Automated Analysis of NIF Experimental Data: Reliable, Systematic, Archived Results for User Community

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The automated analysis of hundreds of raw detector data files immediately after each NIF experiment is relied on by NIF scientists and users to evaluate NIF experimental data.

These three main strategic areas have the biggest impact on eliminating NIF physicists’ time spent on manual analysis and allowing outside users to access standardized, quality NIF results without extensive knowledge of NIF specific hardware and detectors:

1) Coverage for more detectors including standardized, vetted instrument corrections for each type NIF detector

2) Support for more types of NIF shots including classified data

3) Update to more robust data driven engine that assembles needed calibration and experiment data into analysis routines

Automated Analysis for More Detectors: Image Plates and Gated X-Ray Detector Timing

Support For More Shots: VISAR Classified

Robust Data Driven Engine for Automation Framework

Developers: Analysis Team & Bettenhausen, Hahn, Hutton

Developers: Rever

Developer: Munteanu

Developer: Warrick