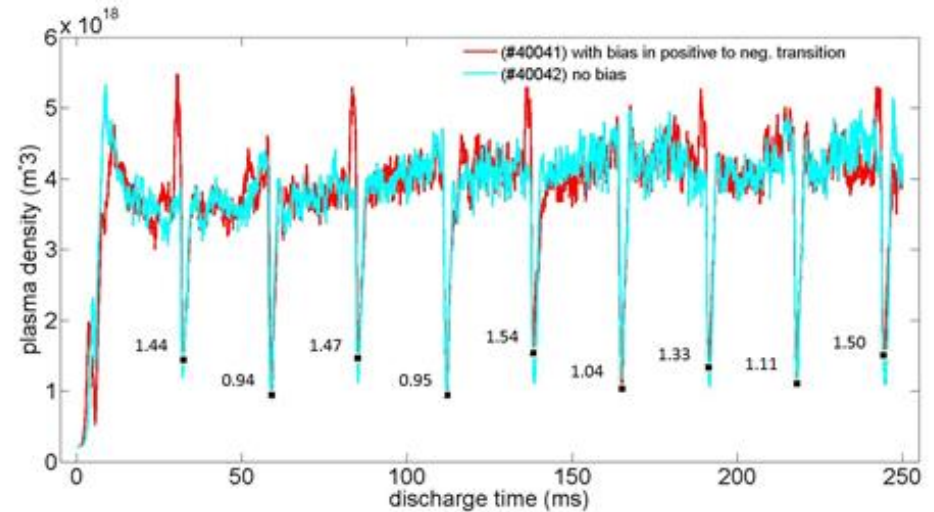


Studies on ISTTOK during edge electrode biasing assisted AC operation

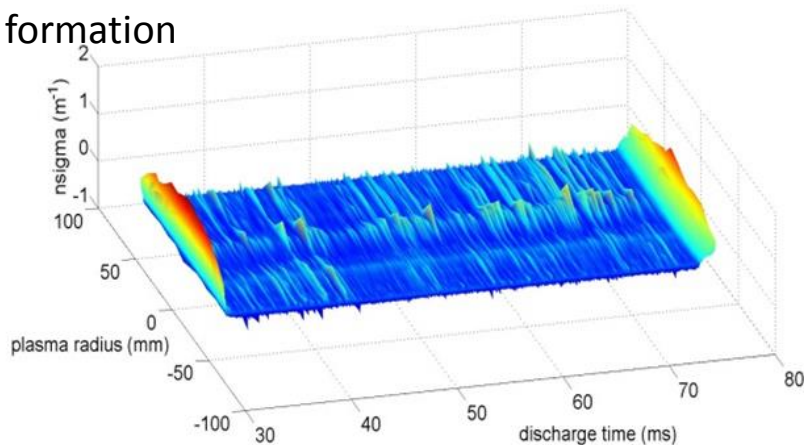
A. Malaquias et al.

- At 4 kA the electrode biasing during AC transition (+/-) is applied and successful full AC transition is maintained.
- Electrode bias increases the absolute plasma density during the AC transition (when $I_p = 0$) roughly from 30%-40% above the non-biased cases.



- AC transitions at higher plasma current (> 4.5 kA) under biasing are not fully successful!

Possible formation and fast loss of fast electron drift currents that are not effective in generating enough ionization for full cycle formation



Unbalanced magnetic fields (H and V) during initial formation of plasma current channel

