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T_e-fluctuation measurements within the pedestal in dominantly electron-heated wide pedestal quiescent H-mode in DIII-D[1] S. HOUSHMANDYAR, University of Texas-Austin, D. ERNST, MIT, A. ASHOURVAN, PPPL, M. AUSTIN, University of Texas-Austin, X. CHEN, GA, G. MCKEE, UW-Madison, T. RHODES, G. WANG, UCLA — The recently discovered wide pedestal quiescent H-mode (WPQH) in DIII-D is distinguished by its ELM-free nature, high confinement, and broadband turbulent fluctuations which limit the pedestal gradient. Recent experiments have shown that supplementing NBI heating with ECH heating improves the WPQH confinement. For dominantly electron heated WPQH plasmas, the fluctuation diagnostics have measured increased n_e and T_e fluctuations in the outer core as NBI power is exchanged for ECH power, which also leads to electron internal transport barrier formation [Ernst *et al*, IAEA 2018]. However, our results show an unexpected and significant reduction in the T_e-fluctuation level in the *pedestal* during the ECH. The T_e-fluctuation measurements in the pedestal were facilitated by the wide and high pedestal nature of the WPQH plasmas which results in sufficient optical thickness required for ECE measurements. Here we present the T_e-fluctuation measurements using the YIG ECE channels and the CECE analysis, in which a cluster of the channels were placed in the vicinity of the pedestal ($0.8 < \rho < 0.95$) for the intent of increasing the spatial resolution of the T_e-profile. Transport analysis and the gyrokinetic simulation with the measured T_e-fluctuation will be presented.

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