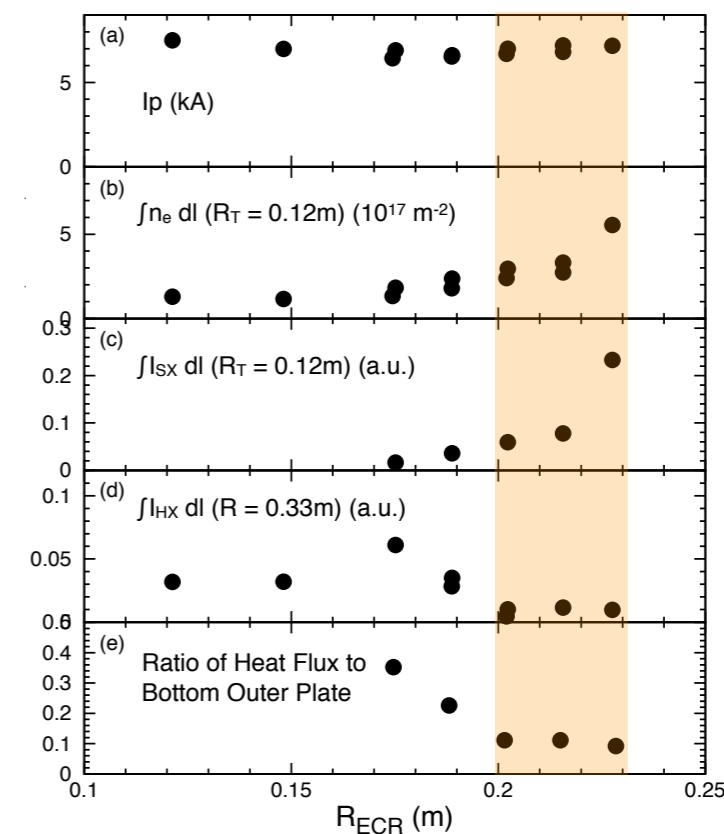
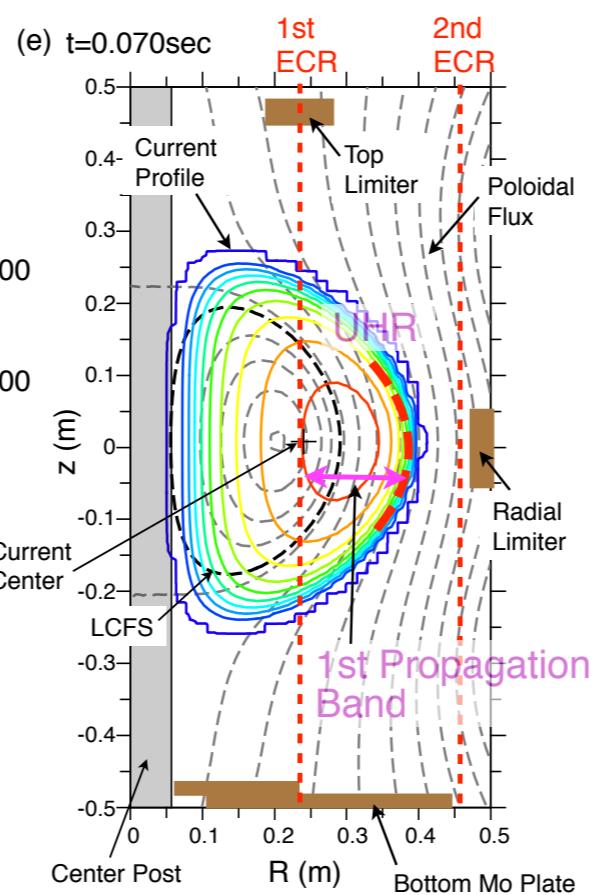
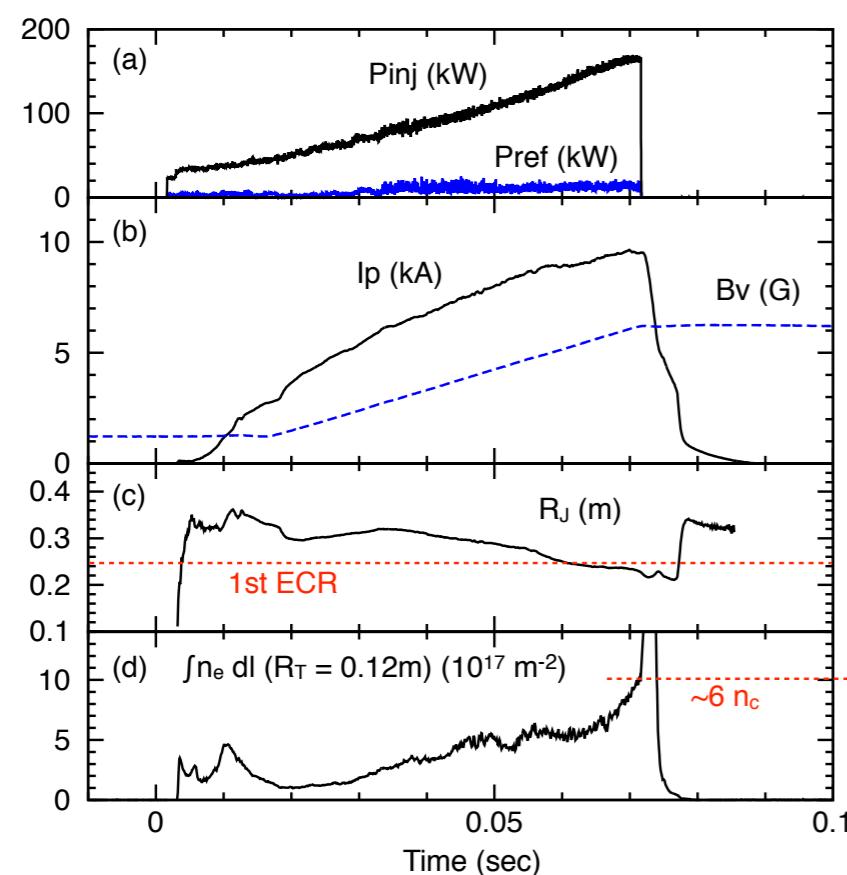


EXW/P4-40 Non-inductive Production of Extremely Overdense Spherical Tokamak Plasma by Electron Bernstein Wave Excited via O-X-B Method in LATE



Extremely overdense spherical tokamak (ST) plasmas are produced non-inductively with electron Bernstein (EB) waves mode-converted via O-X-B scheme when EB waves are excited in their first propagation band (between the fundamental and the 2nd harmonic electron cyclotron resonance (ECR) layer).



Non-inductive ST start-up with EB waves excited in the 1st propagation band is more effective than that with EB waves excited in the 2nd propagation band. EB heating in the core plasma is difficult when the 2nd propagation band is used.

