Abstract Submitted for the DPP01 Meeting of The American Physical Society

Sorting Category: 5.6.2 (Experimental/Observational)

A New System to Monitor Data Analyses and Results of Physics Data Validation Between Pulses at DIII-D<sup>1</sup> S. FLANAGAN, J.M. SCHACHTER, D.P. SCHISSEL, General Atomics — A Data Analysis Monitoring (DAM) system has been developed to monitor between pulse physics analysis at the DIIID National Fusion Facility. The system allows for rapid detection of discrepancies in diagnostic measurements or the results from physics analysis codes. This enables problems to be detected and possibly fixed between pulses as opposed to after the experimental run has concluded thus increasing the efficiency of experimental time. An example of a consistency check is comparing the stored energy from integrating the measured kinetic profiles to that calculated from magnetic measurements by EFIT. This new system also tracks the progress of MDSplus dispatching of software for data analysis and the loading of analyzed data into MDSplus. DAM uses a Java Servlet to receive messages, Clips to implement expert system logic, and displays its results to multiple web clients via HTML. If an error is detected by DAM, users can view more detailed information so that steps can be taken to eliminate the error for the next pulse. A demonstration of this system including a simulated DIIID pulse cycle will be presented.

<sup>1</sup>Work supported by the US DOE under Contract DE-AC03-99ER54463.

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Prefer Oral Session Prefer Poster Session S. Flanagan flanagan@fusion.gat.com General Atomics

Special instructions: Poster 31, Stability, MHD, Current Drive, Advanced Tokamak

Date submitted: July 19, 2001

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