Abstract Submitted for the DPP00 Meeting of The American Physical Society

Sorting Category: 6.2.2 (Experimental)

Database Analysis of Evolution to Disruption in DIII-D¹ A.W. HYATT, P.L. TAYLOR, A.G. KELLMAN, General Atomics — A database consisting of the temporal evolution of several hundred discharges to end-of-shot or disruption was initially constructed last year and initial results were reported.² We extend this database and further investigate several preliminary results. One preliminary result is the observation of a region in parameter space where high normalized beta ($3 < \beta_N < 4$) operation is apparently disruption free. We further investigate whether the disruptivity per unit time diminishes with increasing time after some marker such as maximum β_N is reached and whether this is influenced by end-of-shot operational practices such as turning off auxiliary heating or fuel gas flow. We also report on preliminary investigations into parameter space trajectories of discharges that do and do not end in disruption

¹Work supported by US DOE Contract DE-AC03-99ER54463. ²A.W. Hyatt, et al., Bull. Am. Phys. Soc. **44**, 77 (1999).



Prefer Oral Session Prefer Poster Session A.W. Hyatt hyatt@fusion.gat.com General Atomics

Special instructions: 2nd poster in Disruptions Session (after Humphreys)

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