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Heat Flux Asymmetry in Disruptions and VDEs in DIII–D[1] R.L. LEE, A.W. HYATT, A.G. KELLMAN, P.L. TAYLOR, *General Atomics*, C.J. LASNIER, *Lawrence Livermore National Laboratory* — In disruption experiments on DIII–D in which the discharge is forced to disrupt due to impurity injection, loss of vertical stability, or by reaching beta or density limits, heat deposition measurements in the divertor region using infrared scanners at different toroidal locations reveal toroidal and radial asymmetries are present. In a 1.5 MA disruption caused by impurity injection, heat flux to the divertor region showed a strong in/out asymmetry across the divertor region. During the initial thermal quench, the heat flux was concentrated in the private flux region and as the thermal quench evolved, moved away from the strike points in both the inner and outer divertor regions. During the current quench, the primary heat flux occurred near the inner strike region (R = 1.05 m). In a vertical displacement event (VDE), where the discharge is allowed to drift onto the divertor region, a nearly 2 : 1 toroidal asymmetry in the divertor heat flux was observed at locations 100 deg apart. Further observations of asymmetries during high beta and high density disruptions are presented and discussed.

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