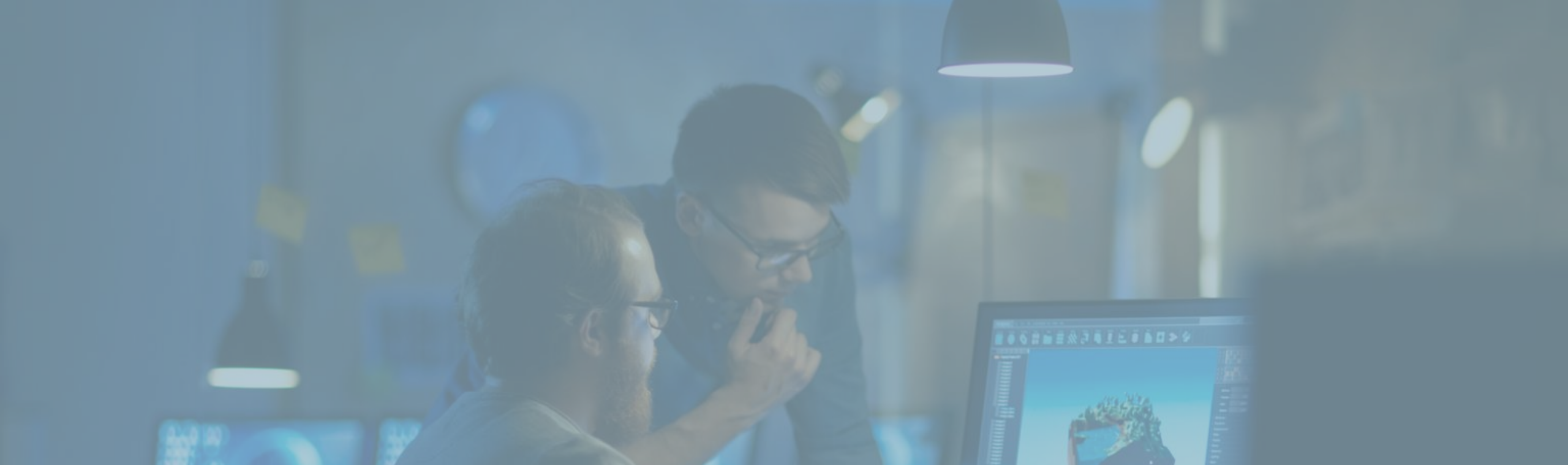


What is New in VCollab 23.x

VCOLLAB

Visual Collaboration Technologies Inc.

VCollab 23.3 Enhancements

VCollabPro

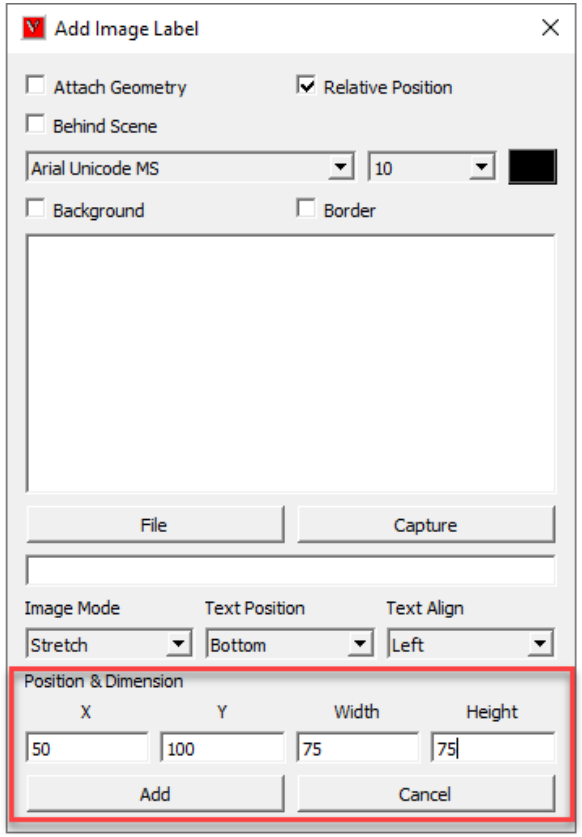
- Rich text Label Functionality is enhanced
- Added option to set the position and dimension for
  - Image and Rich Text Labels
- Enhancements in Adams History Plot capabilities
  - Option to merge plot data from multiple Adams iterations
- Pivot state of CAE Animation settings is saved in viewpoint
- Header Name of legend is saved in Profile
- Measurement Labels are updated based on deformation (need to use snap vertex)
- More APIs are included
- PyTools Enhancements
  - Import Image Views : option to select specific images
  - Export CSV: Dump Option to support duplicate nodes
  - Blank View: option to set white background
  - - PPTExport => Option to Add Editable 2D labels/Tables, Select Viewpoints,
  - Multiple VPs per Page, GUI Change

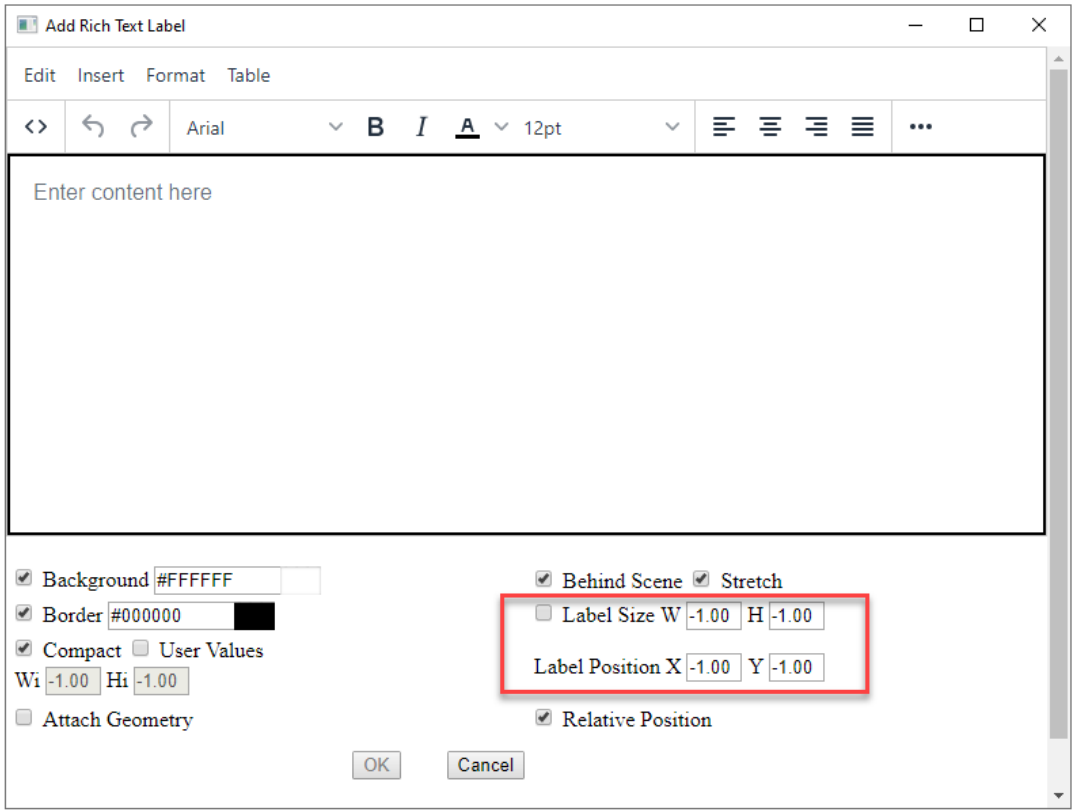
VMoveAdams

- Batch mode is enhanced to convert the multiple iterations of data in a folder to multiple CAX files

VCollabPro 23.3

- Added option to set the position and dimension for
  - Image Labels
  - Rich Text Labels

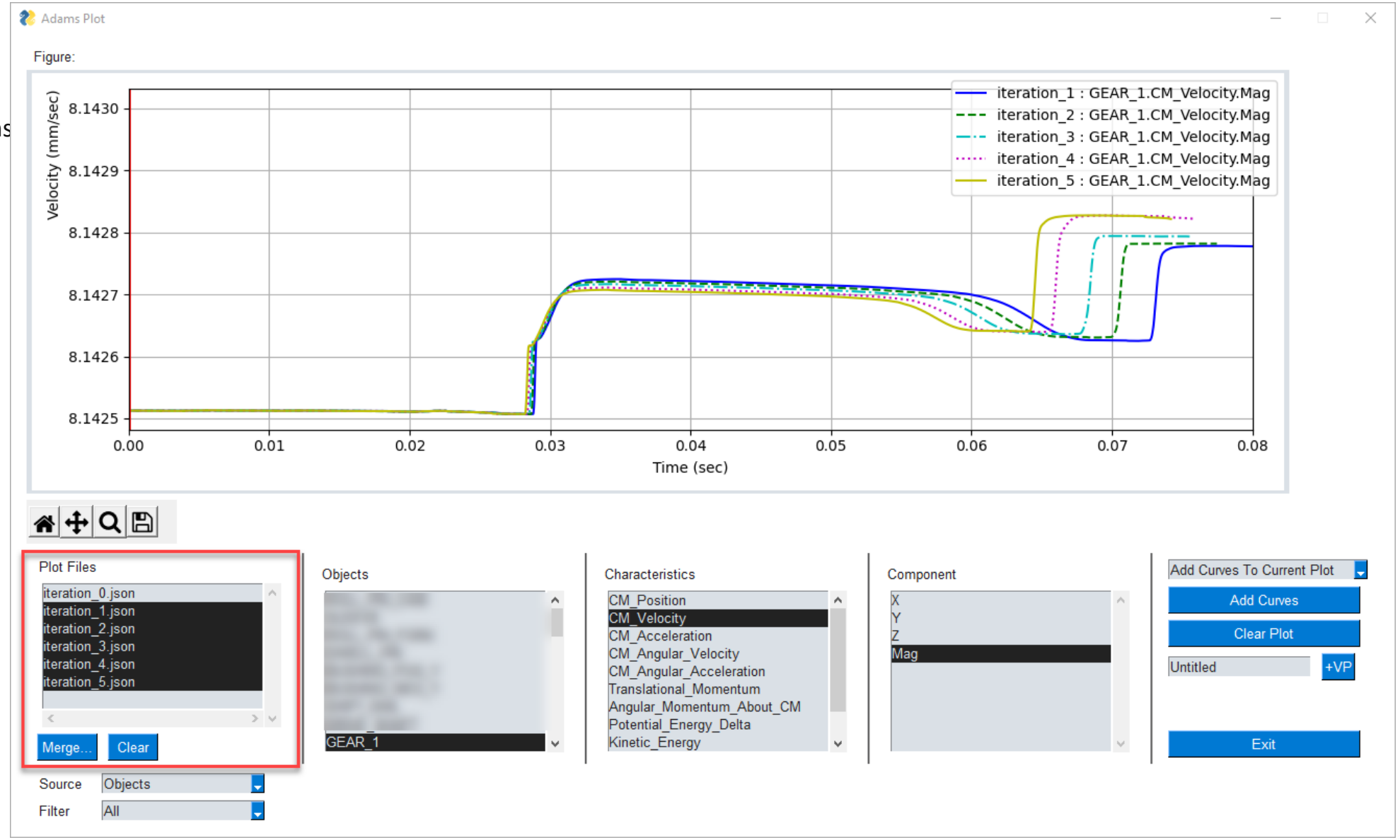




VCollabPro 23.3

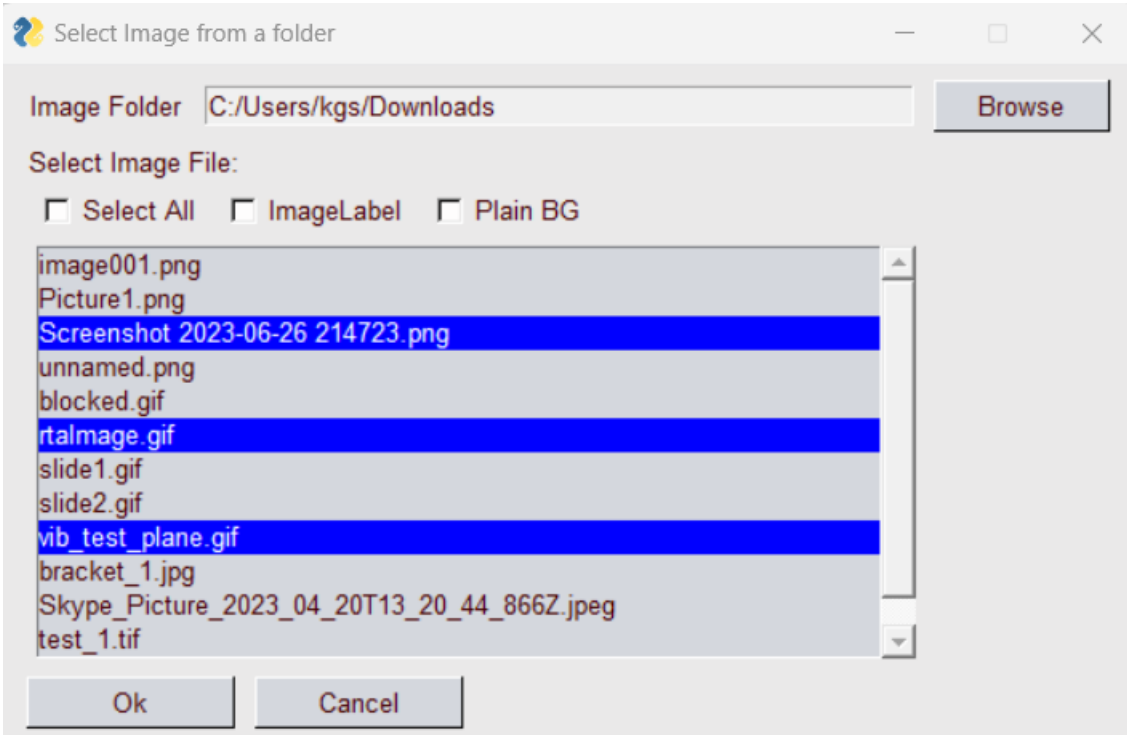
Enhancements in Adams History Plot capabilities -

