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Radiative shock experiments on LIL and Gekko MICHEL KOENIG, ROMAN YURCHAK, Laboratoire LULI - CNRS, France, CLAIRE MICHAUT, PATRICE BARROSO, LUTH, France, EMERIC FALIZE, ALEXIS CASNER, STEPHANE LAFFITE, SERGE BOUQUET, CEA DAM - DIF, France, YOUICHI SAKAWA, ILE, Osaka, Japan, TAICHI MORITA, Kyushu University, Japan, PAUL DRAKE, Department of Atmospheric, Oceanic, and Space Sciences, U. of Michigan, USA, ALEXANDER PELKA, Helmholtz-Zentrum Dresden-Rossendorf, U. Dresden, Germany, SÉBASTIEN LEPAPE, LLNL, USA — For more than a decade, we have currently performed laboratory experiments in connection with astrophysical phenomena in order to improve our understanding in the field of radiation hydrodynamics so to validate numerical schemes and assumptions in simulations. Here, recent experimental results on highly radiative shocks generated by high-power lasers such as Gekko (Japan) and LIL (laser integration line) are presented. Many visible diagnostics were implemented (interferometry, self-optical pyrometry, 2D snapshot imagers) providing measurements of the shock and precursor velocities, temperature, electronic density and 2D shock front shape. Results will be compared with 2D radiation hydrodynamic simulations

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