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Divertor Plasma Parameters During Radiative Divertor Operation on DIII–D[1] S.L. ALLEN, M.E. FENSTERMACHER, D.N. HILL, C.J. LASNIER, W.H. MEYER, G.D. PORTER, R.D. WOOD, Lawrence Livermore National Lab, A.W. LEONARD, M.A. MAHDAVI, T.W. PETRIE, W.P. WEST, General Atomics, R. MAINGI, M.R. WADE, Oak Ridge National Laboratory, D.G. WHYTE, INRS–Energie et Materiaux — A large array of divertor diagnostics has been used to characterize the DIII–D divertor conditions during radiative divertor operation. We have used both D_2 and impurities to reduce the divertor heat flux. Several discharge conditions have been obtained, including attached and detached ELMing H-modes. The multi-chord Divertor Thomson Scattering (DTS) system has been used with divertor sweeping to obtain 2-D measurements of n_e and T_e in the divertor. The T_e drops to ≤ 2 eV with D_2 puffing, n_e increases, and the electron pressure P_e decreases. The radiation zone, measured by multi-chord bolometry, moves from the inside leg of the divertor to the outside. Comparisons of the 2-D distribution of n_e and T_e and the radiation distribution will be presented.

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[X] Prefer Oral Session
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