

XP-537 HHFW Current Drive with MSE

- Goal: Explore viability of measuring HHFW CD with MSE
- Use 300 kA discharge that worked well for HHFW heating experiments
 - Maximize CD effect
 - Hopefully minimize both the NBI affect on plasma and NBI absorption of rf
- Use constant one source NBI
 - Start beam before rf
 - Scan beam thru rf
- Scan phase, 14m^{-1} , co, ctr and balanced 7m^{-1}

Results

- Discharges plagued by MHD
 - Only -7 m^{-1} w/o NBI showed no MHD
 - MHD clamped energy reduced central Te and affected MSE
- Some differences seen on MSE but may just be heating
- No affect on neutrons seen