F09-Waves excitation by REs

Goals

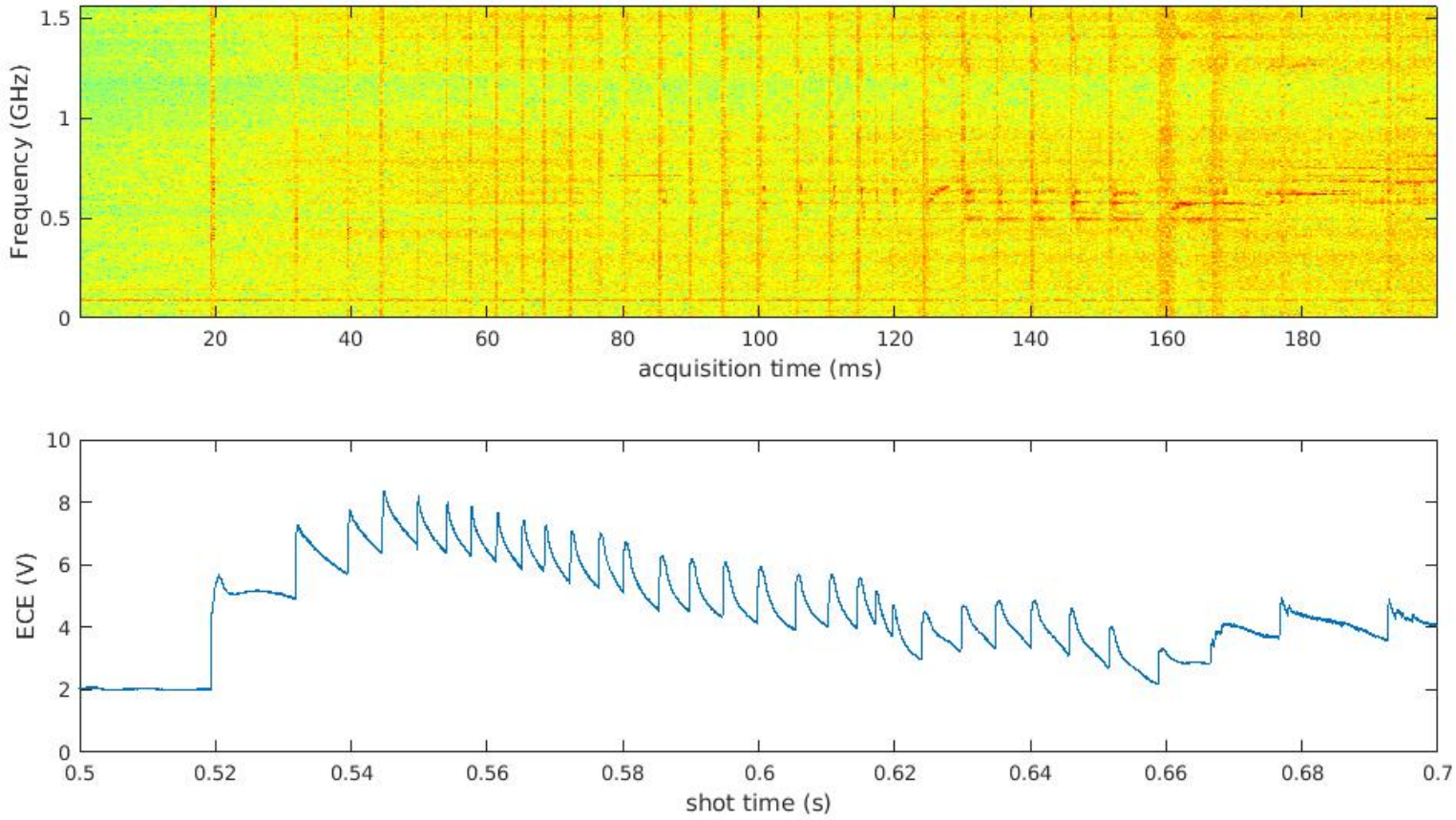
The main aims of this experiment are :

- Measure frequency spectra of plasma waves excited by RE in FTU.
- Investigate the relevant dispersion relation.
- Investigate the excitation mechanism (anomalous Doppler or Cherenkov resonance).
- Investigate influence on re-heating of cold background plasma.
- Integrate wave spectra with REIS data

