Observation of Toroidal Asymmetries in the DIII-D Divertor During ELM-Suppressed I-Coil Operation,* C.J. Lasnier, M. Groth, M.E. Fenstermacher, Lawrence Livermore National Laboratory, I. Joseph, U. California-San Diego, T.E. Evans, General Atomics – During operation of the internal coil set (I-coils) in DIII-D to suppress ELMS, we observe toroidal asymmetries in heat flux or visible light in the divertor. Pronounced heating at tile joints is observed in some cases. We often observe a double-peaked profile in the visible light emission at one toroidal location while the IRTV at another toroidal location shows no split. In other cases infrared camera images show toroidal variation in the splitting within the view of a single camera. We compare this toroidal asymmetry to field line calculations by I. Joseph using the E3D code (this conference), in this poster and that of Joseph, and find cases of striking agreement.

*Work supported by U.S. Department of Energy under W-7405-ENG-48, DE-FG02-04ER54758 and DE-FC02-04ER54698.