Option to merge plot data from multiple Adams iterations



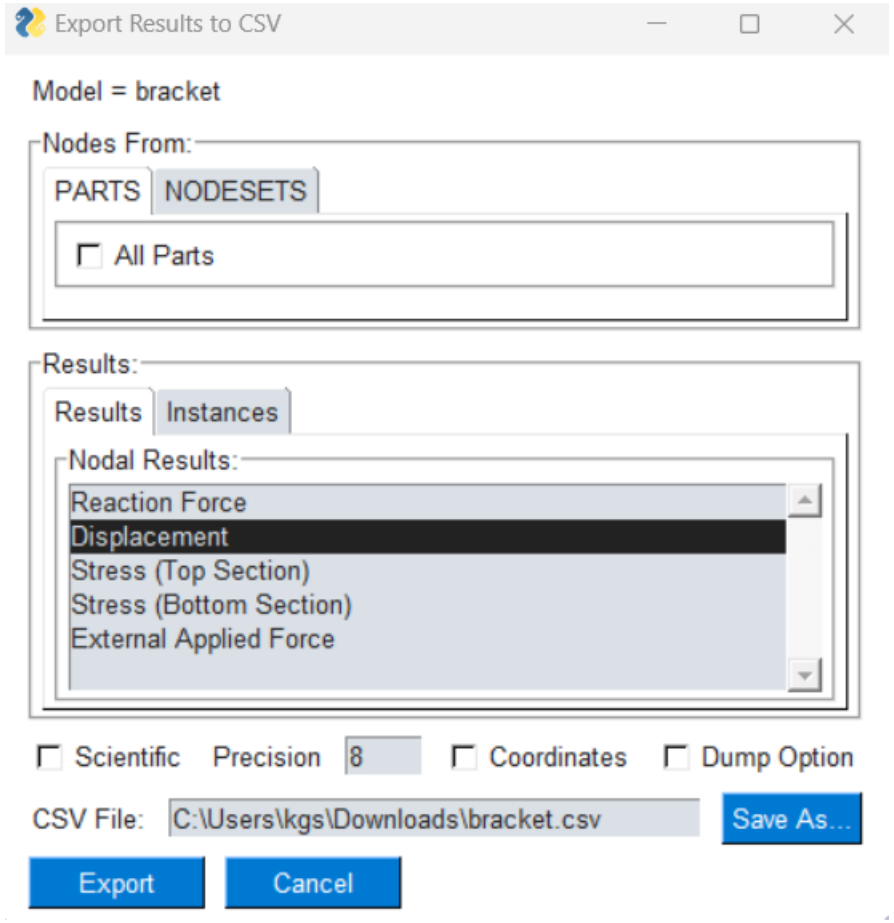
PyTools: Import Image Views

- All the images in the folder is displayed in a dialog
- User can select required images to be imported
- Image can be inserted as background or as image label



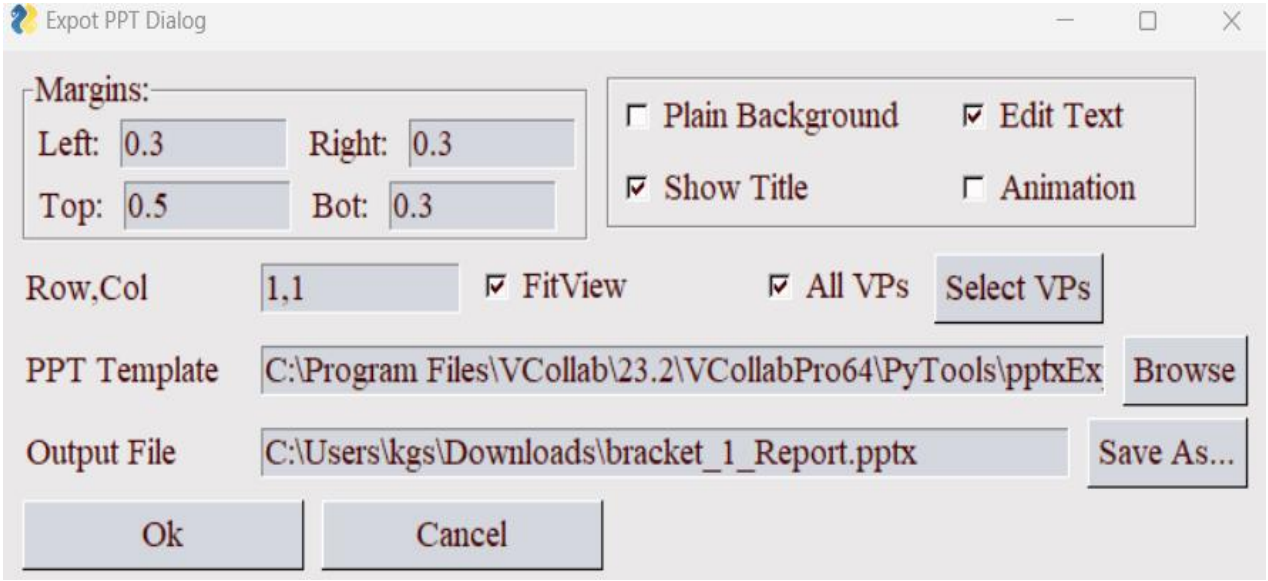
PyTools: Export CSV

- Added Dump Option to support same node id in multiple parts



PPTx Export

- *Edit Text Option*: 2D labels will be exported as editable text in PPT
- *Row,Col*: Multiple viewpoints in same slide
  - 1,2 => 1 row, 2 column arrange ment of two viewpoints
- FitView => Aspect ratio is not critical
- Select VPs => select viewpoint to be exported



- *Note: To append slides to existing PPT, specifi existing PPT as template file*

VCollab 23.2 Enhancements

VCollabPro

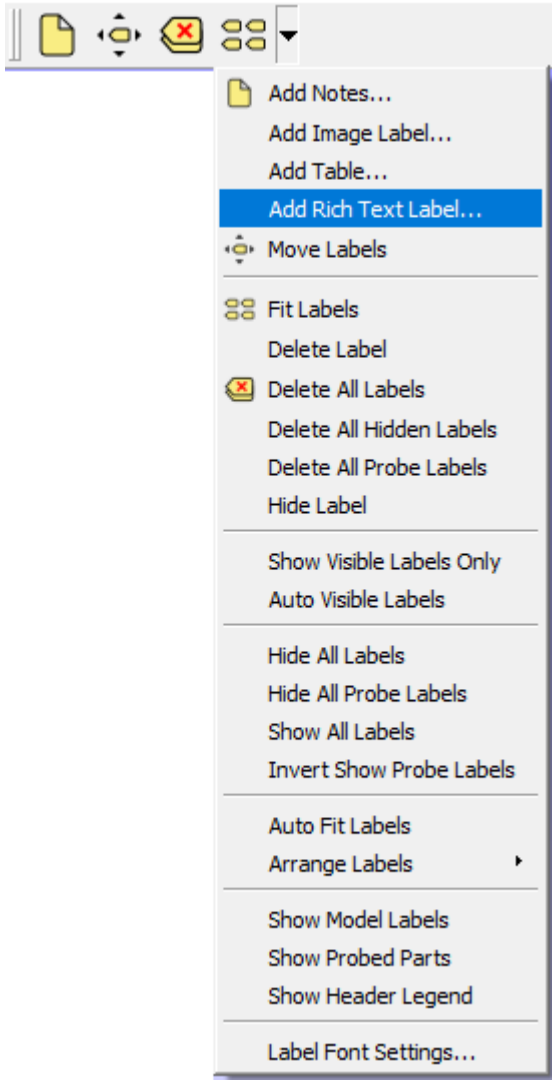
- Option is provided to add Rich Text Labels
- ‘Exclude Section’ option is enabled in Product Explorer to exclude the selected part from the cut-section
- Enhancements in Adams History Plot capabilities

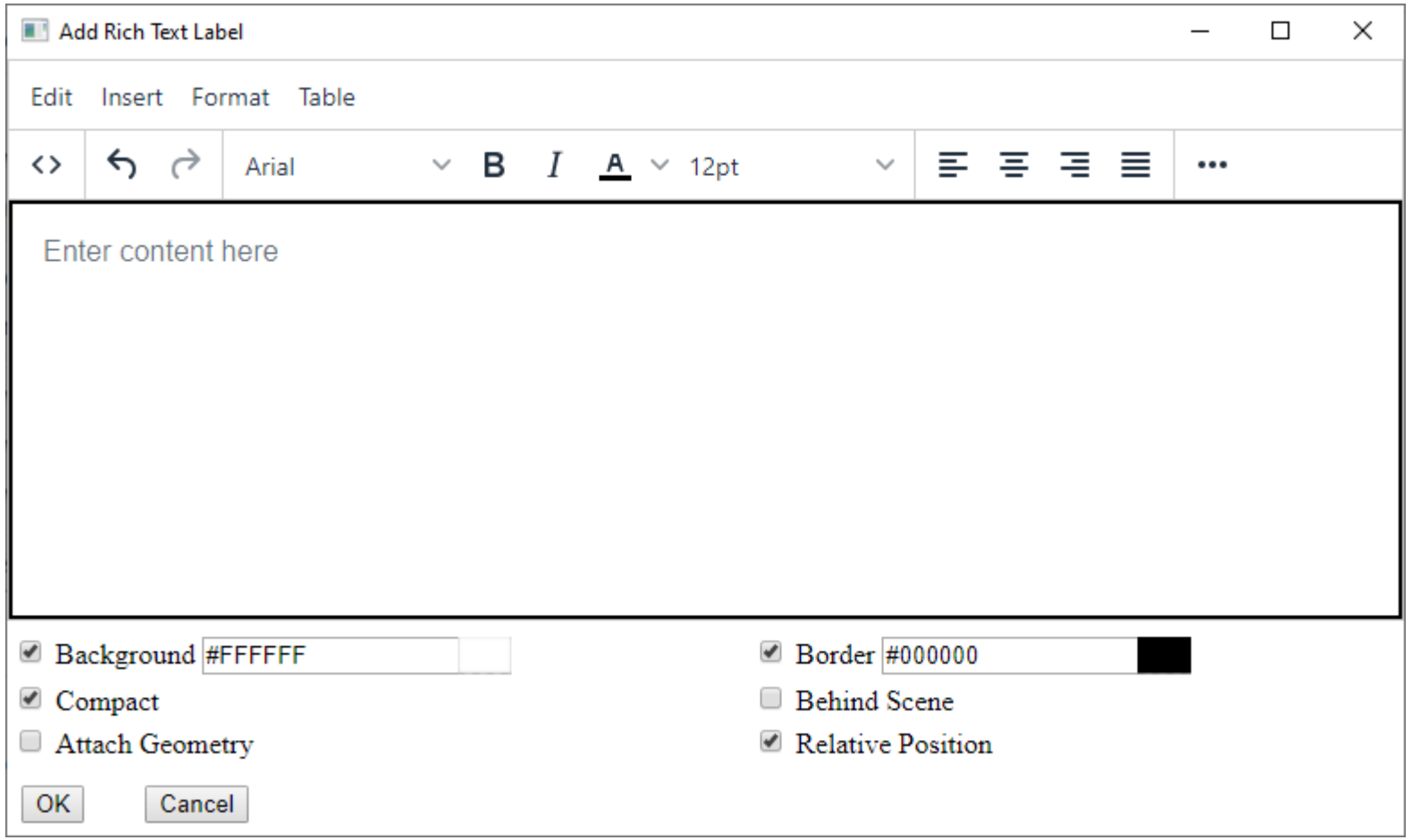
VMoveCAE

- Added support for NPZ files
- The input file format of VMoveCAESubmit is enhanced

