



# FIELDVIEW

BRING CFD TO LIFE

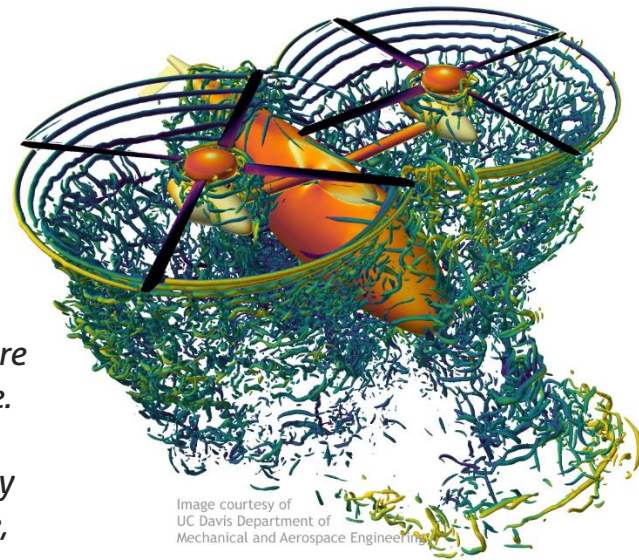


Image courtesy of  
UC Davis Department of  
Mechanical and Aerospace Engineering

## CFD Visualization & Analysis

*FieldView is the CFD Post-Processing and Visualization software you need to make better decisions quickly and with confidence. Our customers know they must deliver accurate results within ever tighter design cycles. Around the world, CFD engineers rely on FieldView every day in diverse industries such as Aerospace, Automotive, Defense, Energy, Environmental and Turbomachinery.*

*CFD Engineers choose FieldView because it enables them to understand, communicate and automate their work.*

### Understand

- See what is happening at realistic (real world) speeds with fast interactive animation.
- Dig deeper with powerful yet easy to use feature extraction tools and predefined Q-criterion and  $\lambda_2$  functions.
- Compare with Dataset Sampling and Dataset Differencing to get quantitative and qualitative differences.

### Communicate

- Bring CFD results to life with realistic images and animations that include environments, backgrounds, and materials.
- Increase confidence within your organization and with customers.
- Reveal important new information, make design decisions, avoid problems, and get to market faster.

### Automate

- Reuse your work on new simulation results over and over.
- Post-process in full batch with python or FieldView's own scripting language (FVX).
- Standardize repetitive tasks so any member of the team will get the same great results.
- Perform standard tasks overnight to get the answers you need first thing in the morning.
- Process many more cases than can be done by hand.
- Archive your process with your images, plots, and animations.

## Contact Tecplot about FieldView

**Sales:** 1.800.763.7005 or 425.653.1200

**Email:** [sales@tecplot.com](mailto:sales@tecplot.com)

**<https://www.tecplot.com/>**

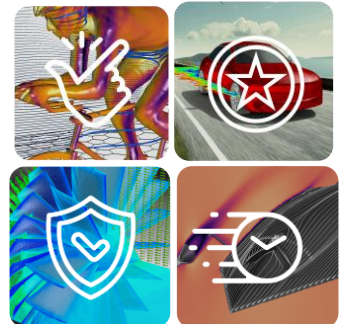
**Master the View™**

**[www.tecplot.com](http://www.tecplot.com)**

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## Try FieldView for Free

[tecplot.com/  
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## High-Quality Fast Easy Reliable

**1.800.763.7005**



# Parallel Post on HPC Made Easy with FieldView 2023

**Easier Client-Server and Parallel Setup from Your Local Machine to an HPC System** – On FieldView 2022 and earlier versions, users may have faced challenges establishing Client-Server connection from their local machines to an HPC System as a result of layers of firewalls, the inability to run directly on compute nodes, etc. With FieldView 2023, it has never been easier to connect to an HPC system from your local machine. Client-Server Autostart now supports:

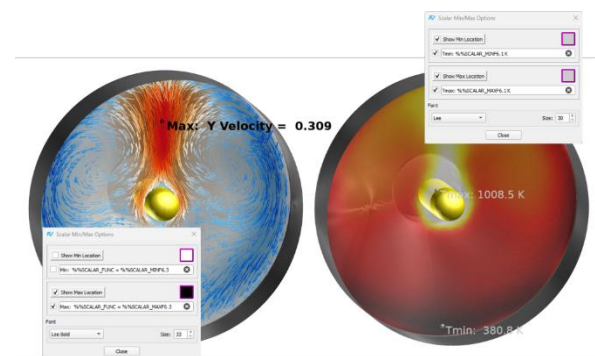
- Port forwarding to the Login Node through SSH or PuTTY
- FieldView Server(s) job submission through a scheduler (Currently PBS)
- Double port forwarding from the Compute Node back to the Local System

A New GUI panel has been added that shows progress as FieldView establishes the connection. In addition, FieldView now comes with Open MPI 4.1.5.

## Show Local Scalar Min/Max Locations and Values in One Click

– Identifying the exact location and values of a scalar's minimum and maximum can be difficult. But with FieldView 2023, that's now possible in one click.

- Show Scalar Min/Max is a new surface property available for all surfaces
- The label is fully customizable, with your choice of font, color and numerical format
- The default label shows the scalar's name automatically
- The text is always shown on top of other objects, for better readability



**New arctan2() Function for Computing Local Angle of Attack** – We have added a new operator, arctan2(), to allow easy computation of Local Angle of Attack (LAoA).

**New Polyspheres Display Type for Accurate Intersection with Surfaces** – In the past, high-performance Display Type Spheres caused unrealistic intersections with surfaces. In FieldView 2023, we have introduced a new particle display path called Polyspheres that allows accurate intersections.

**New Key Modifiers for Controlling the View from a Trackpad** – FieldView's view controls are designed for a mouse with three buttons, but what if you only have one or two buttons? For those controllers, we added new key modifiers.

## Improved VTK, ANSYS-Fluent CFF, Tecplot360 and Ensight Readers

- New Support for the VTI format which can be read in two ways: "VTK Structured" reader and "VTK Unstructured/Hybrid" reader
- New support for changing number of grids over time
- New support for IBlanking information in VTU datasets
- Our Tecplot360 and Ensight readers are now more visible

## More Improvements

- Faster Data Input on Windows for datasets with many grids
- The limit on the number of grids for a single dataset has been raised to 100,000 on Windows, to match other platforms
- A desktop shortcut is automatically created during installation on Windows.
- Over 20 bug fixes