

Abstract Submitted
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Symmetry tuning from analyzing the shape of x-ray self emission of Megajoule implosions at NIF G. KYRALA, J. KLINE, Los Alamos National Laboratory, S. GLENN, D. BRADLEY, R. BENEDETTI, Lawrence Livermore National Lab, N. IZUMI, Lawrence Livermore National Labl, T. MAH, S. DIXIT, S. GLENZER, N. MEEZAN, S. WEBER, L. SUTER, R. TOWN, D. CALLAHAN, J. RALPH, T. DOPPNER, O. LANDEN, Lawrence Livermore National Lab — X-ray self-emission from imploding capsules driven by hohlraum radiation has been used to tune the symmetry of symcaps in the past. However as capsules have changed, new features have appeared in the x-ray images that have led us to re-examine the analysis and helped us tune the symmetry of different imploding cryogenically layered capsules as well. We had observed jets in the implosion and we tried identifying those jets, and avoid their effect on the observed time dependent symmetry. Since, we have tried to quantify the effect of these jets on the measured symmetry, x-ray history, and x-ray emission bang time. In this presentation we will show the effect of including the emission from the jets, show a correlation between the observations from different directions, give an estimate of the velocity of these features, as well as give a time history of their emission and size. We will also show how the time history have changed for the different laser conditions for the cryogenically layered targets, the implosion size was smaller than that for symcaps, and consequently the compression was larger.

George Kyrala
Los Alamos National Laboratory

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