

Abstract Submitted
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Streaked X Ray Spectra from Polar Direct Drive Capsules with an Equatorial Defect¹ T.J. MURPHY, P.A. BRADLEY, J.A. COBBLE, S.C. HSU, N.S. KRASHENINNIKOVA, G.R. MAGELSEN, M.J. SCHMITT, I.L. TREGILLIS, F.J. WYSOCKI, Los Alamos National Laboratory — In the Defect Implosion Experiment (DIME) on Omega, capsules with an equatorial “trench” defect have been imploded to study defect-induced mix processes. The capsules contain layers doped with titanium and/or vanadium, with doped layers in contact with the deuterium fill gas on some targets, and separated from the gas by a layer of undoped plastic in others. Streaked x-ray spectra from the capsule implosions provide information on conditions in the mix layer. Polar direct drive was utilized in preparation for experiments planned for the National Ignition Facility in 2012.

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