Scenario

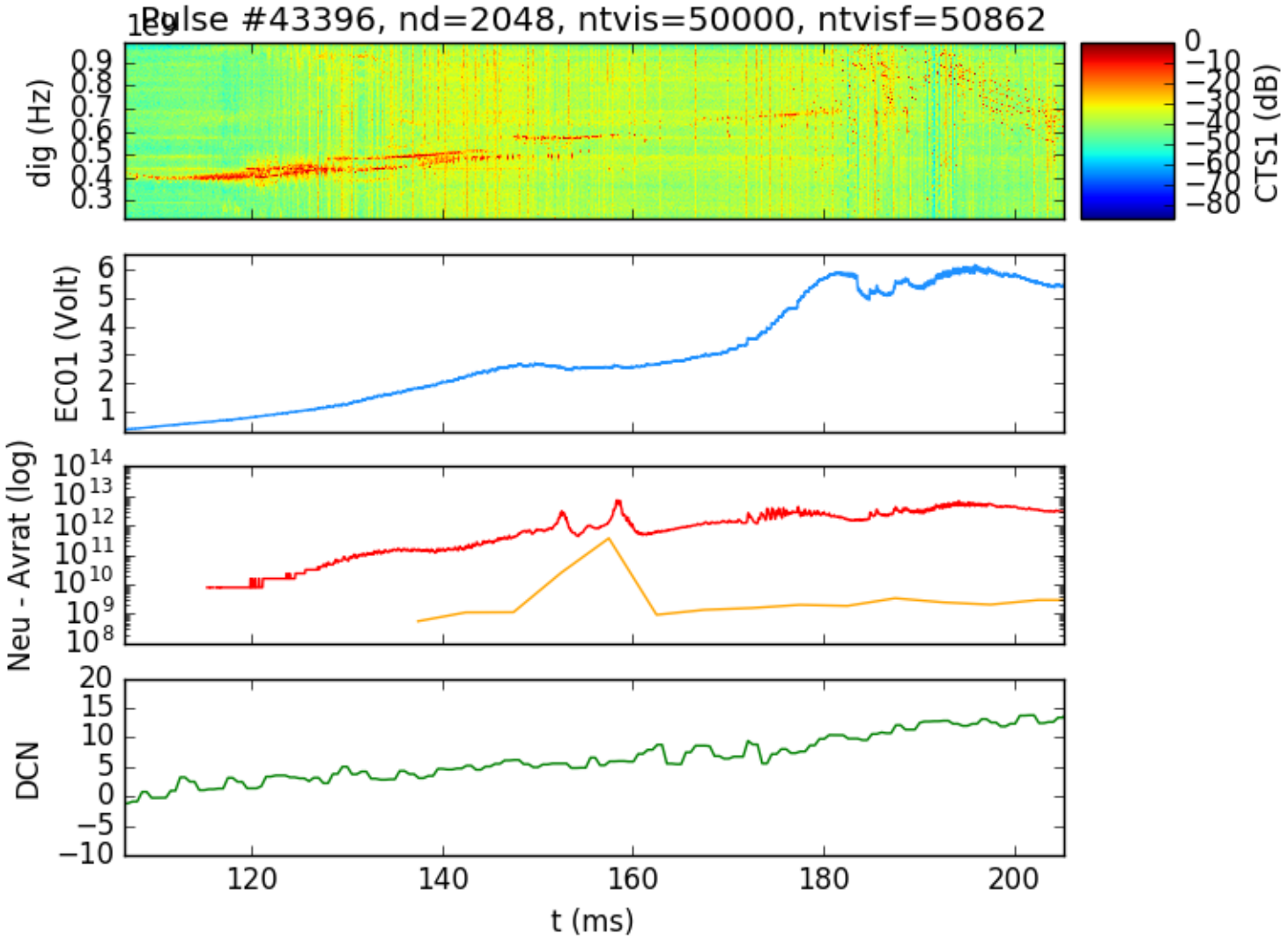
- **Post-disruption RE** beam with anomalous Doppler instabilities
- RE formation during **initial current ramp-up**
- Wave spectra response to density variations by **ECRH**.
- Excitation in low-density plasmas before disruption.

