

## IVAS™ 3.8.2 Release Notes

CAMECA's Integrated Visualization and Analysis Software (IVAS) version 3.8.2 includes the latest features to make the most of the atom probe data you collect. Highlights of what has changed are noted below. Refer to the IVAS 3.8.2 User Guide for assistance with details on the software.

### Enhancements

- **Added Concatenate Offset POS Files capability**
- **The 2D Evaporation Simulation now includes some Matlab scripts to analyze the output in the Sim Project directory**
- **Added additional reflectors for BCC and FCC pole indexing with OIM**
- **Added support for HITS files introduced with LEAP Suite 5.1**
- **Supports data reconstruction and analysis for EIKOS data**
- **Improved format of landmark registration displacement numbers**
- **Improved error message when data file is unsupported version**
- **Automatically save range file when a reconstruction is saved**
- **POS details panel Total Hit Density units are now ions/nm<sup>3</sup>**

The CAMECARoot™ version is 18.46.428.

### Known Issues with Work-Around Procedures

- In the Tools>Configuration menu the [Reset to Defaults] and [Import] buttons are currently non-functional

## **Resolved Defects List:**

- ECR #4000 Complex Ion Peak ID now correctly uses the Max. Atoms parameter
- ECR #3875 IVAS installer remains visible while sub-package installers are running
- ECR #3864 Projection Centers set in the Recon Explorer now correctly entered in the recon expert window when running a Recon Wizard from an RHIT file
- ECR #3838 Saving detector maps for pole indexing now allows a user-specified directory or the top level of the LEAP project folder
- ECR #2992 The New Ion Type ranging window is now always on top to avoid being hidden behind other windows
- ECR #4031 The Shank Angle Estimate calculation in the recon expert window has been fixed to no longer return estimates that are too small for LEAP 5000 systems
- ECR #4015 IVAS will switch from the Global ToF-Based background to the Local Mass-based background if a valid link to the hit data is not present
- ECR #3956 Fixed an intermittent exception when pole indexing starts
- ECR #3872 In the Landmark Reconstruction registration panel, deselecting the Trim Edges checkbox now leaves unguided ions in place
- ECR #2744 Recon Explorer no longer crashes if the number of ranges change between uses
- ECR #2132 Proxigram profiles now use the Line Display Thickness specified in the Tools>Configuration menu
- ECR #2180 The red crosses, indicating detection rate excursions in the recon wizard voltage plot, no longer get pinned to the top of the chart when the chart is unsampled
- ECR #4229 The Multi Ion Volume Render feature now installs correctly on a PC which has never had a version of IVAS installed on it

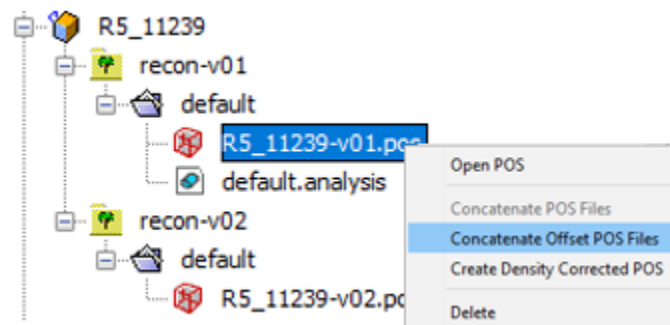
## **Patents**

- The LEAP<sup>®</sup> Microscope, as well as its components, software, and operational procedures, are covered by U.S. Patents 6,576,900; 6,661,013; 6,700,121; 6,762,415; 7,019,307; 7,157,702; 7,652,269; 7,683,318; 7,772,552; 7,884,323; 8,134,119; 8,153,968; 8,247,766; and International Patents GB2427961, JP5127445, and ZL200580044221.8. Additional patents may be pending in the United States and elsewhere.

