

Abstract Submitted  
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**Planar concentration and velocity measurements of a shock-accelerated gas curtain at multiple Mach numbers** GREG ORLICZ, B.J. BALAKUMAR, KATHY PRESTRIDGE, CHRIS TOMKINS, Los Alamos National Lab — Concentration and velocity measurements are obtained in a shock-accelerated gas curtain for three values of the incident shock strength:  $Ma = 1.2, 1.5,$  and  $2.0$ . Qualitative PLIF images yield planar concentration maps at approximately 12 times to capture the evolution of the transitioning curtain, from which mixing widths are estimated as a function of time. The concentration results are complemented by planar velocity measurements (using combined PIV/PLIF) at one or two times for each Mach number. Vorticity and circulation estimates are computed from the PIV data and used in determining appropriate scaling of the flow.

Christopher Tomkins  
Los Alamos National Lab

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