

# Scientific Visualization For Large Scale Data



**S&T Campaign: Computational Sciences**  
*Advanced Computing Architectures*

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## Research Objective:

- Provide tools and expert staff to assist users with data analytics and visualization of traditional physics-based computations



## ARL Facilities and Capabilities Available to Support Collaborative Research

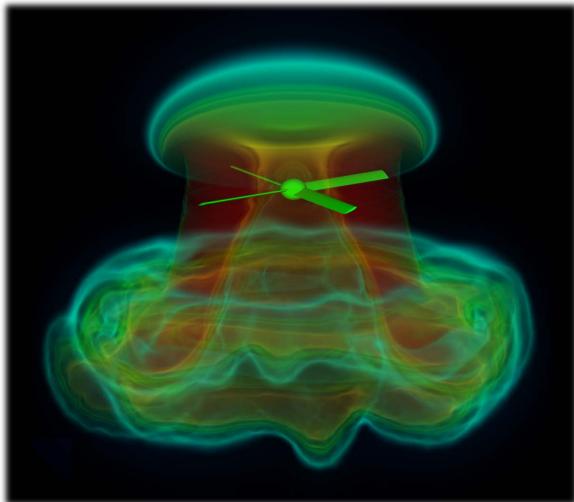
- ARL Supercomputing Research Center
- Data Analysis and Assessment Center
- Expert Staff



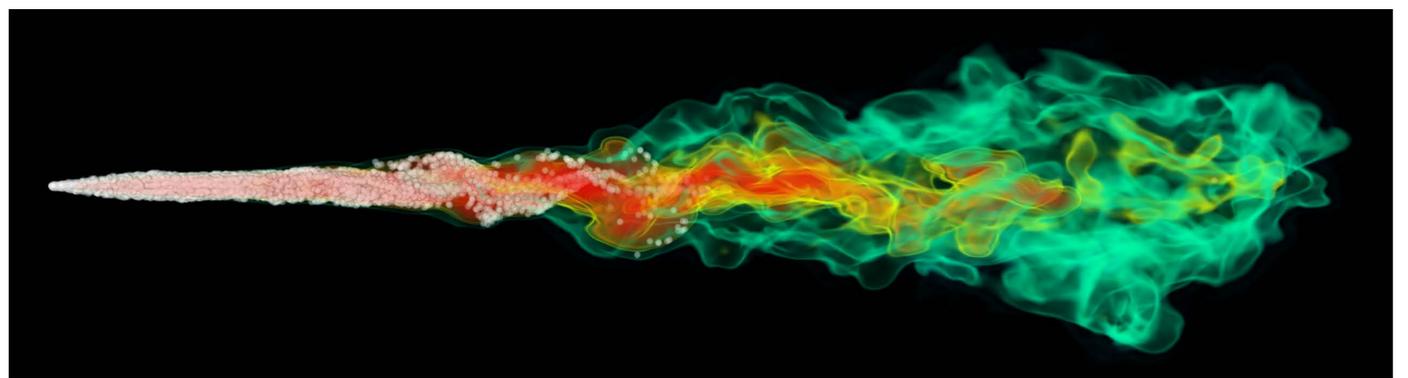
Collaborative Facilities



Classified Computational Facilities



Volume Visualization of a ducted rotor (ARL/VTD)



Fuel Spray & Combustion (ARL/VTD)

## Challenges:

- Develop methodologies to improve capabilities to analyze HPC-sized datasets efficiently and interactively
- Advance state-of-the-art techniques to support DoD/Frontier projects



Research in Alternative Display Technology



AHPARC HIVE Visualization Environment

## Complementary Expertise/ Facilities/ Capabilities Sought in Collaboration

Expertise in data analytics and visualization software tools for physics based computations