

Abstract Submitted
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Simulations of Recent Ar Gas Puff Radiation Sources on the ZR Generator¹ VARUN TANGRI, Berkeley Research Associates, A.J. HARVEY-THOMPSON, Sandia National Laboratories, J.W. THORNHILL, J.L. GIULIANI, N.D. OUART, Naval Research Laboratory, B. JONES, C.A. JENNINGS, Sandia National Laboratories — We present radiation-magnetohydrodynamic simulations of four recent Ar gas puff shots on the refurbished Z generator. The simulations using Mach2-TCRE are calculated in r-z geometry with a tabulated collisional radiative equilibrium model for the non-LTE ionization kinetics and radiation transport. The four shots were designed to study the effects upon the Ar K-shell radiation output due to a change in the initial gas puff distribution. The shots Z2604 and Z2605 had a double shell puff and a central jet. The shots Z2560 and Z2628 did not have a central jet. Calculated yields are close to experimental error-bars. Results will be presented for the impact of the initial gas puff distribution on the K-shell yield.

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Varun Tangri
Berkeley Research Associates

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