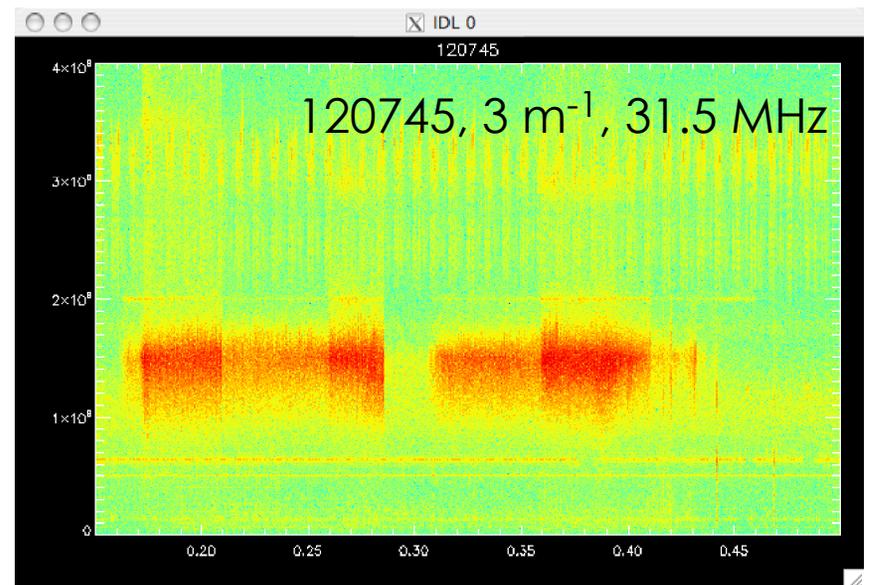
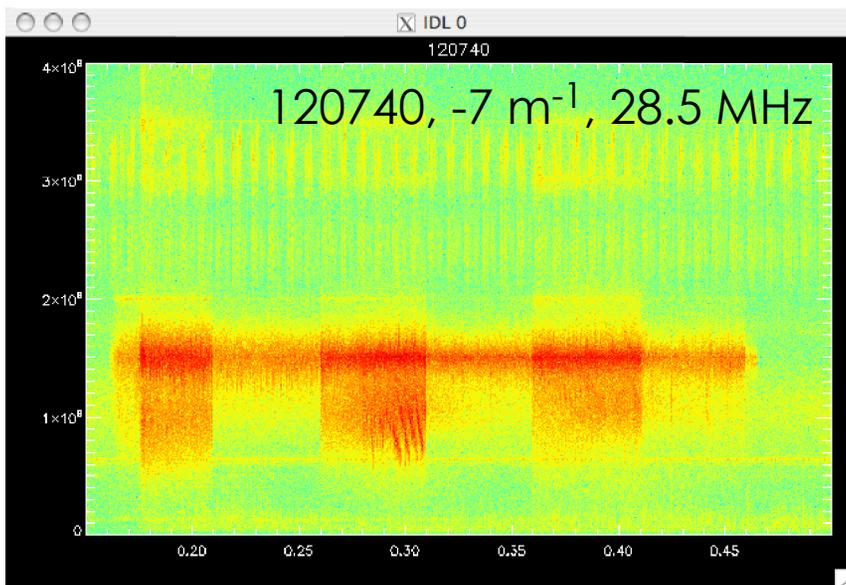
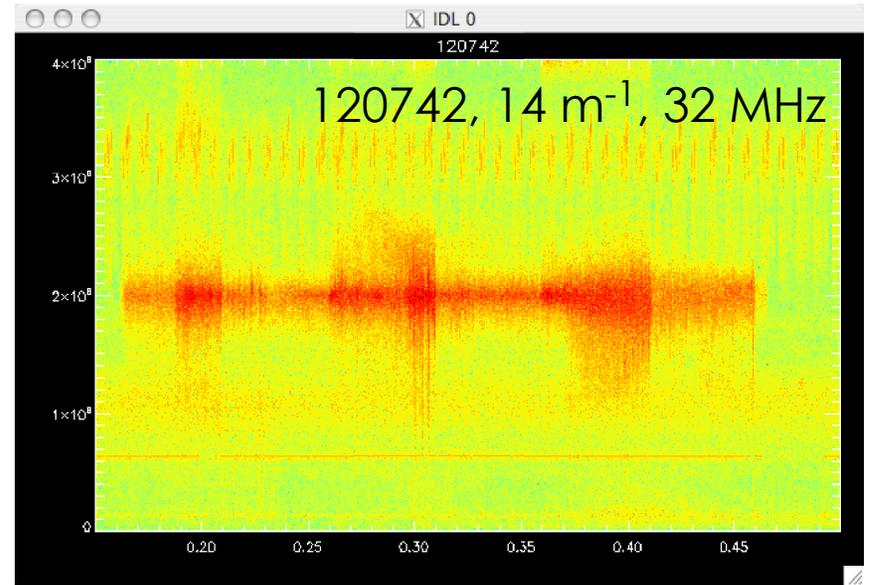
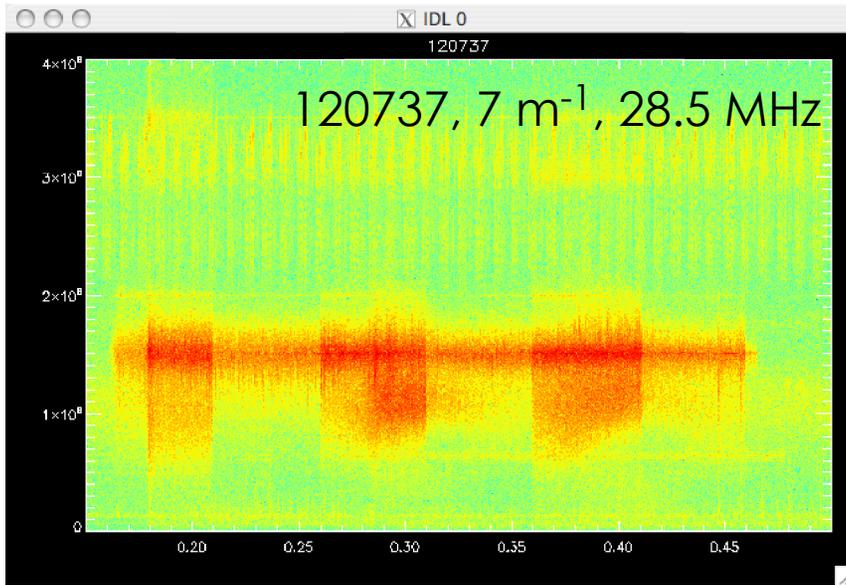


