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Update on 2-D OMEGA Capsule Implosions[1] PAUL BRADLEY, Los Alamos Natl Lab — We have an upgraded laser energy deposition package in our AMR-Eulerian radiation-hydrodynamic code called RAGE. As part of our validation effort, we ran 2-D simulations for a series of OMEGA direct drive implosion capsules that have shell thickness ranging from 7.2 to 29.3 μm and different gas fills. These simulations include the effect of surface roughness, laser spot non-uniformity, the mounting stalk, and the glue spot. We examined the sensitivity of our simulated results to mesh resolution and mix model. Our simulated results compare well to the experimental yield, ion temperature, burn width, and x-ray size data.

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