VCollab 23.2 Enhancements

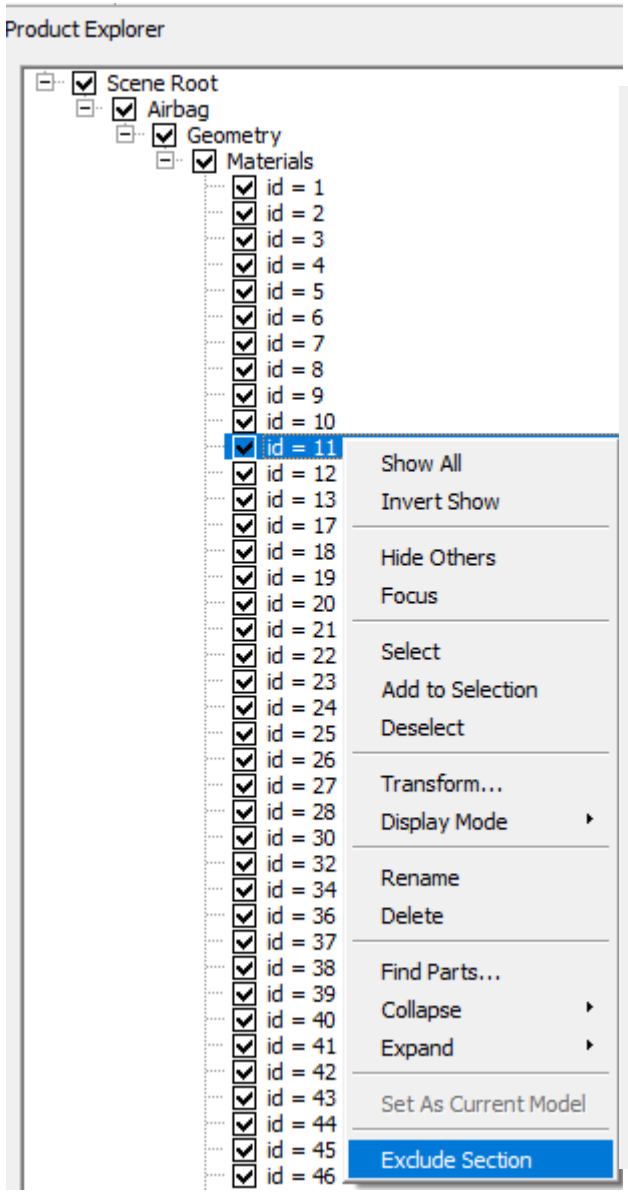
Rich Text Label

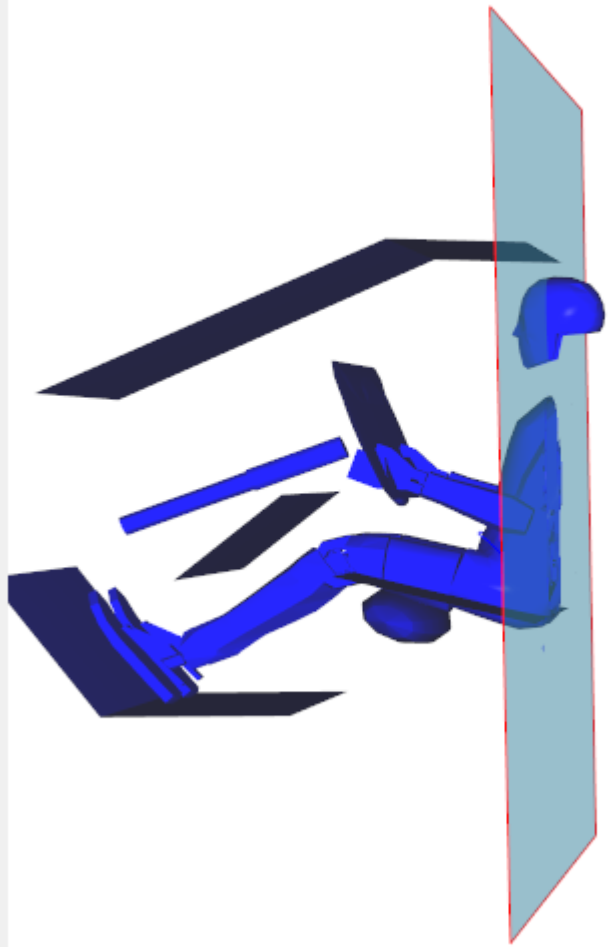




VCollab 23.2 Enhancements

Exclude Section





VCollab 23.1 Enhancements

VCollabPro

- Behind Scene option for 2D Labels
- Python Menus Customization
- Enhancements to MSC.Adams Support
  - Performance Improvement in Adams Animation
  - Option to draw the 2D Plots for Adams History data
- WCAX/3D HTML Export – Option to export the CAE animations as movie
- Unicode support for all file operations
  - Default Font is set as ‘Arial Uniocode MS’
- New APIs are provided

PyTools

- Instance Bowser tool
  - Option to delete instances
- Set Legend tool
  - Option to save and load legends

VCollab 23.1 Enhancements (contd…)

VMoveCAE

- Support for Abaqus 2023
- Support for CFX 2023

VCollabWeb

- Product Tree Enhancements
- Support to view the CAE animation as movie

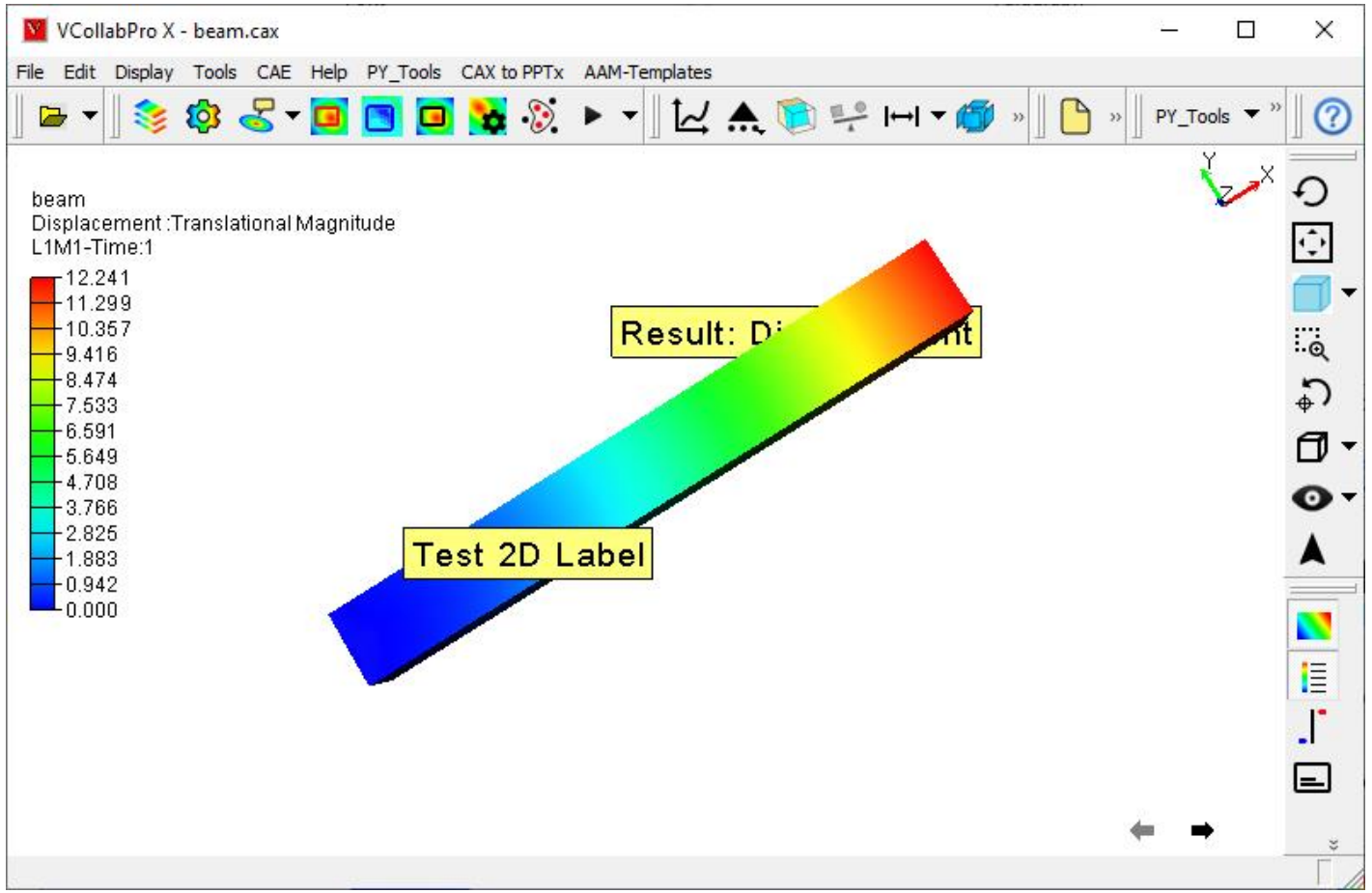
VMoveAdams

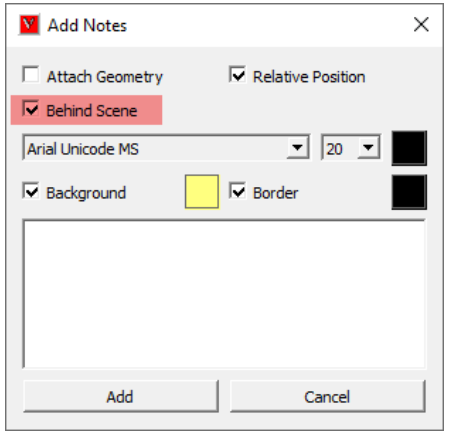
- Optimized to reduce the CAX file size for FLEX data
- Enhanced to read the History data
- GUI application is provided for VMoveAdams