Initial RF Reflectometry Measurements During XP-617

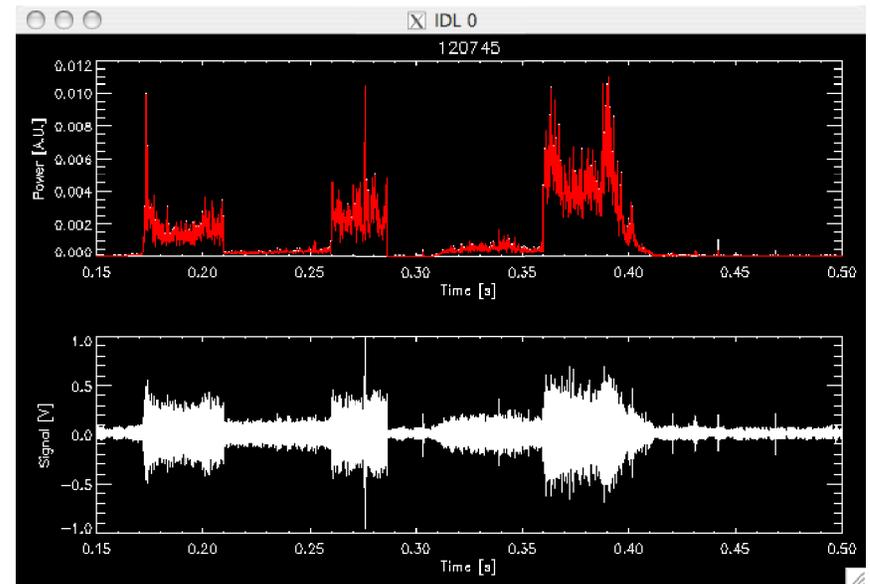
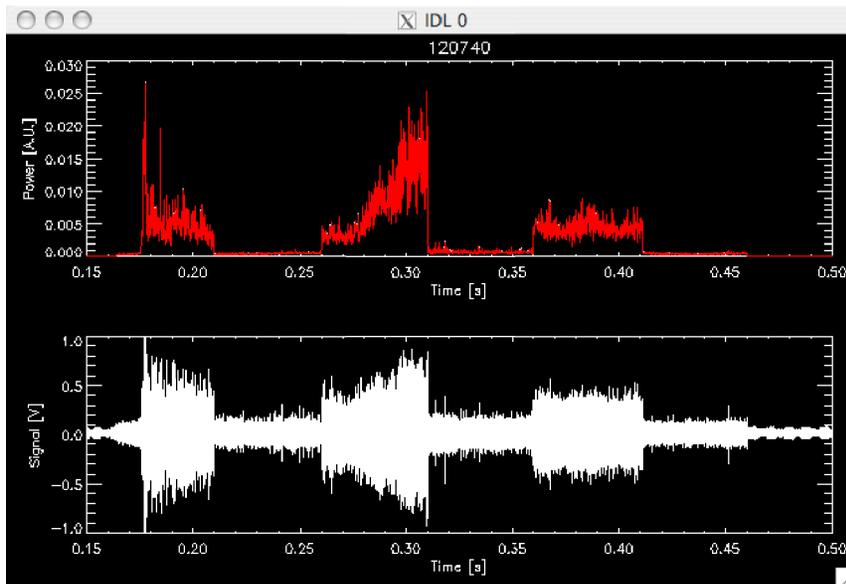
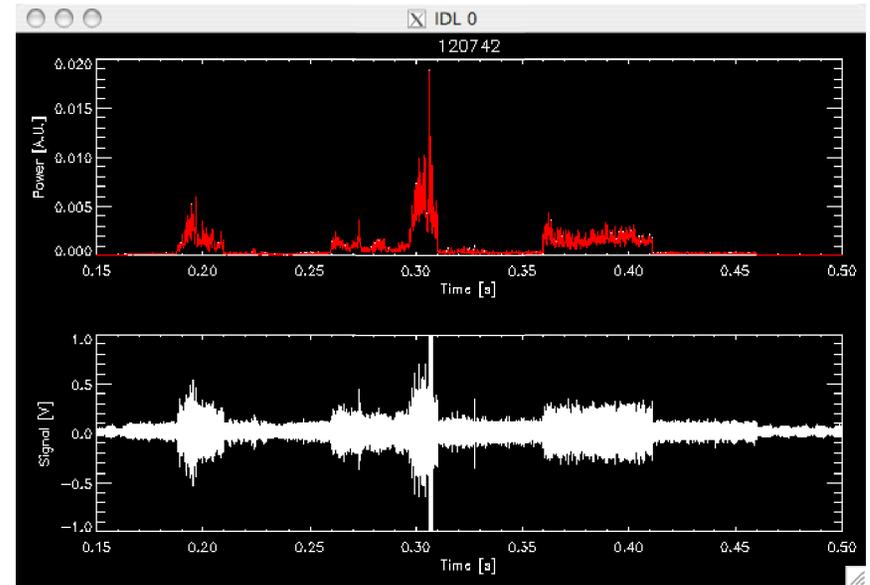