F09-Waves excitation by REs



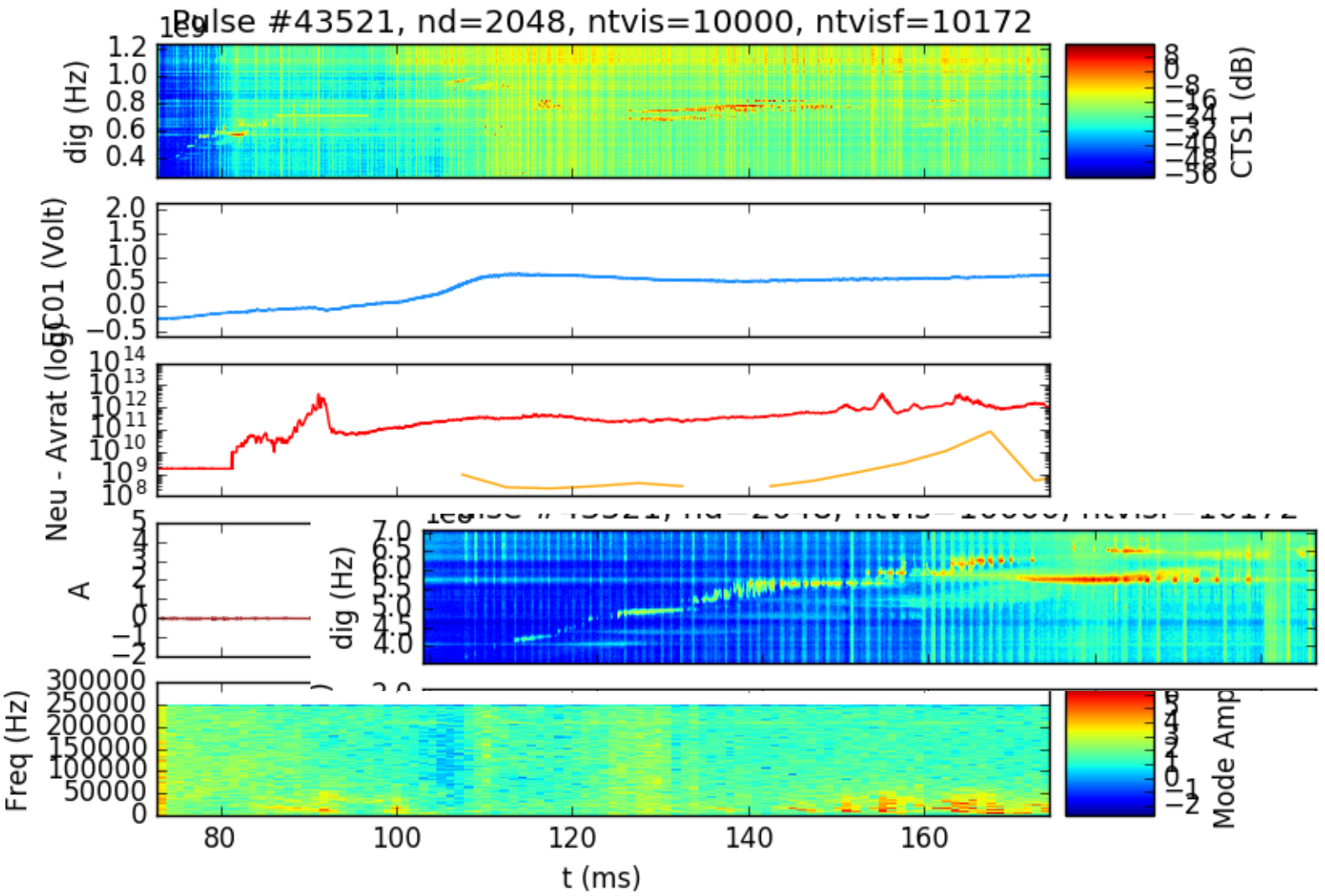
42927 **Post-disruption RE** beam with anomalous Doppler instabilities

