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Initial results, emerging trends, and interpretations from the Mix Campaign on NIF¹ BRUCE REMINGTON, Lawrence Livermore National Laboratory, NATIONAL IGNITION CAMPAIGN (NIC) COLLABORATION — As part of the National Ignition Campaign (NIC), we are pursuing a series of experiments on the NIF to understand and minimize the effects of hydrodynamic mixing on capsule performance in cryogenic DT layered implosions. We are varying the capsule preheat shield dopants, ablator and fuel thicknesses, and laser drive. An overview of the Mix Campaign will be given, emerging trends pointed out, and analysis presented to illustrate the degree to which ablation-front Rayleigh-Taylor instability contributes to mixing of ablator material into the hot spot.

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