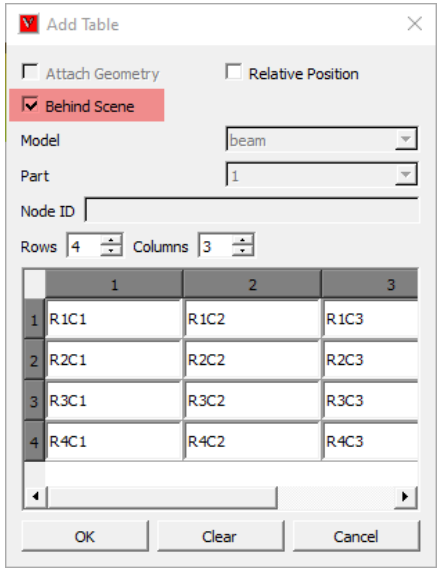
VCollabPro 23.1 Enhancements

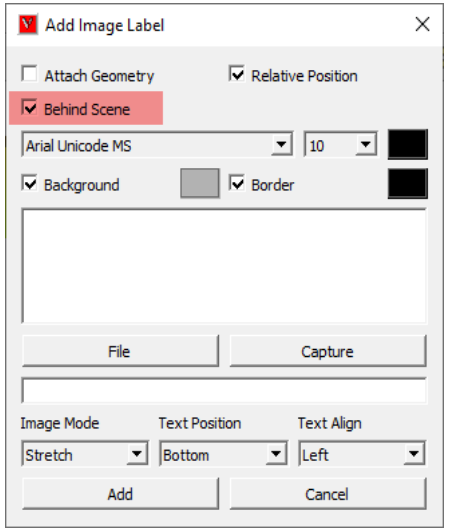
Behind Scene

- Option is provided to move the 2D labels behind the scene





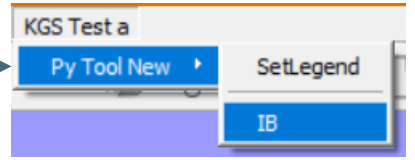


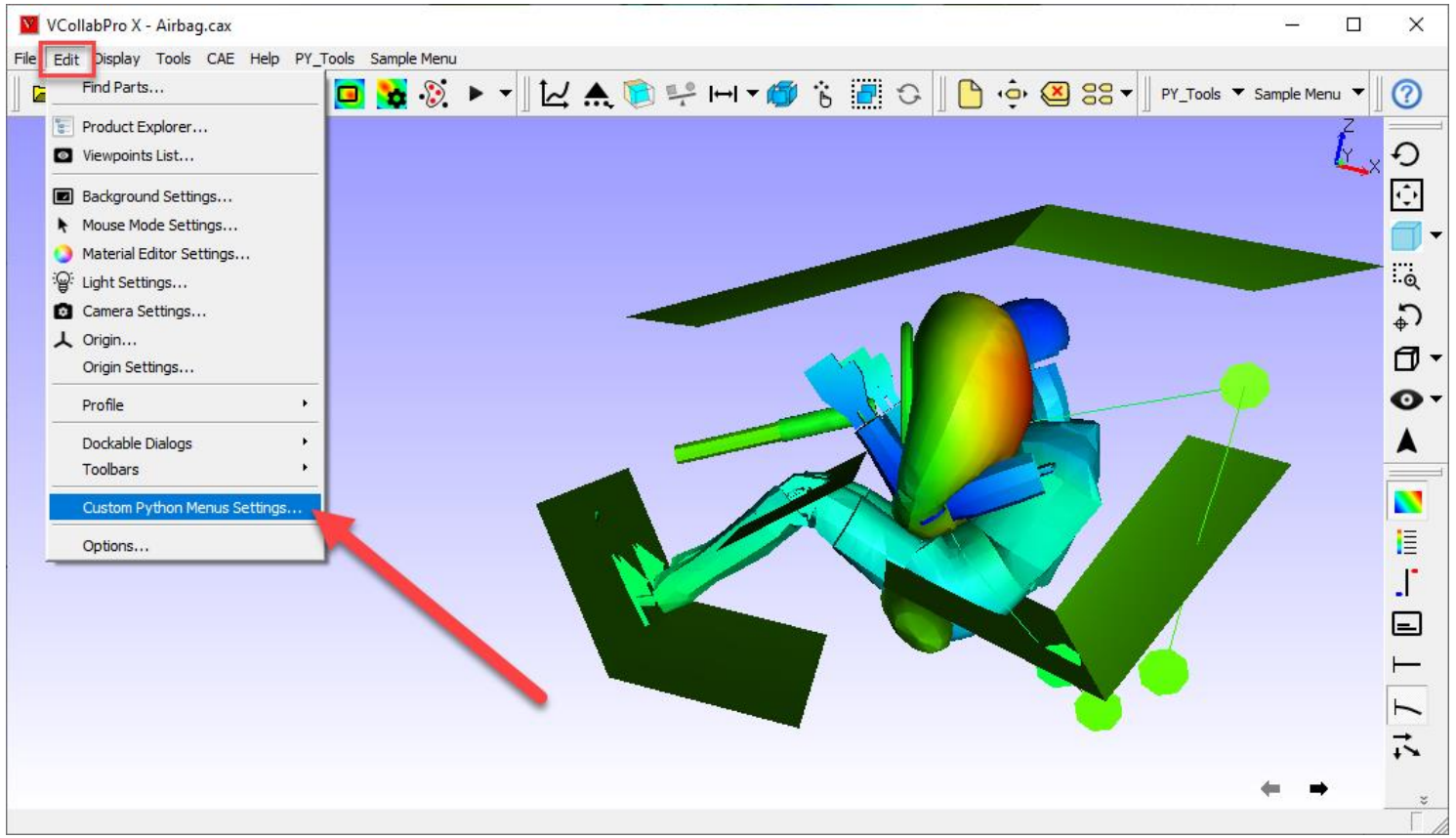


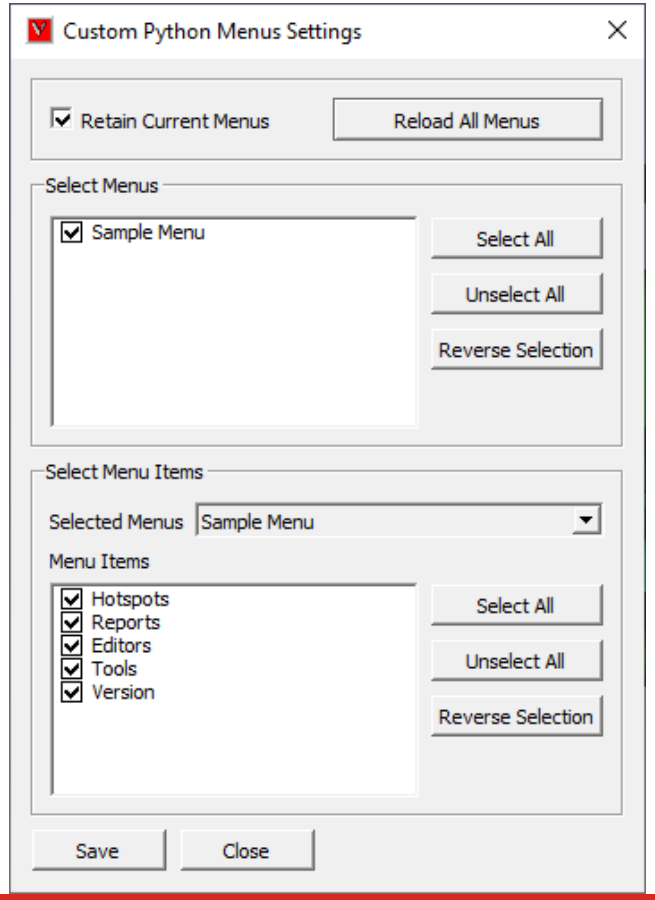
VCollabPro 23.1 Enhancements

Python Menus Customization (option supported only in ProX)

- The custom Python menus are loaded from JSON files that are placed in the folder referred to by the environment variable VCOLLAB_PLUGIN_PATH.
- Support sub menus
- Allows users to dynamically load and unload the custom Python menus.



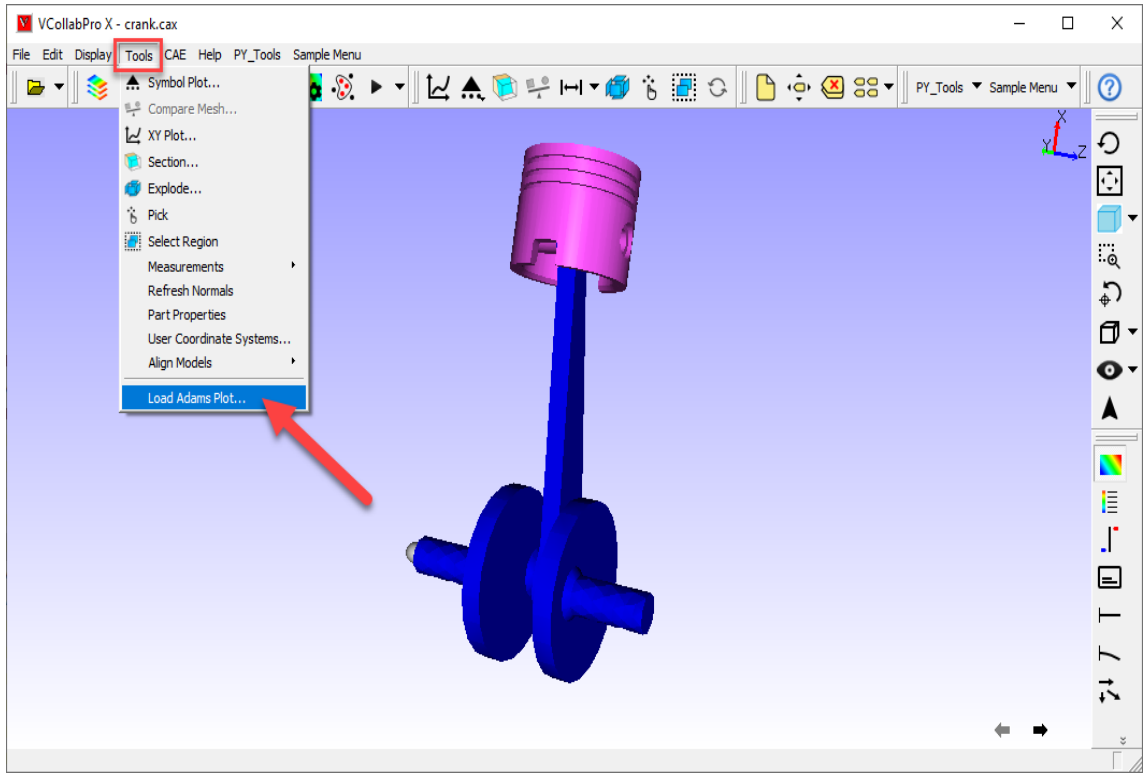


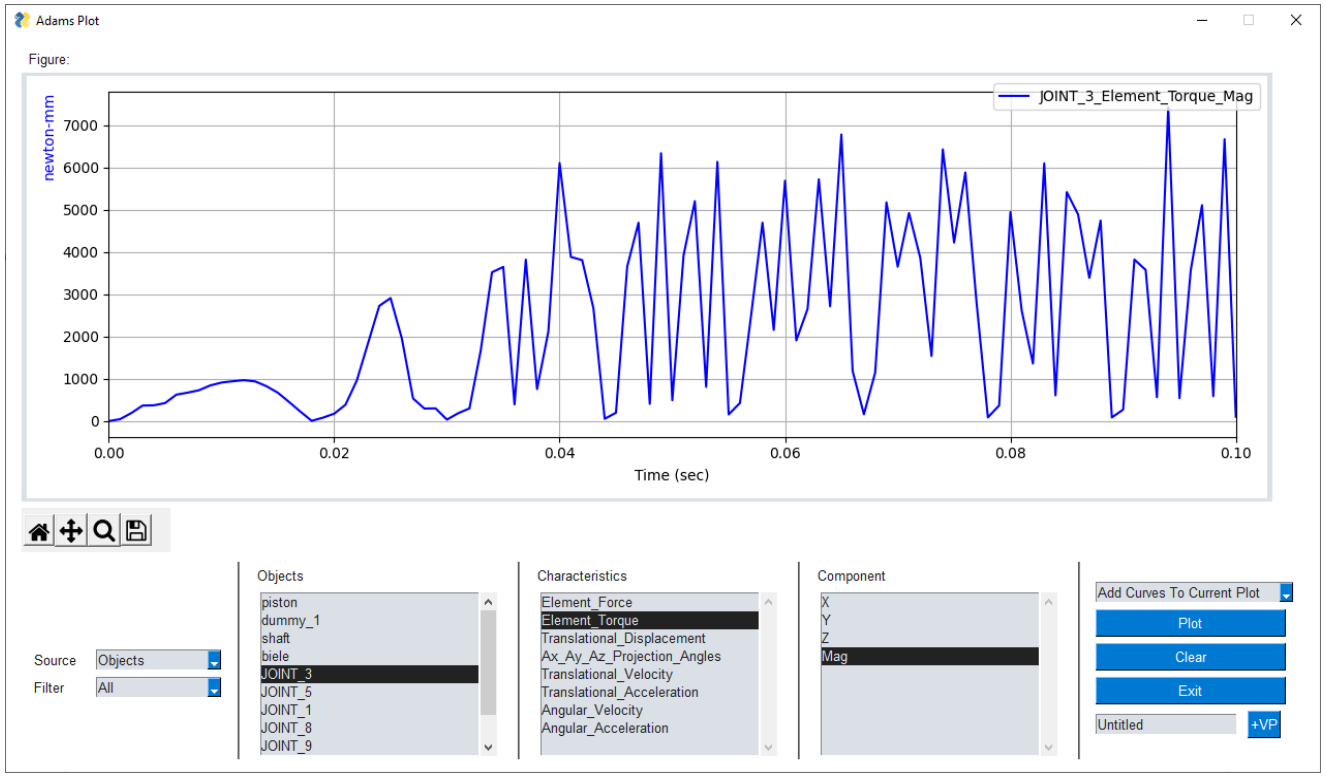


VCollabPro 23.1 Enhancements

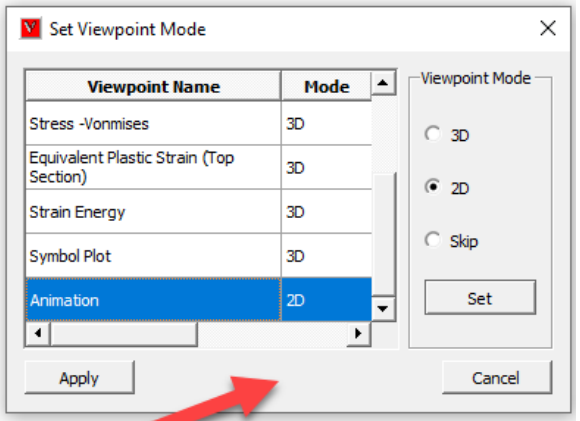
Support for Adams History data (option supported only in ProX)

