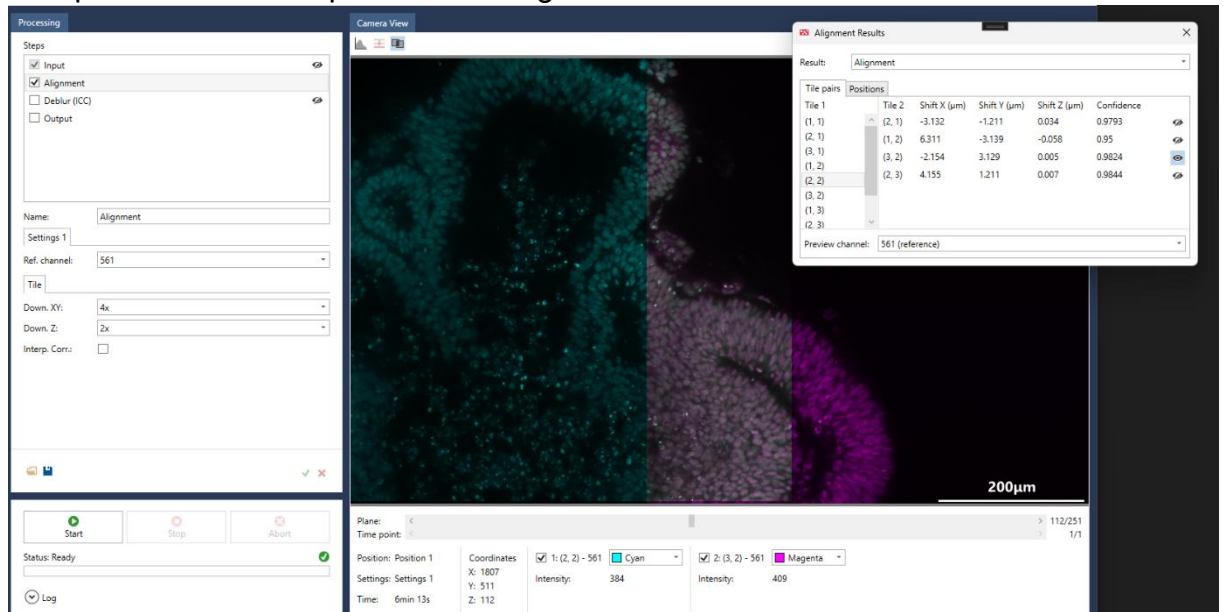
To improve the image quality, remove the background blur. The user can select the size of the object of interest.



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- **New alignment step that allows alignment of images from the two views in tile scan experiments:**
  - Compute alignment between views.
  - Compute pairwise alignment between tiles.
  - Compute global alignment.
  - Add result visualization for alignment.
  - Add preview mode for view alignments.
  - Add preview mode for pairwise tile alignments.



- Add fusion step that will merge views and stitch tiles together based on their alignment.
- **Added downsample step**  
Reduce image size and resolution along the XY plane or the Z axis.
- **Added crop step**  
Allows to crop images along X, Y and Z dimensions for each pair of position and settings profile.
- **Added compression with Zstandard for OME-TIFF files**
- **Added export to Aivia TIFF**  
Enable export as Aivia TIFF to support fast 3D visualization in Aivia.
- **Add support for pyramids (writing/reading)**  
Allow display of full mosaic in image viewer.

## **5. Solved Issues / Solved Restrictions**

No solved issues as this is the first version of this software.

## **6. Open Issues / Restrictions**

The following list enumerates the known, unresolved anomalies of Viventis Deep Post Processing Software 3.0.5.

No known open issues.