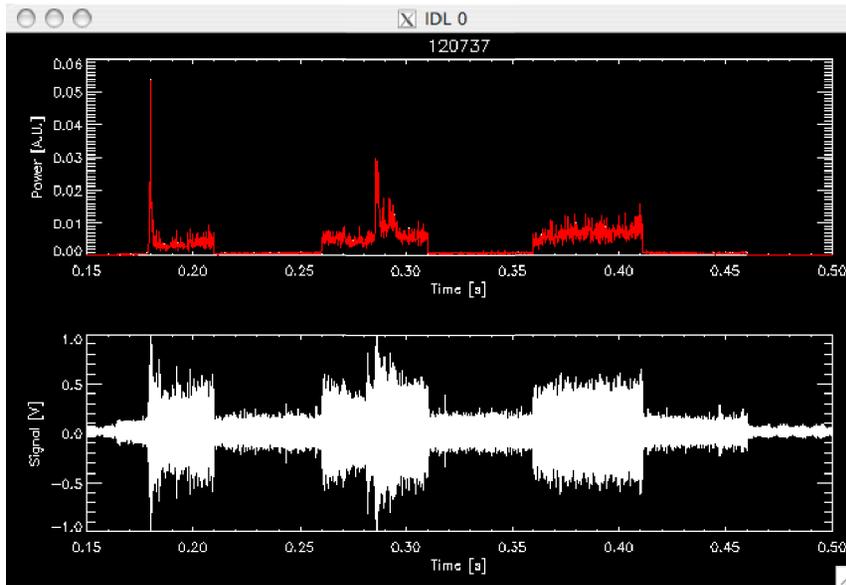


- **Heterodyne reflectometer with $\Delta f=27-32$ MHz around RF frequency of 30 MHz. $f_{\text{probe}} < f_{\text{lo}}$.**
