

Abstract Submitted  
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**Edge Resolution and Laser Upgrades for the Thomson Scattering System at DIII-D**<sup>1</sup> B.D. BRAY, M. WATKINS, C. LIU, T.M. DETERLY, D.M. PONCE, General Atomics, D. ELDON, UCSD — The DIII-D Thomson scattering system has been significantly upgraded over the last year. Four new 1 Joule/pulse, 50 Hz ND:YAG lasers have been installed. These new lasers significantly increase the measurement frequency, and are run in addition to the previous set of eight, 20 Hz lasers. Installation of the lasers required an expansion of the Thomson laser room and a replacement of the laser control system. Concurrently, twenty smaller fiber bundles were installed to image the plasma edge and ten new polychromators added to the system. These new fibers double the spatial resolution of the Thomson system and improve the ability of the system to measure the steep edge gradients. The results from the upgrade as well as planned upgrades for the upcoming run campaign will be presented.

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