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Update on Los Alamos 1 MJ National Ignition Facility Capsule-Hohlraum Calculations¹ PAUL BRADLEY, DOUGLAS WILSON, MELISSA DOUGLAS, Los Alamos National Laboratory — Recent plans for ignition on the National Ignition Facility (NIF) call for the first ignition attempt to utilize about 1 megajoule (MJ) of laser energy. Our 2-D capsule-hohlraum calculations has capsule with a 0.3 atom% uniformly Cu doped beryllium ablator capsule that has an inner ice radius of 753 μm , and inner ablator radius of 825 μm , and an outer ablator radius of 1000 μm . We use post-processing to simulate results expected from neutron imaging, high-energy X-ray images, and neutron reaction history diagnostics. We are especially interested in how we can use these diagnostics to determine the difference between laser pointing errors and problems with the time dependent shape of the laser pulse and examine this in detail here.

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