Abstract Submitted
for the DPP12 Meeting of
The American Physical Society

Study on Sawtooth and ELM activities in DIII-D and KSTAR Plasmas[1] J.-G. BAK, H.S. KIM, S.G. LEE, K.D. LEE, W.H. KO, J. KIM, Y.M. JEON, W.C. KIM, Y.S. BAE, National Fusion Research Institute, E.J. STRAIT, R.J. LA HAYE, R.J. BUTTERY, M.R. WADE, General Atomics, J.K. PARK, Princeton Plasma Physics Laboratory, J.M. HANSON, Columbia University — Sawtooth precursor oscillations (SPOs) are studied in neutral beam heated plasmas on DIII-D and KSTAR. The characteristics of the SPO (5-20 kHz, $m/n = 1/1$) are investigated using magnetic sensors along with electron cyclotron emission (ECE) and soft x-ray diagnostics. In addition, the Type I edge localized mode (ELM) precursors (8-40 kHz, $n = 2, 3$) are detected before the ELM burst in neutral beam heated plasmas. The characteristics of the ELM precursors are investigated by using magnetic sensor data. In this work, the experimental investigations of the SPOs and ELM precursors in DIII-D and KSTAR plasmas will be presented.

[1]Supported by the US DOE's Exchange Visitor Program G-3-00348, by the US Department of Energy under DE-FC02-04ER54698, DE-AC02-09CH11466, DE-FG02-04ER54761, and by the KSTAR project funded by the Ministry of Education, Science & Technology of Korea (MEST)

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Date submitted: 23 Jul 2012 Electronic form version 1.4