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Direct Measurements of Shock-Wave Propagation in CH Using Streaked X-Ray Radiography and VISAR C.R. STILLMAN, P.M. NILSON, M. LAFON, C. MILEHAM, R. BONI, T.R. BOEHLY, D.D. MEYERHOFER, D.H. FROULA, Laboratory for Laser Energetics, U. of Rochester, D.E. FRATANDUONO, LLNL — Measurements of shock-wave propagation in CH were carried out with one-dimensional streaked x-ray radiography and a line-imaging velocity interferometer. The shock was driven with a 2.5-ns laser pulse at focused intensities of up to 4×10^{14} W/cm^2. The shock-velocity measurements show good agreement with each other to within experimental error. This combination of techniques is being investigated for future applications in absolute equation-of-state studies. This material is based upon work supported by the Department of Energy National Nuclear Security Administration under Award Number DE-NA0001944 and the Stewardship Science Graduate Fellowship Grant Number DE-NA0002135.

D.H. Froula
Laboratory for Laser Energetics, U. of Rochester

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