

1st VMAP User Meeting 2024

VMAP WORKING GROUP – VISUALIZATION OF VMAP DATA SETS

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This working group in VMAP SC is focussing on development of a VMAP plug-in for the Paraview, an open-source multiple-platform application for interactive, scientific visualization.

The following functionalities have been implemented based on some of the use cases and feedback from the VMAP Analytics project:

- Multiple parts
- Individual part and variables selection
- Static or transient variables
- Variables on nodes, elements, or integration points (averaged to elements)
- Scalars, vectors, and 2nd order symmetric tensor (visualized as von Mises)
- Partial results
- Deformed geometry via DISPLACEMENT variable

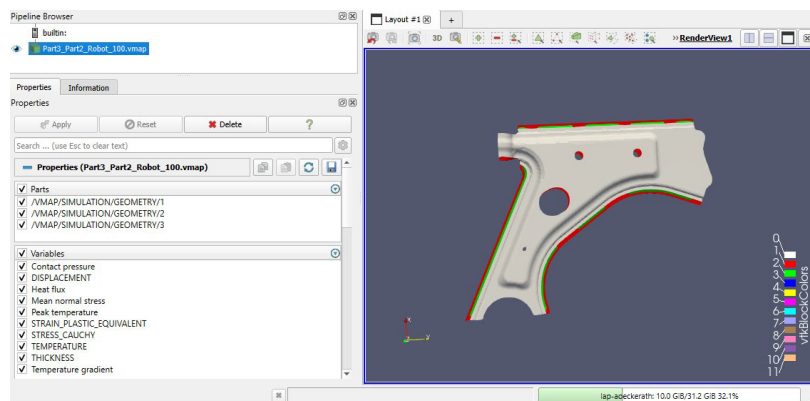


Figure 1: Paraview displaying a part stored in VMAP format

The further extension of the plug-in is still ongoing and some of the items which will be implemented in the next months include, tensor component visualization, multiplicity > 1 variables, e.g., element coordinate system stored in ORIENTATION, layered visualization of integration point results, measurement data on point clouds, with geometry and tables.