

Abstract Submitted
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Temperature Fluctuations during Sawtooth Crashes in TEXTOR TOBIN MUNSAT, University of Colorado, I.G.J. CLASSEN, C.W. DOMIER, A.J.H. DONNE, N.C. LUHMANN, JR., H.K. PARK, B. TOBIAS, AND THE TEXTOR TEAM — Recent 2-D spatially and temporally resolved measurements of electron temperature fluctuations in the tokamak core have revealed new information on the complex mechanisms and dynamics of the sawtooth crash. Here we present fluctuation analysis of TEXTOR plasmas using data from the Electron Cyclotron Emission Imaging (ECEI) diagnostic. Maps of electron temperature are measured in the poloidal plane in the vicinity of the $q=1$ surface on both the high-field and low-field side, and are characterized during sawtooth precursor, crash, and recovery stages. Previous studies have presented studies of global and local topology, and extended coherence and correlation analyses are presented in addition to fundamental spectral characteristics.

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