 - Digitizer sampling rate of 8MSa/s.
 - LPF at 5 MHz, IF amplifier cutoff (6.5 MHz), digitizer cutoff 9 MHz.
- **Signal characteristics:**
 - Broad turbulence spectrum around $|f_{\text{rf}} - \Delta f|$.
 - Typically asymmetric.
 - Broad offset sidebands.
 - Coherent chirps.

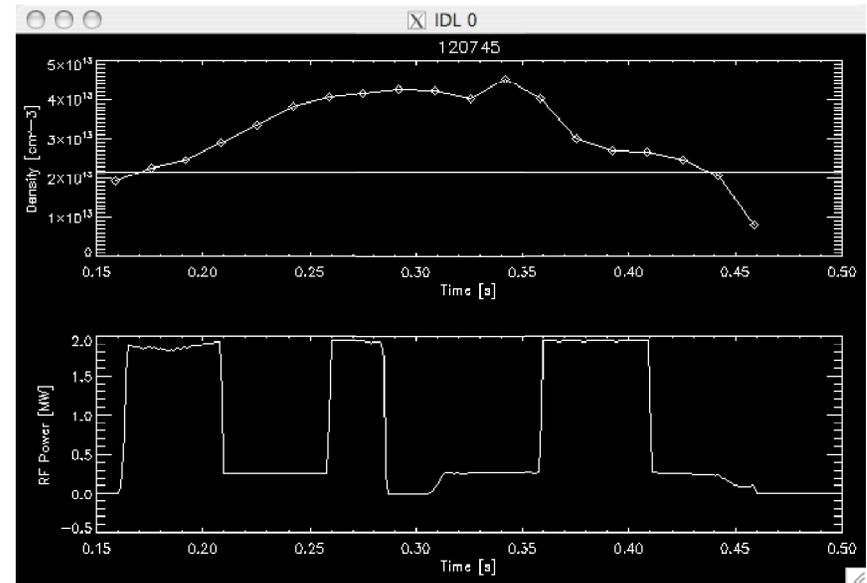
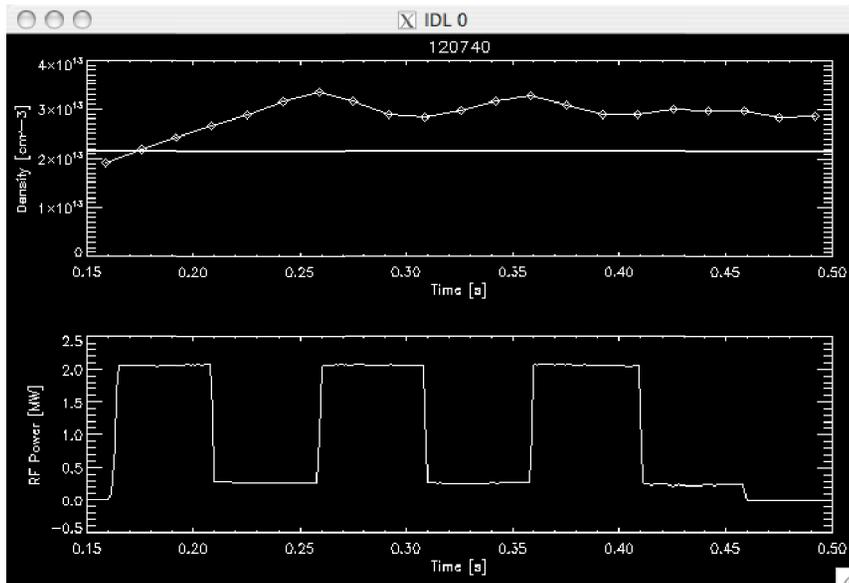
