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Impurity Behavior in DIII-D Discharges with Counter Beam Injection[1] N.H. BROOKS, W.P. WEST, General Atomics, M.R. WADE, Oak Ridge National Laboratory, D.G. WHITE, University of California, San Diego, A. RAMSEY, Princeton Plasma Physics Laboratory, R. JAKUMAR, Lawrence Livermore National Laboratory — Accumulation and axial peaking of intrinsic and injected impurities has been studied in DIII–D discharges with neutral beams injected counter to the direction of I_p. Evolution of the Z_{eff} profiles has been deduced by cross comparison of data from the Visible Bremsstrahlung (VB) diagnostic, from profile measurements of carbon and neon impurity densities with the Charge Exchange Recombination diagnostic, and from near axial measurements with the Core SPRED diagnostic of XUV charge exchange lines. A recent upgrade in the DIII–D Thomson Scattering System has extended radial coverage in measured n_e and T_e profiles to the magnetic axis, allowing straightforward analysis of the VB data. Systematic errors in the VB diagnostic have been identified and corrrected in software; hardware changes to eliminate these errors are planned.

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☐ Prefer Oral Session
☒ Prefer Poster Session

Special instructions: DIII-D Poster Session 1, immediately following TC Jernigan

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