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Electron temperature fluctuations changes associated with ELM suppression by RMP in DIII-D¹ C. SUNG, G. WANG, T. RHODES, W. PEE-BLES, UCLA — New results in this presentation show an increase in broadband electron temperature fluctuations (\tilde{T}_e) during ELM suppression by resonant magnetic perturbations (RMP). This measurement is obtained via correlation ECE (CECE) near the top of the pedestal ($\rho \sim 0.9 - 0.96$). This \tilde{T}_e increase is significant, (>40%), and occurs after the ELM suppression but not between ELMS. This may imply an increase in thermal transport facilitated by the increased \tilde{T}_e levels. Considering that the changes in gradient scale length during ELMs with RMP are complicated, it is possible that the mechanism responsible for changing \tilde{T}_e is different compared to previously observed changes in \tilde{n}_e [G. R. McKee et al NF 2013]. This possibility, and the nature of the \tilde{T}_e , will be studied through profile analysis and linear gyrokinetic analysis using TGLF [J. E. Kinsey et al PoP 2008]. In addition, the relation between the \tilde{T}_e and an observed low frequency coherent mode will be investigated.

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