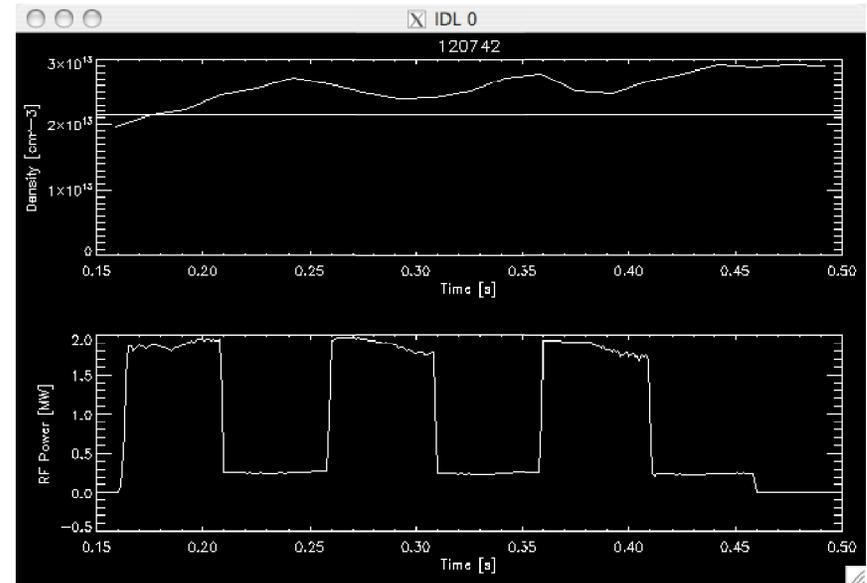
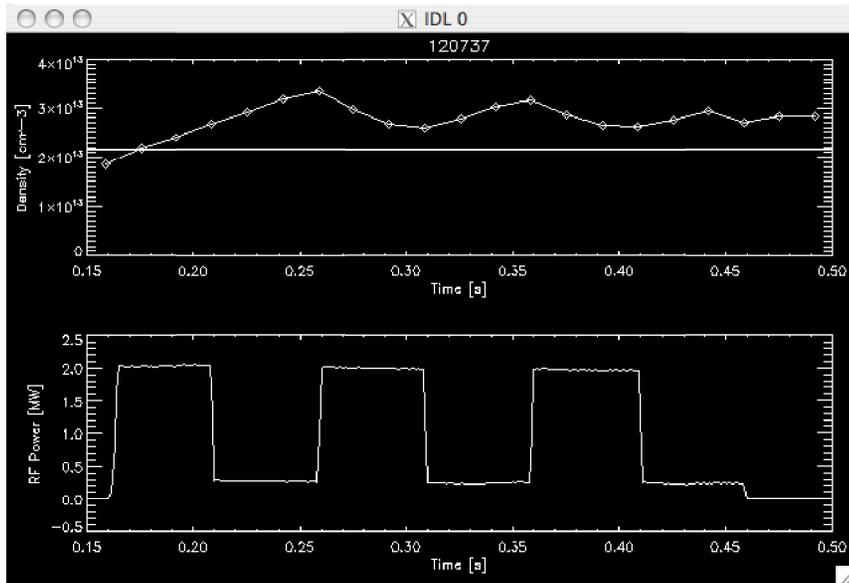
Signal Spectra, 5.5 kG



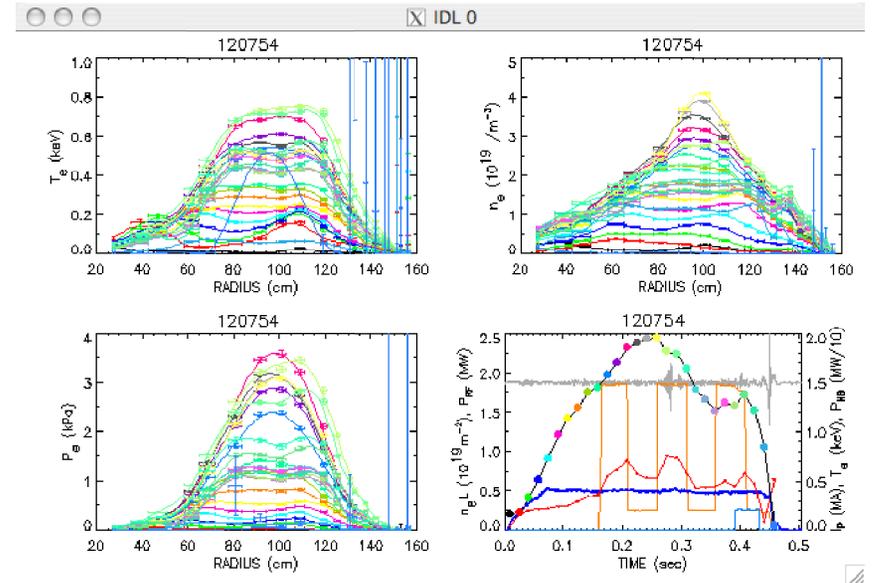