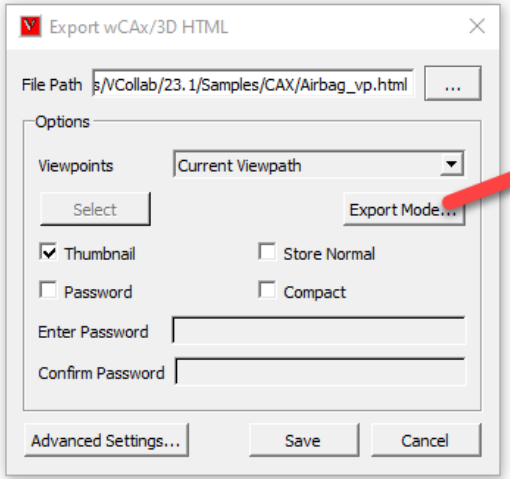
- VCollabProX is enhanced to draw the curves for Adams History Data
- Performance improved while loading and playing the Adams simulation





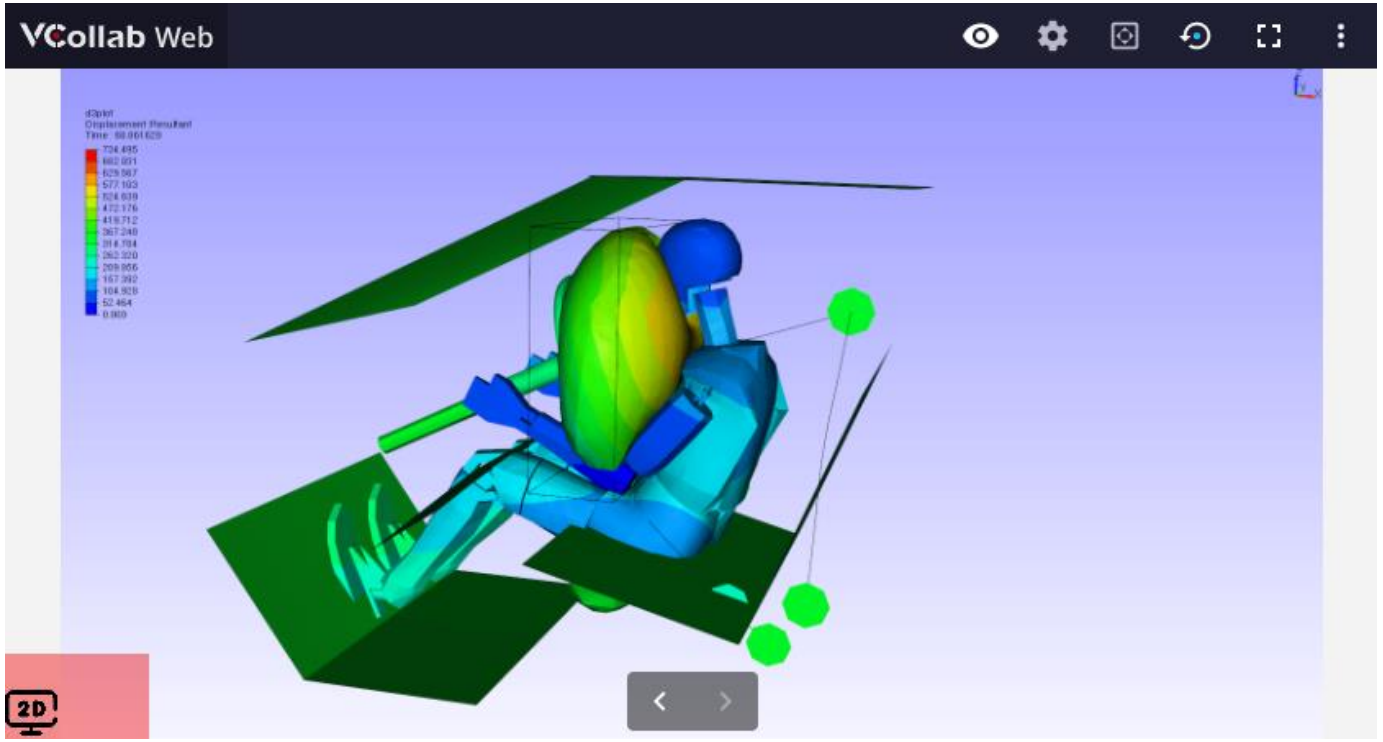
VCollabPro 23.1 Enhancements





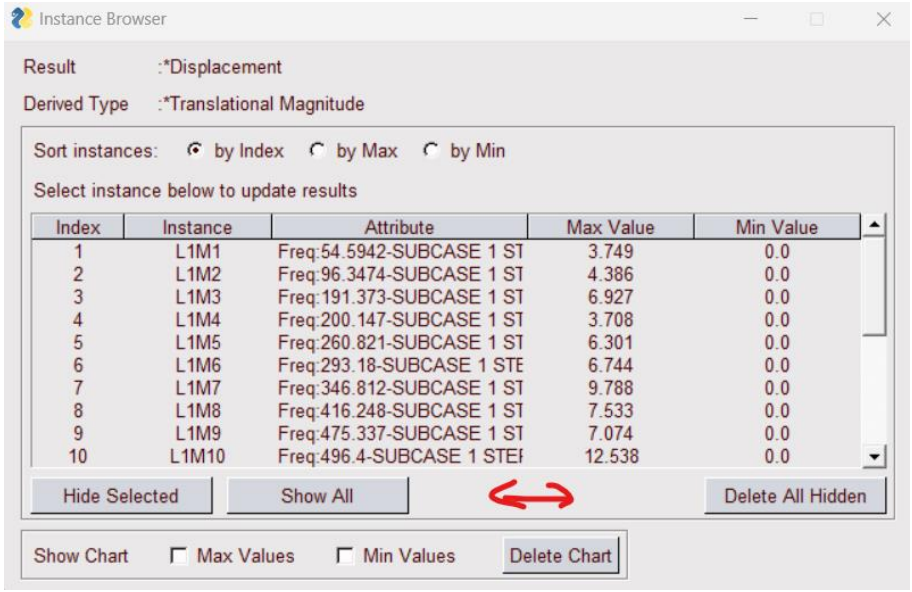
Export HTML

- WCAX/3D HTML Export – Option to export the CAE animations as movie
- This option can be used to reduce html file size
  - (when viewpoint with transient animation is present)

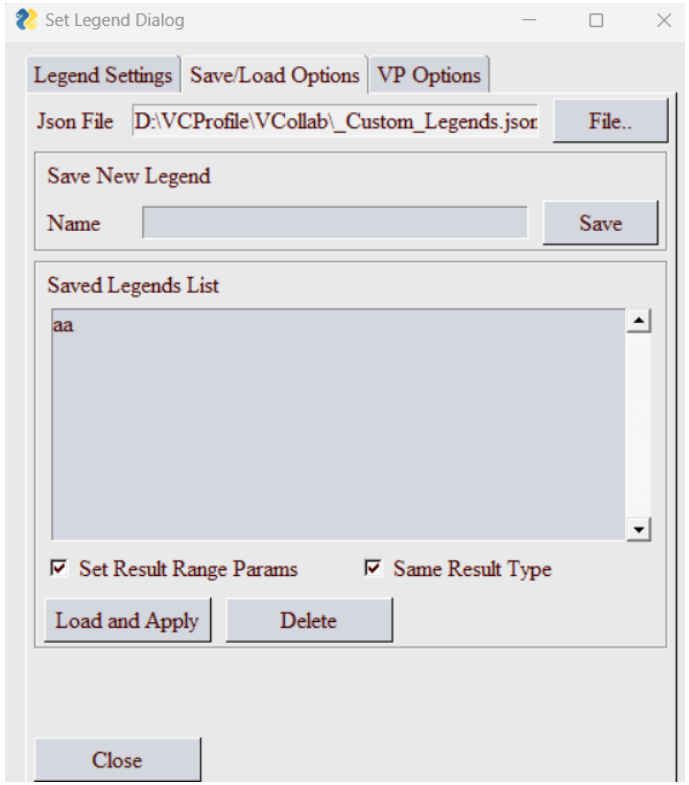


VCollabPro 23.1 – PY-Tools Enhancements

- Instance Browser tool
  - Option to delete instances



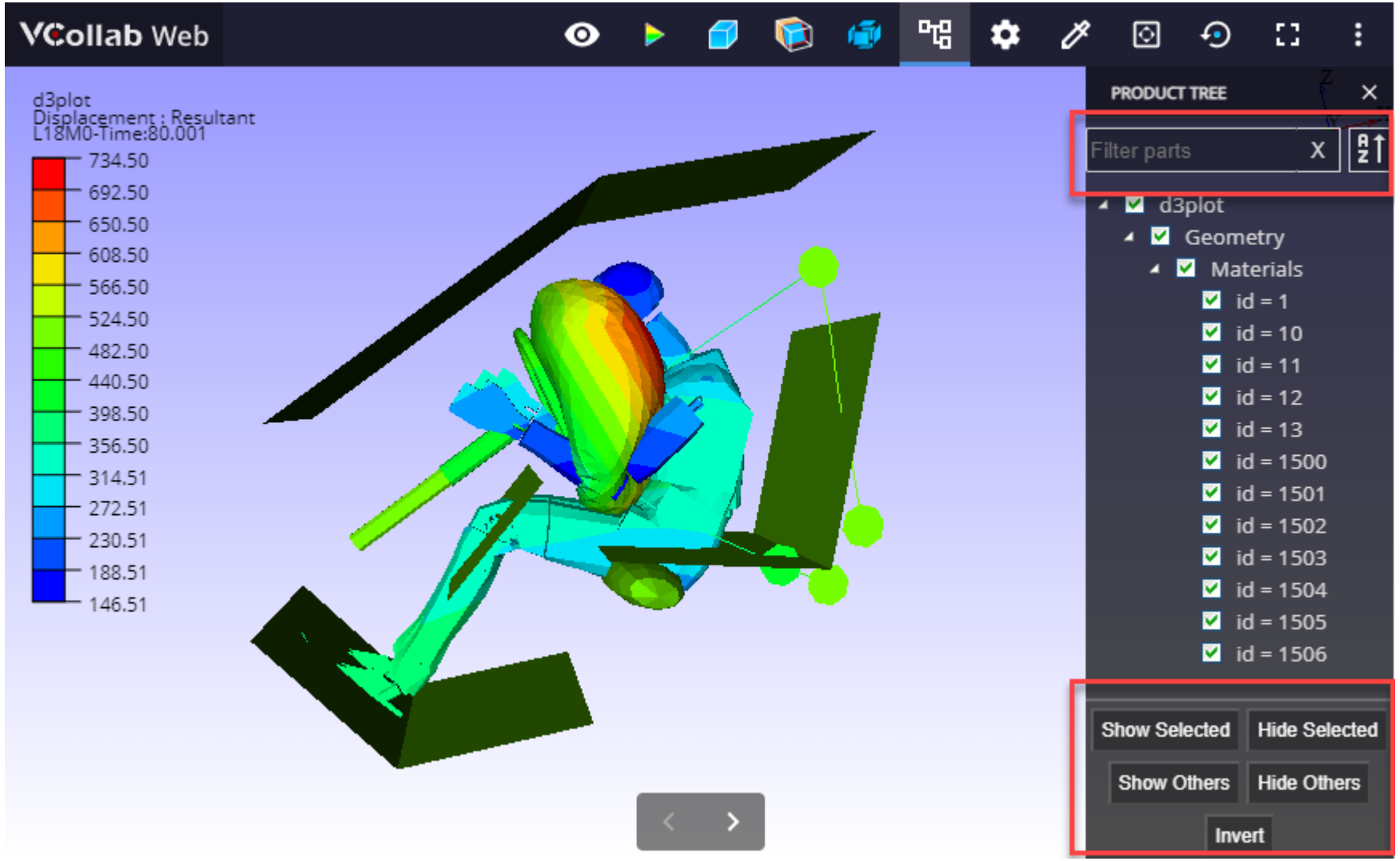
- Set Legend tool
  - Option to save and load legends
  - Option to apply a lagend settings to multiple viewpoints



VCollabWeb 23.1 Enhancements

Product Tree Enhancement in VCollabWeb Viewer

'Filter Parts' option is provided in the Product Tree



VCollab 22.x Enhancements

VCollab 22.x Enhancements

VCollabPro

- WCAX Export – Premium Features
- Mouse Settings: Reversing Mouse Wheel Zoom-in and Zoom-out
- Exporting the results of Nodesets into CSV
- NodeSet manager: Show & Hide Parts
- Compare Mesh: Sign Option is introduced in Compare Mesh dialog
- Find Dialog: Wild Card option is autodetected
- Probe ID – Multiple probe labels when multiple parts have same id
- Merge : If viewpath names are same, new suffix will be added
- Set Working Directory (for all save dialogs)
- Prompting user with warning message to save modified CAX with viewpoints while reloading and closing the application.

