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Two-Dimensional Simulations of Low-Adiabat Plastic Shell Implosions on OMEGA P.B. RADHA, R. BETTI, V.YU. GLEBOV, V.N. GONCHAROV, J.P. KNAUER, P.W. MCKENTY, J.A. MAROZAS, D.D. MEYERHOFER, S.P. REGAN, T.C. SANGSTER, C. STOECKL, Laboratory for Laser Energetics, U. of Rochester — D_2- and DT-filled plastic shells with thicknesses varying between 27 and 35 μm and pressures varying between 3 and 15 atm have been imploded on OMEGA using pulse shapes that set the shell on a low adiabat. These implosions are simulated with the 2-D hydrocode *DRACO*, with detailed calculations of the on-target nonuniformity because of beam-beam imbalance and single-beam nonuniformity as input. Target performance has been measured experimentally through neutron yields, neutron production rates, and ion temperatures. Simulation results will be compared with these observables. The modes that influence target performance will be identified. This work was supported by the U.S. Department of Energy Office of Inertial Confinement Fusion under Cooperative Agreement No. DE-FC52-92SF19460.

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