F09-Waves excitation by REs



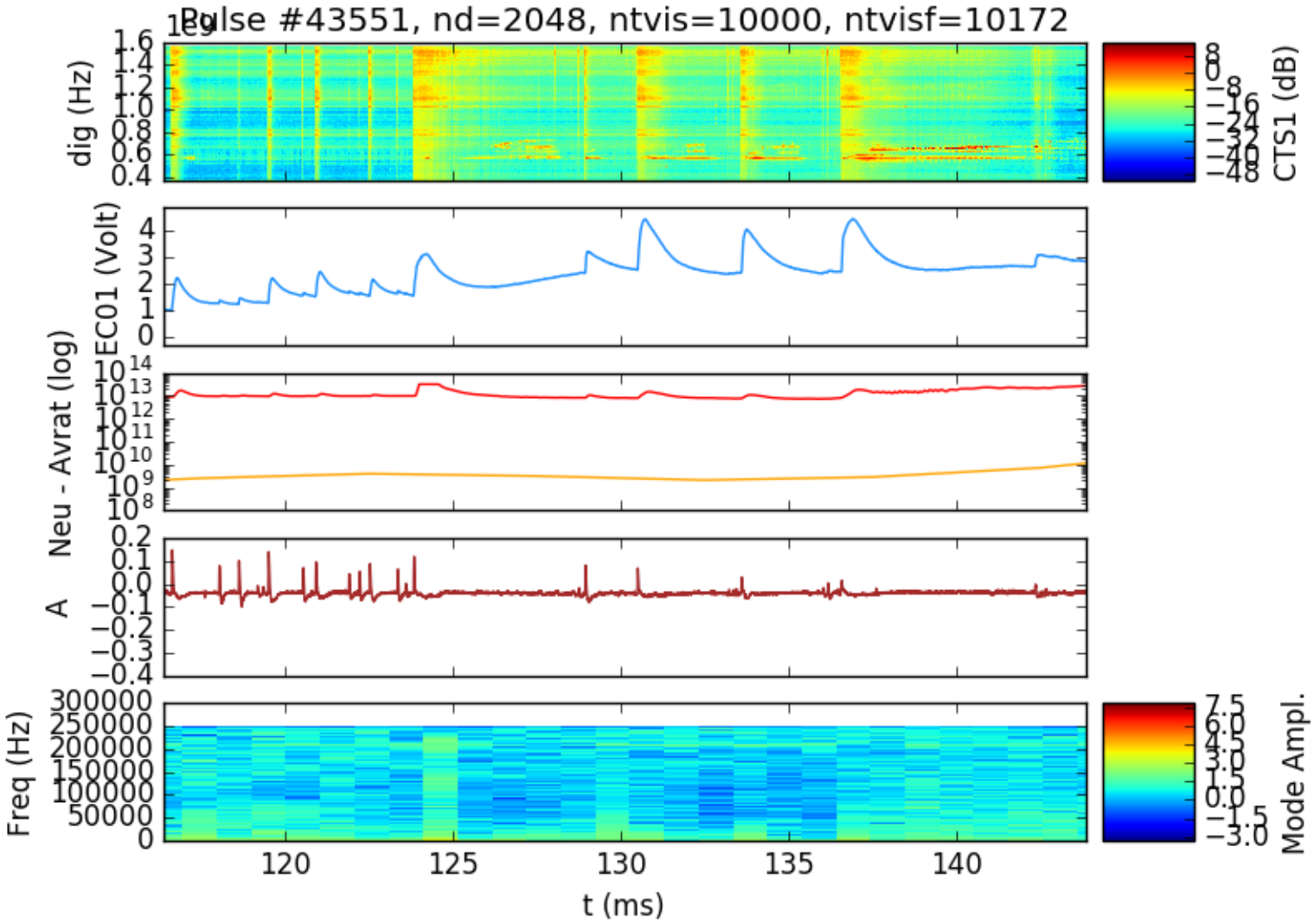
43396 Initial RE with continuous lines

F09-Waves excitation by REs



43521 Initial RE with continuous lines and broadband

F09-Waves excitation by REs



43551 Initial RE with ADI and continuous lines

F09 and F18 (parasitic) sessions

- C1: data on post-disruption RE beam.

C2:

• 30 Oct. (12)	B=5.3&2.7T	Initial Ip ramp-up
• 06 Nov. (11)	B=5.3&4	1.6 & 3.2GHZ Nyquist freq
• 07 Nov. (10)	B=5.3&4	New aerial
• 12 Nov. (1)	B=5.3	
• 13 Nov. (16)	B=5.3	Timing scan
• 14 Nov. (24)	B=6	Density scan; technical problems