- XYPlot : Minor Grid option, Display enhanced
  - Titles supported in CSV import/export,
  - Plots for Rigid Body Transformation (Adams Data) Results
- Image Label: Function is enhanced. Default texture mode is set to Actual/FitView
- Python version upgraded to 3.8
- Envelop for selected instances using Python API
- Key (name) is added to Labels/Tables , which can be used to search for a specific type of labels (only using API)

PyTools

- Set Legend => Enhanced GUI
- Instance Browser => New Function
- Export CSV Results => Nodesets Option
- CreateCAX (VMoveSubmit)

VCollab 22.x Enhancements (contd…)

VMoveCAE

- Abaqus history plot extraction enhancements
- VMoveCAESubmit functionality is enhanced
- Dev scripts updated / enhanced
- Support for Abaqus 2022
- Support for CFX 2022
- Support for ANSYS 2022
- Gasket element result transformations bug is fixed
- Issues related to Ansys 2021 format changes are fixed

VCollabWeb

- Advanced Viewer: Support provided for ProductTree, Explode, Section and Probe
- Bug fixes and Enhancements

VMoveCAD

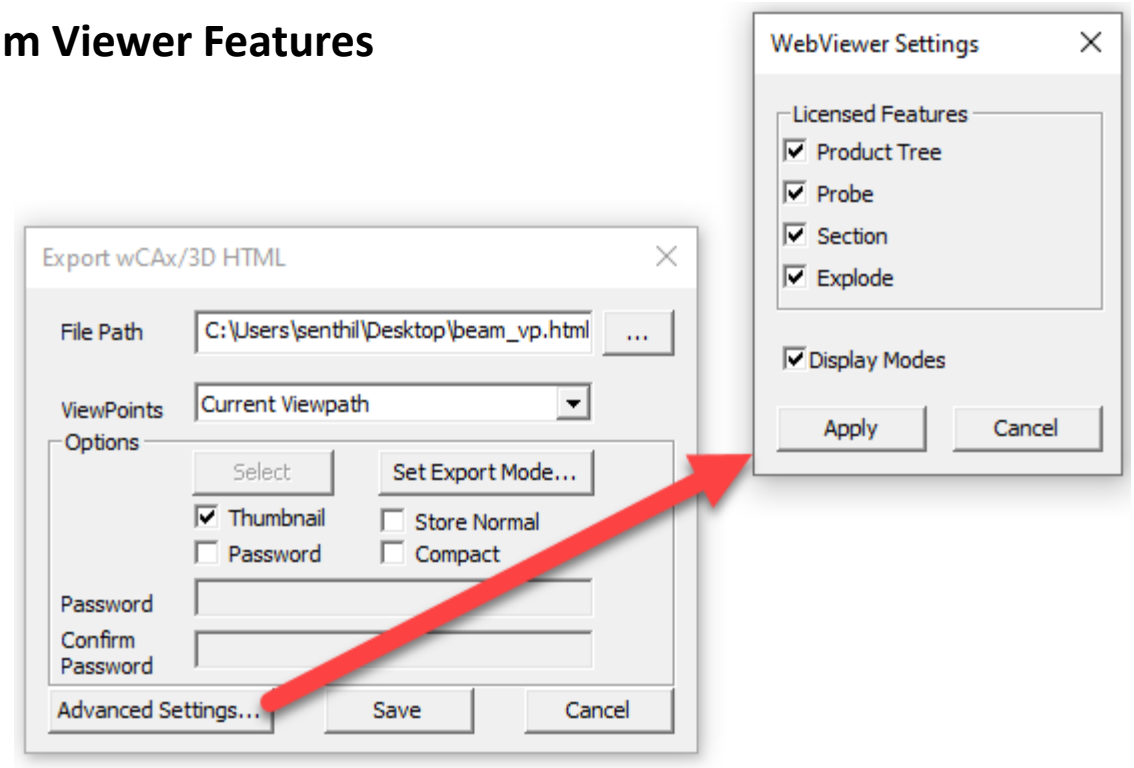
- 3D Experience (Catia V6) is supported up to 2022x
- Catia V5 is supported up to R32(V5-6R2022)
- Pro/E is supported up to Creo Parametric 9.0
- Inventor is supported up to 2023
- UG NX is supported up to UGNX2206
- ACIS is supported up to 2021 1.0
- Parasolid is supported up to v34.1
- SolidWorks is supported up to 2022
- SolidEdge is supported up to 2022

VCollabPro Enhancements

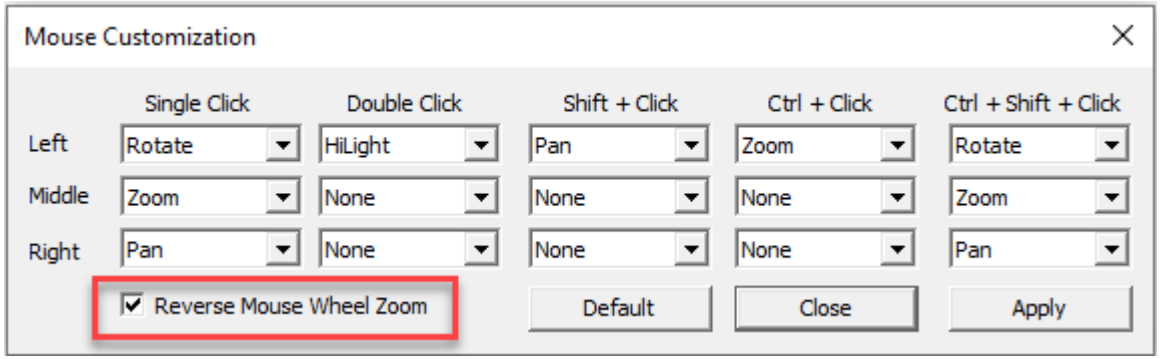
WCAX/HTML Export – Premium Viewer Features

- Option is provided in VCollabPro to export the WCAX data with
  - Product Tree
  - Probe
  - Section
  - Explode
- VCollabWeb Viewer is supported to view these data

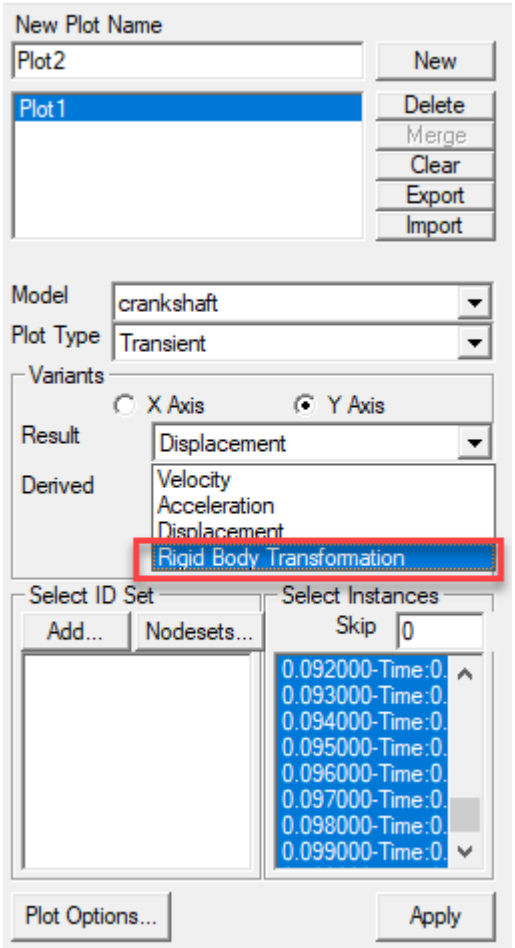
Note: These 4 options are premium features and need license to export it.



VCollabPro Enhancements



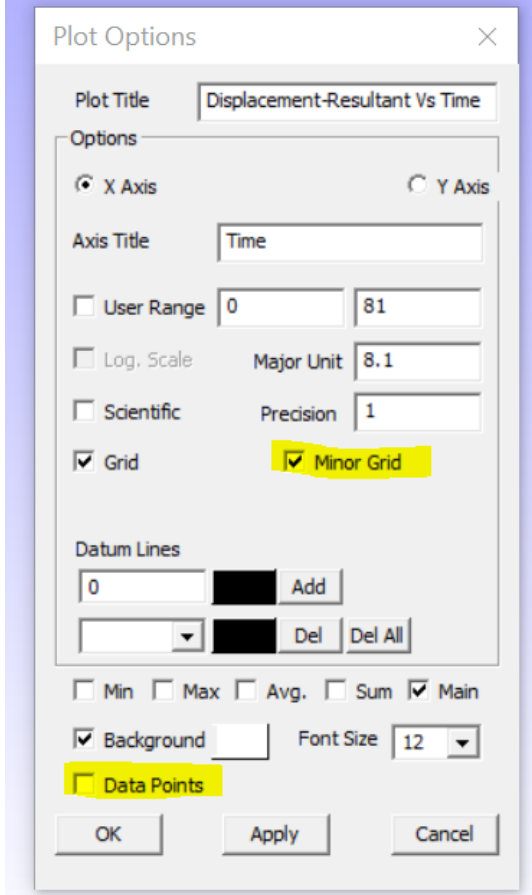
Reverse Mouse Wheel Zoom: Zooming direction can be customized for forward as well as backward scroll

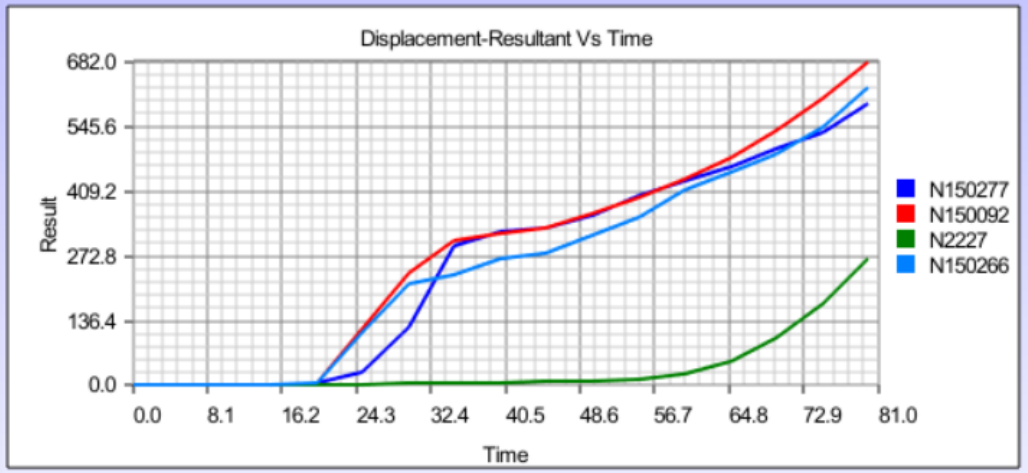


XYPlot: Supported for RigidBodyTransformation (Adams Data) Results

VCollabPro Enhancements

- **XY Plot Enhancements**
  - **Minor Grid option**
  - **Enhanced Display**
    - **Option to suppress markers for Data points**
    - **Line thickness based on line size in options dialog**
  - **Titles supported in CSV import/export**
    - **Format changed**



