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Modeling of low convergence liquid layer wetted foam implosions at the National Ignition Facility[1] S. A. YI, R. E. OLSON, L. YIN, D. C. WILSON, H. W. HERRMANN, A. B. ZYLSTRA, B. M. HAINES, R. R. PETERSON, P. A. BRADLEY, R. C. SHAH, J. L. KLINE, R. J. LEEPER, S. H. BATHA, Los Alamos National Laboratory, J. L. MILOVICH, L. F. BERZAK HOPKINS, D. D. HO, N. B. MEEZAN, Lawrence Livermore National Laboratory — A new platform has been developed that allows for lower convergence ratio implosions (CR $\sim$ 15) than is possible with traditional DT ice layered capsules (CR $\sim$ 30). We present HYDRA simulation models of the first low convergence DT implosions on NIF utilizing the wetted foam platform. When tuned to match the observed bangtime and hotspot symmetry, our rad-hydro models agree well with many experimental observables. In particular, the inferred hotspot density and pressure are consistent with simulations, and our modeled burn widths are in better relative agreement with the data than in high convergence implosions. The observed neutron yields are approximately 60-70% of postshot calculations. These results indicate that at a reduced convergence ratio CR $\sim$ 15 the hotspot formation process is well modeled by our simulations.

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