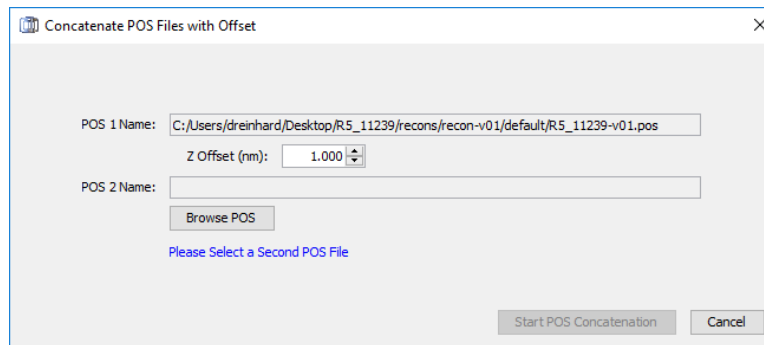
## Appendix 1: Concatenate Offset POS Files

The Concatenate Offset POS File feature allows two POS files to be joined together with a specified offset indicating the beginning of the second POS file. This is in contrast to the existing Concatenate POS Files feature which directly overlapped any number of POS files.

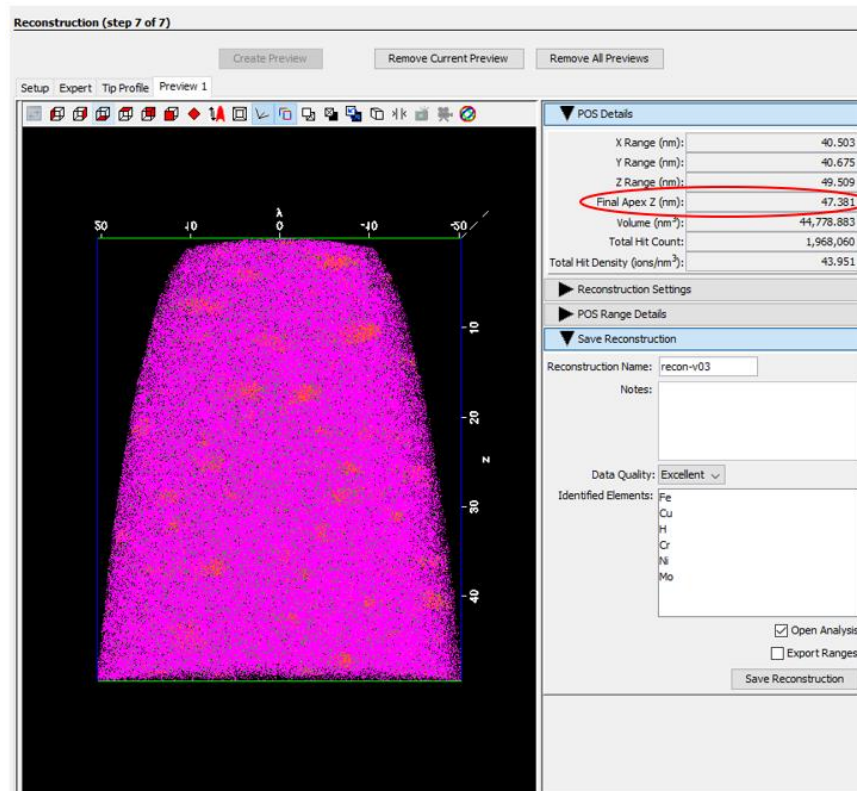
To access the feature, right click on any POS file in the LEAP Projects panel and select “Concatenate Offset POS Files”.



This will launch a dialog with that POS file specified as the first POS file. Specify the second POS file through the [Browse POS] button.



The Z offset must be specified to avoid overlapping the POS files. Ideally, this value is the depth at which the first reconstruction ends, measured at the reconstruction center (apex of curvature). This exact value can be found in the reconstruction preview of the reconstruction wizard if the specified POS file has an associated ROOT file. The required parameter is in the “POS Details” section of the reconstruction preview and is listed as the “Final Apex Z (nm)”.



Alternatively, the Z offset can be estimated from the 3D display.