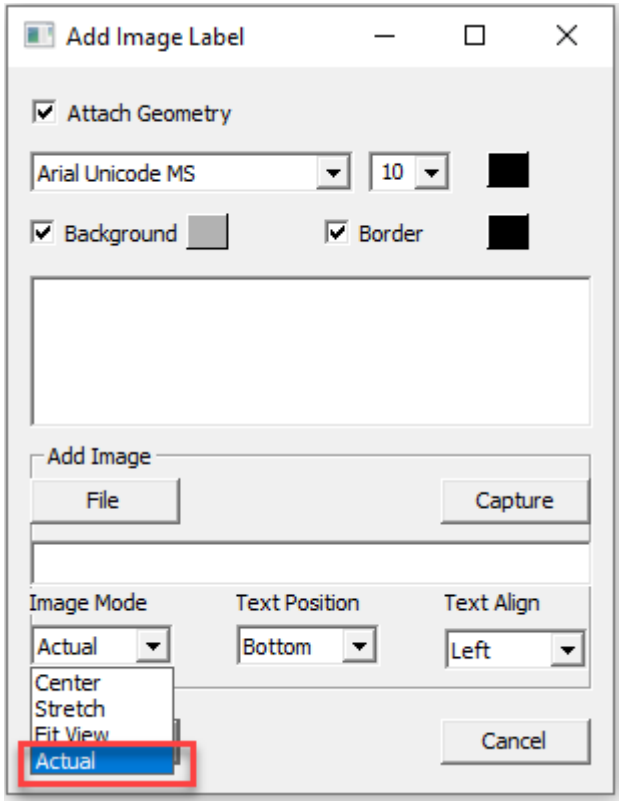


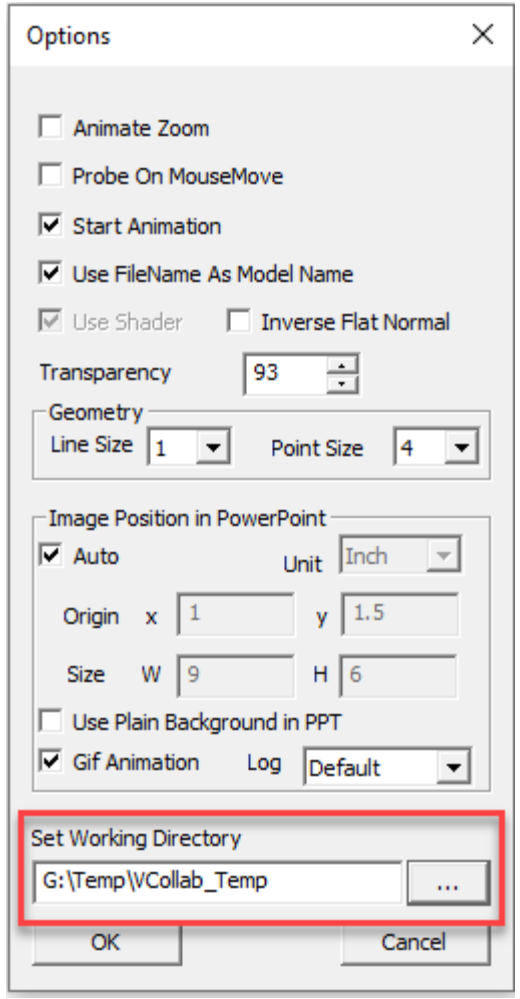
	A	B	C	D	E	F
1	VCOLLAB_XYPLOT_FILE_CSV_X_SINGLE_ATTRIBUTE					
2	#Titles	Displacem	Time	Result		
3	Time	Time	N150277	N150092	N2227	N150266
4	0	0	0	0	0	0
5	4.99443	4.99443	0.000252	0.000261	0.124359	0.000311
6	9.99323	9.99323	0.002075	0.001531	0.534401	0.001549
7	14.9916	14.9916	0.048939	0.067748	1.28159	0.071102

VCollabPro Enhancements

Add Image Label :

- Functionality is enhanced
- Option is introduced to attach the image with actual size





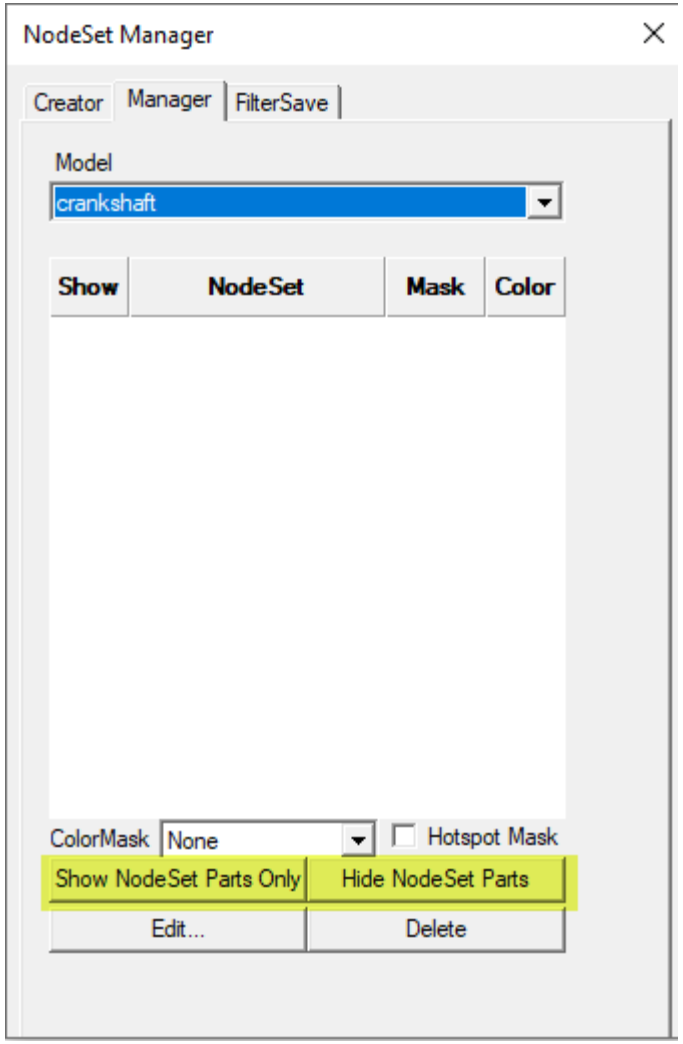
Set Working Directory:

- The directory from which the CAX file was loaded is the default working directory. The working directory can be edited and set by the user. All file dialogs will pop with the working directory that is set.

VCollabPro Enhancements

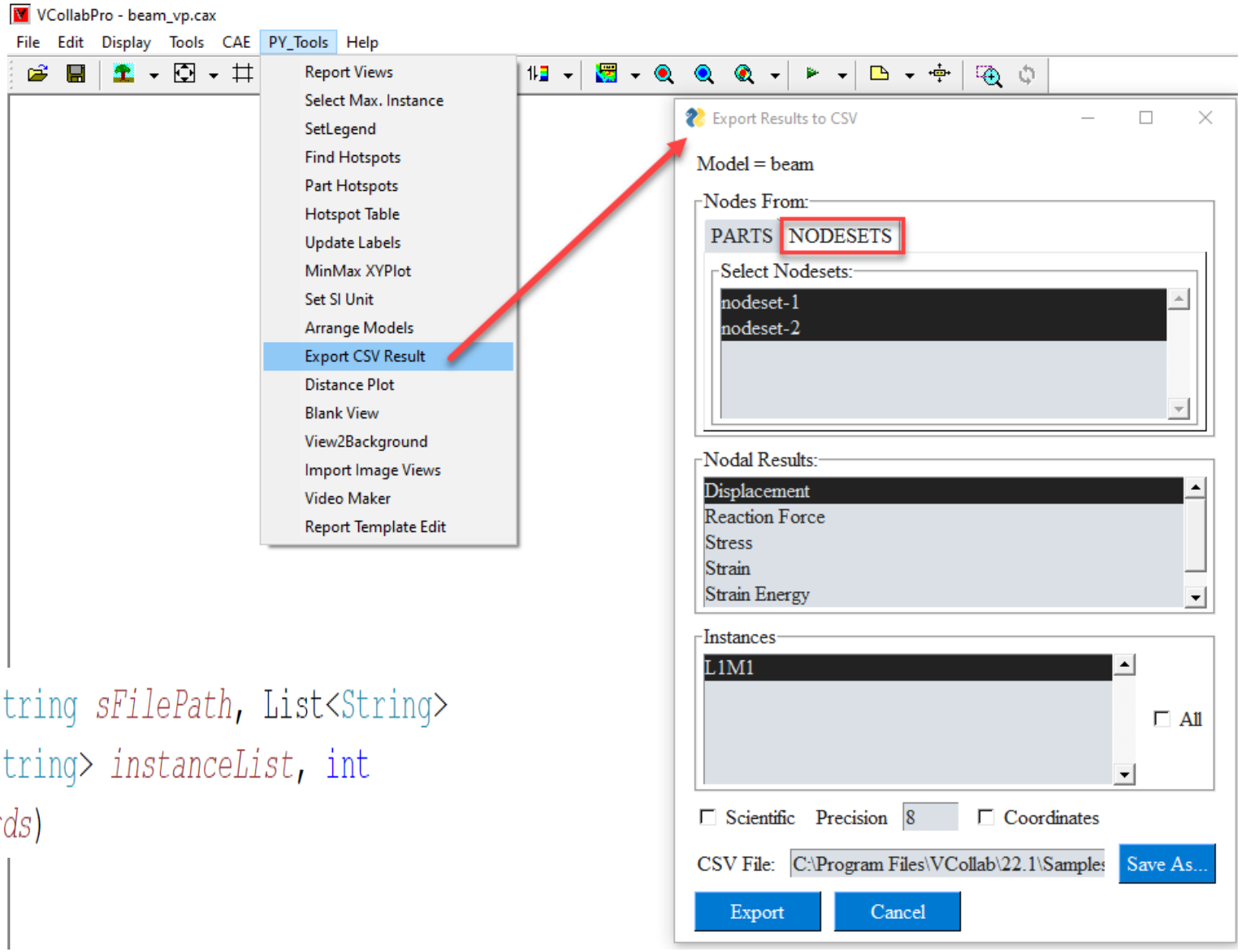
Nodeset Manager:

