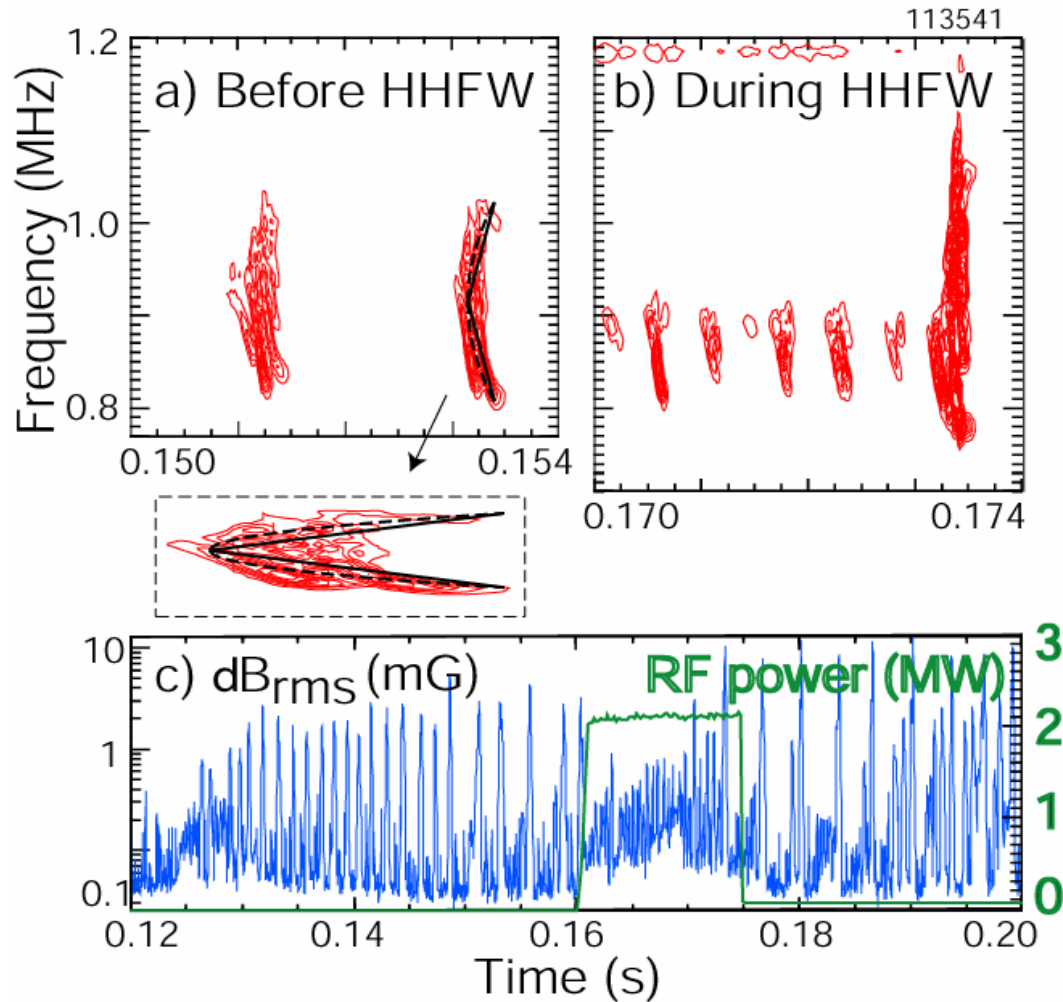
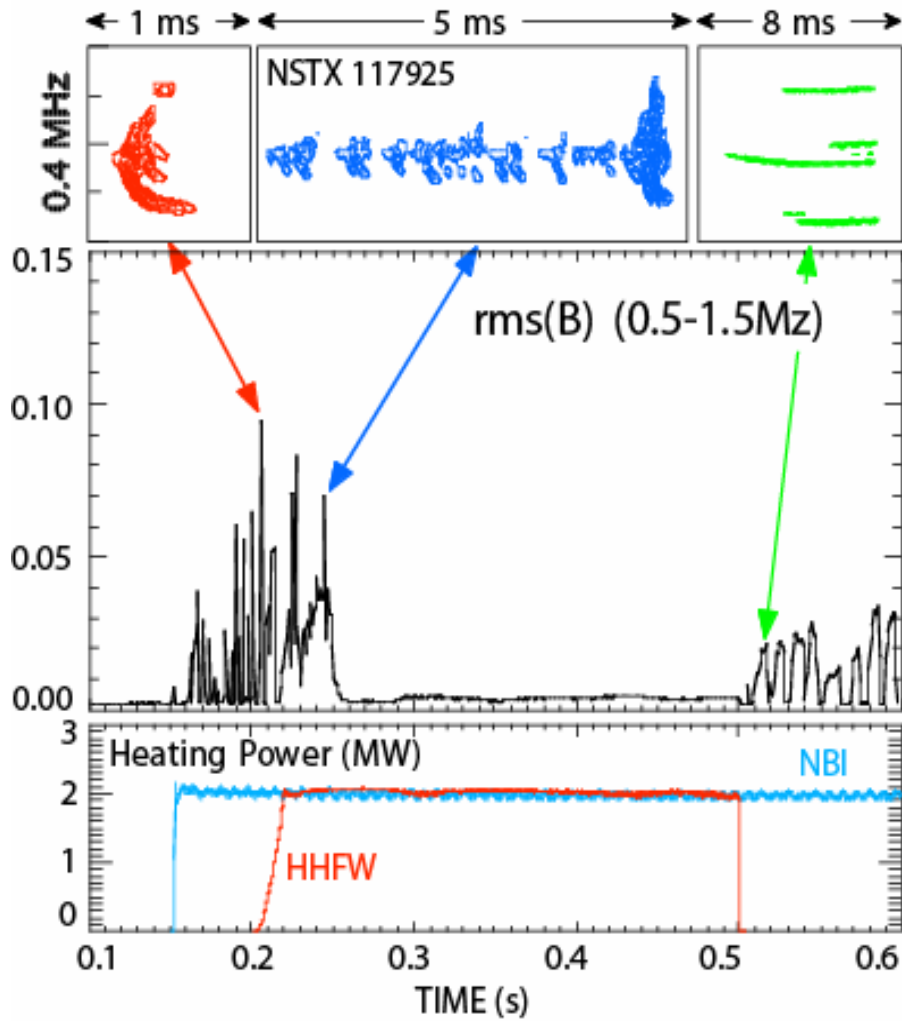


# Effect of HHFW on "Angelfish" Chirping



- Intriguing 2004 Results found mode suppression at ~2 MW level, in some cases
- Nonlinear dynamics a crucial aspect of mode characterization (R07-3)
- Engineering of fast-ion phase space could mitigate deleterious instabilities

# HHFW Power is Adequate for the Experiment



- Growth rate estimates from NOVA (TRANSP input), empirical fast-ion HHFW heating with NPA, and Hole-clump theory give self-consistent estimate of threshold power for suppression of about 2 MW.

- **Need controlled HHFW power scans.**

# Effect of HHFW on “Angelfish” Chirping

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MHD (Energetic Particles)

- Establish Angelfish in L-Mode plasma
- HHFW power scan
- Document eigenfunction and fast-ion dist. funct.
- (Time permitting) HHFW pulse length & phasing scans

1 runday

3 Sources, ~3 MW HHFW, 0.8 MA, ~0.4 T, IW/DND, Helium

Essential: MHz fluctuations, all fast ions, Thomson, MSE