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Simulations of FY15 2-shock CH Campaign Shots PAUL BRADLEY, R.R. PETERSON, L. YIN, R.E. OLSON, J.L. KLINE, N.S. KRASHENINNIKOVA, Los Alamos National Laboratory, S.A. MACLAREN, T. MA, J.D. SALMONSON, Lawrence Livermore National Laboratory, G.A. KYRALA, Los Alamos National Laboratory, J. PINO, E. DEWALD, S. KHAN, D. SAYRE, R. TOMMASINI, J. RALPH, D. TURNBULL, Lawrence Livermore National Laboratory — The 2-shock campaign is a joint Los Alamos/Livermore project to investigate the role of shock timing, asymmetry, and shock convergence on the performance of ICF capsules. This campaign uses a simple two step pulse that makes it easier to correlate the effect of changing the laser pulse on the performance of the capsule. The $\sim$ 680 micron outer radius capsule has a CH or CH+1 at% Si ablator approximately 175 microns thick surrounding the gas region that is either D_2 or THD gas at 0.0085 g/cc. The capsules are indirectly driven inside a gold hohlraum that is 9.2 mm long by 5.75 mm in diameter. The three CD inner surface capsules utilized THD fuel so that the DT yield would arise from mixing of CD shell material into the tritium of the gas region. Our simulated results compare well to the experimental yield, ion temperature, burn width, x-ray size, and radius versus time data. Work performed by Los Alamos National Laboratory under contract DE-AC52-06NA25396 for the National Nuclear Security Administration of the U.S. Department of Energy.

Paul Bradley
Los Alamos National Laboratory

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