- Displays or Hides parts associated with the nodesets



PyTools => Export CSV Results => Nodesets Option

Interface for exporting the results of Nodesets into CSV

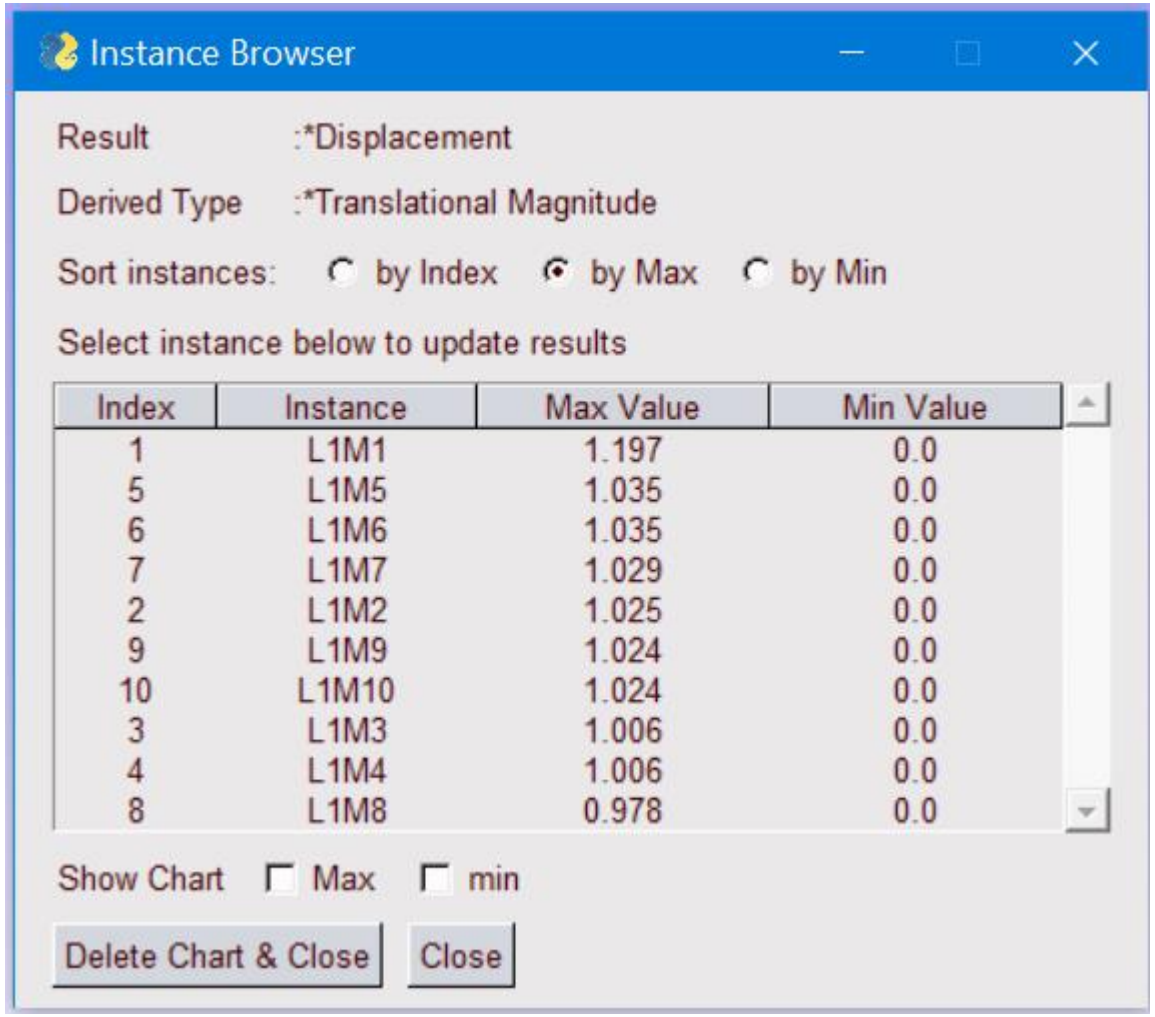


Exporting the results of Nodesets into CSV using Python API

```
bool xExportCAENodeSetResults(String sModel,String sFilePath, List<String>
NodeSetNames, List<String> resultList, List<String> instanceList, int
iPrecision, bool bScientific, bool bPrintCoords)
```

PyTools => Instance Browser

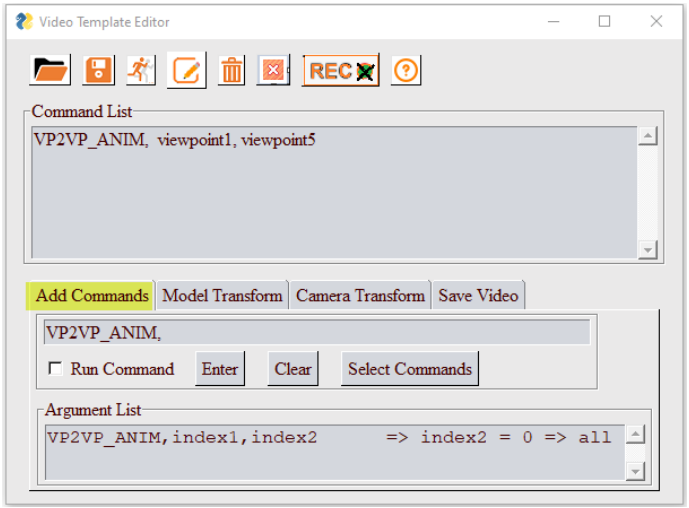
- Display List of instances and Max/Min Value
- User can select specific instance from list
  - CAE display will be updated to this instance
- User can create Max or Min XY plot



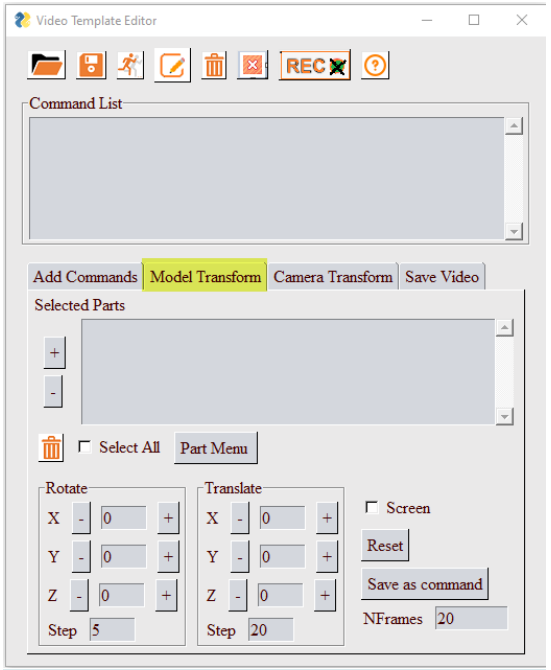
PYTools: Video Maker

Animations can help to communicate complex geometric feature (Shape/Assembly/Joint/Connections), specific deformations or relative motion between parts and critical hotspot locations in a model. In general, a video should capture part movements, rotation of models or camera, sectional views and CAE animations. High quality animations are created by capturing many frames (images) and then stitching them together. Select "PyTools=> Video Maker " menu option to lunch the following GUI. The GUI can be used to load , Edit and run a set of commands. Help option in this dialog will give details for all the commands. Python Source code for the commands as also available in Pytools/VideoMaker folder.

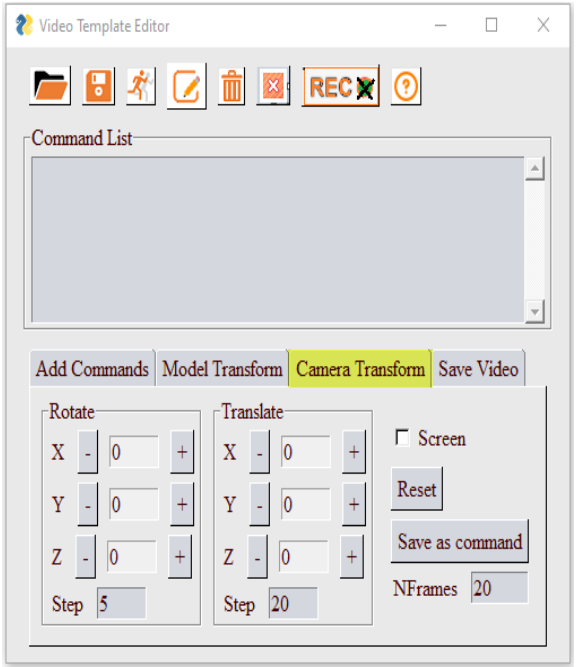
Video Template Editor GUI



To add a command to define video action



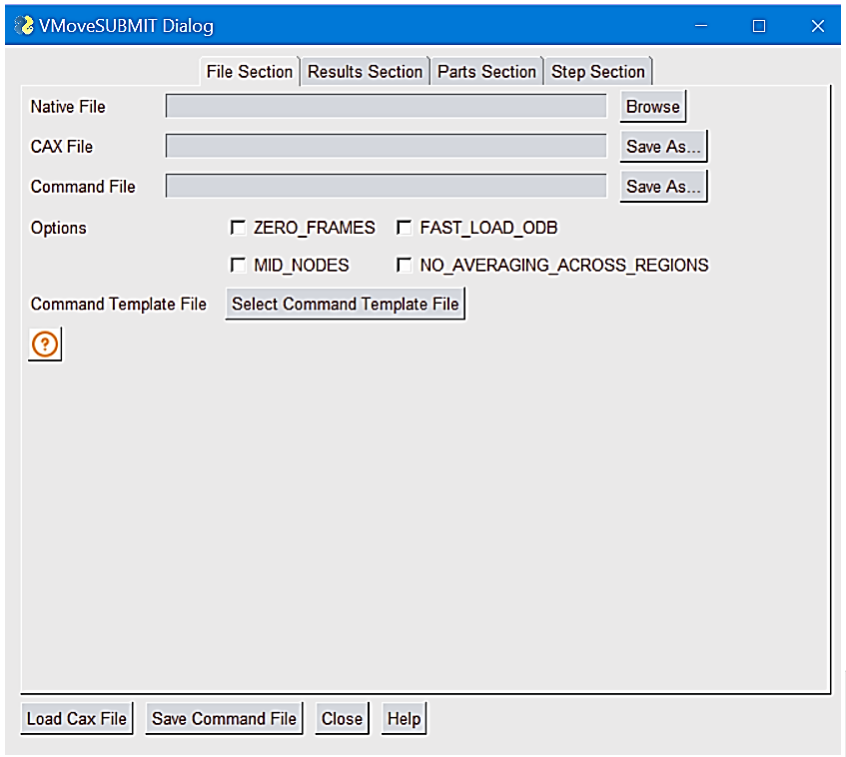
To define model transformation

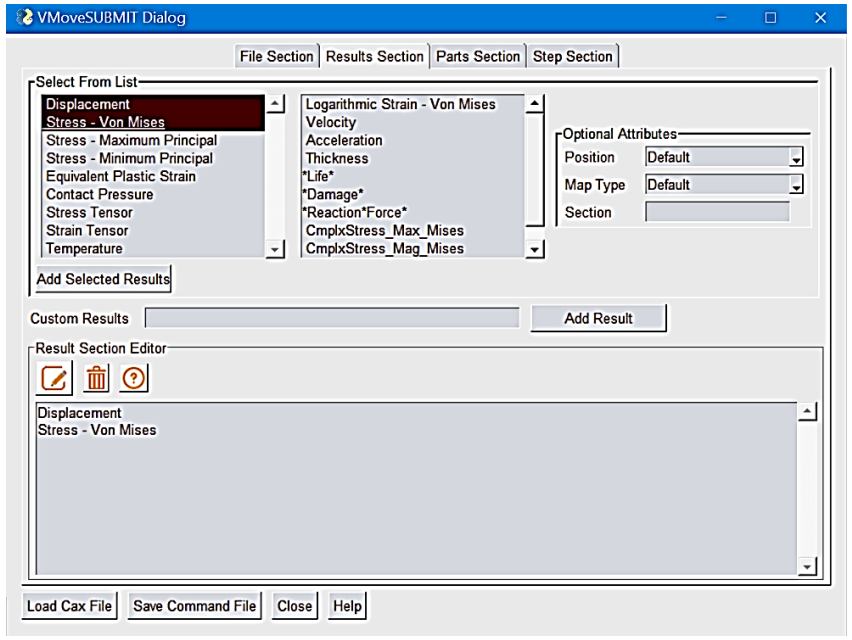


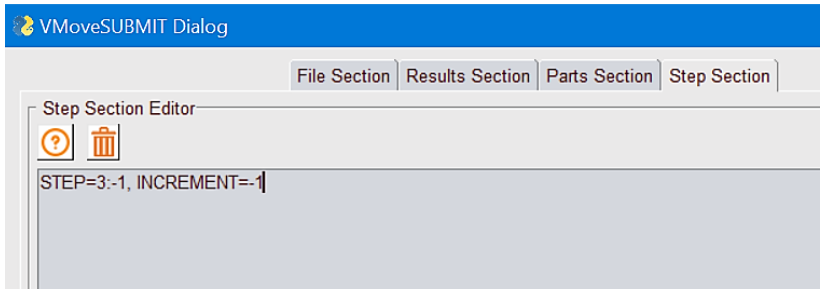
To define Camera Transformation

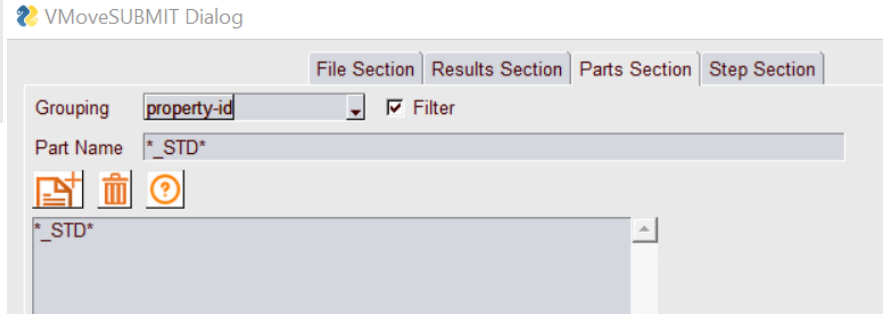
PyTools => CreateCAX (VMoveSubmit)

- GUI to select Native files, Results, Parts and Steps/Instances
- Create CAX using VMoveSubmit and load into VCollabPro
- Or Save VMoveSubmit command text file and run in batch mode









VCollabWeb Viewer Enhancement

Premium Viewer Features

Support provided for

- Product Tree
- Explode
- Section
- Probe