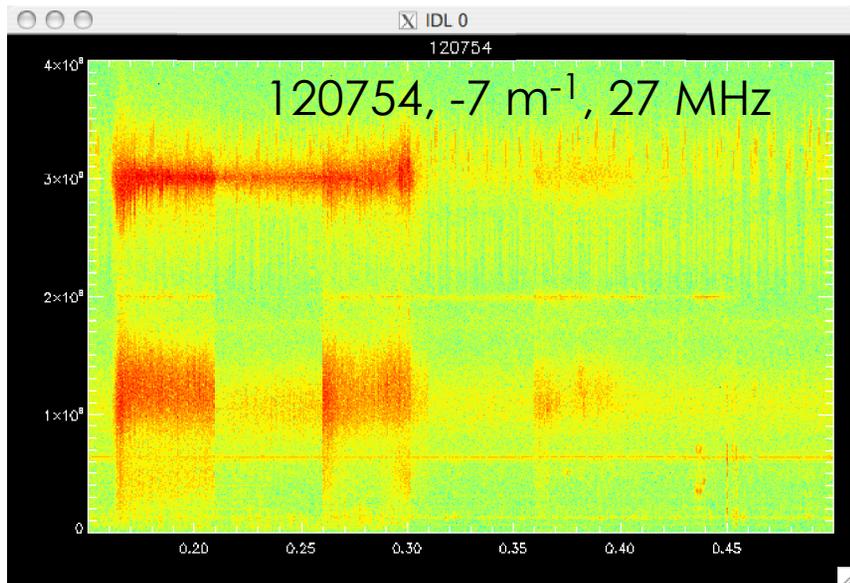
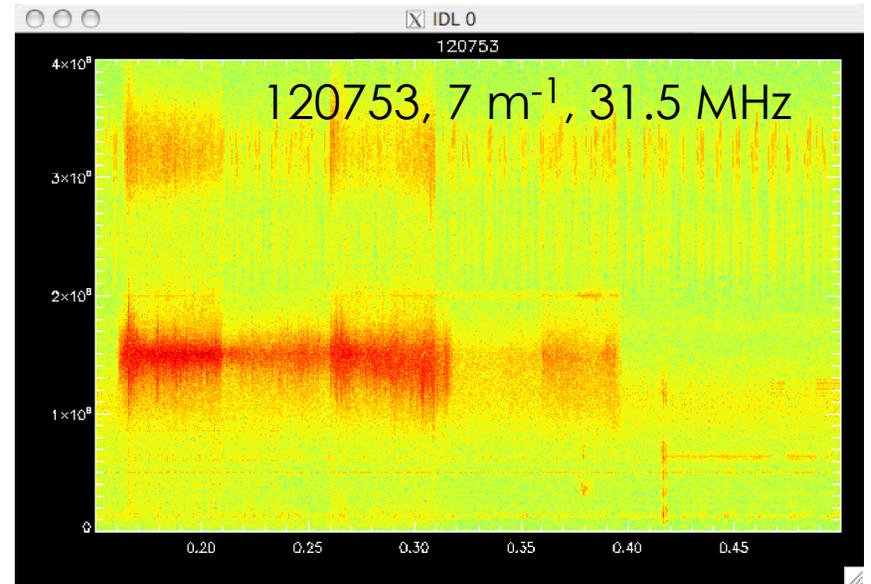
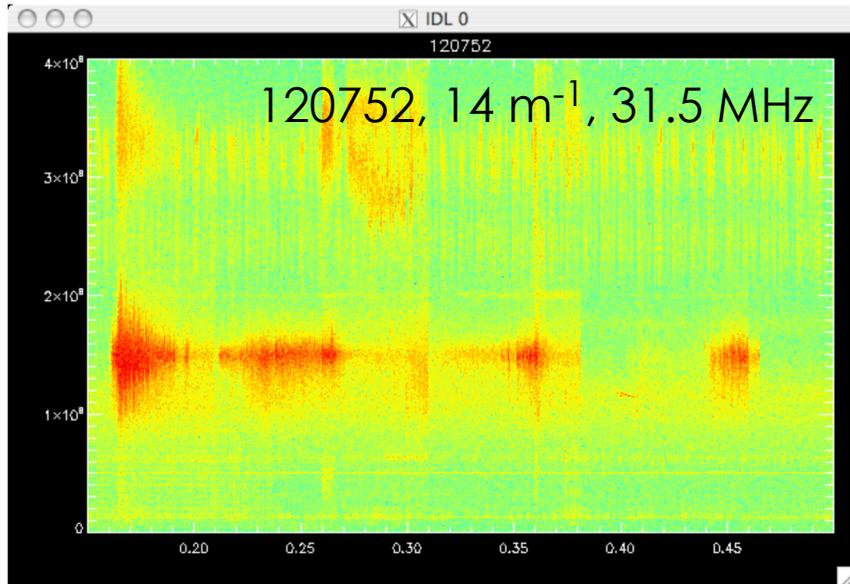
Signal/Power



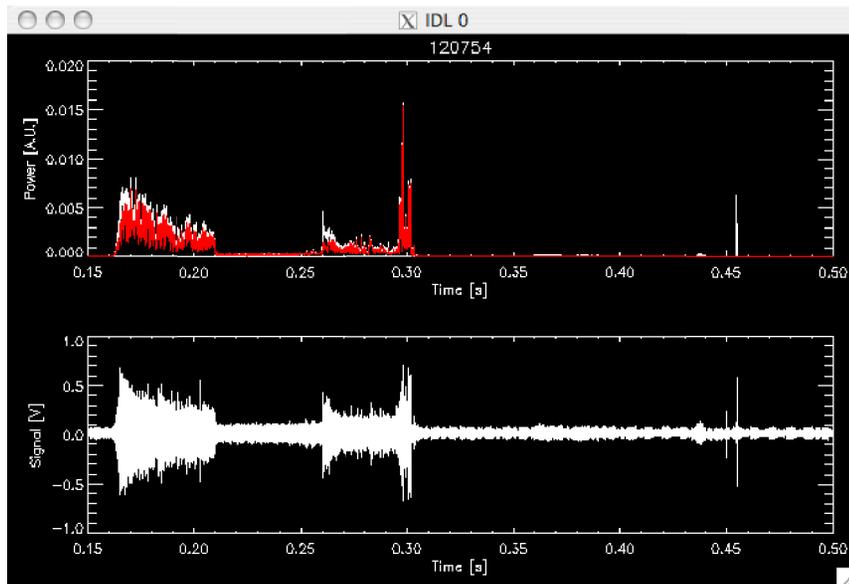
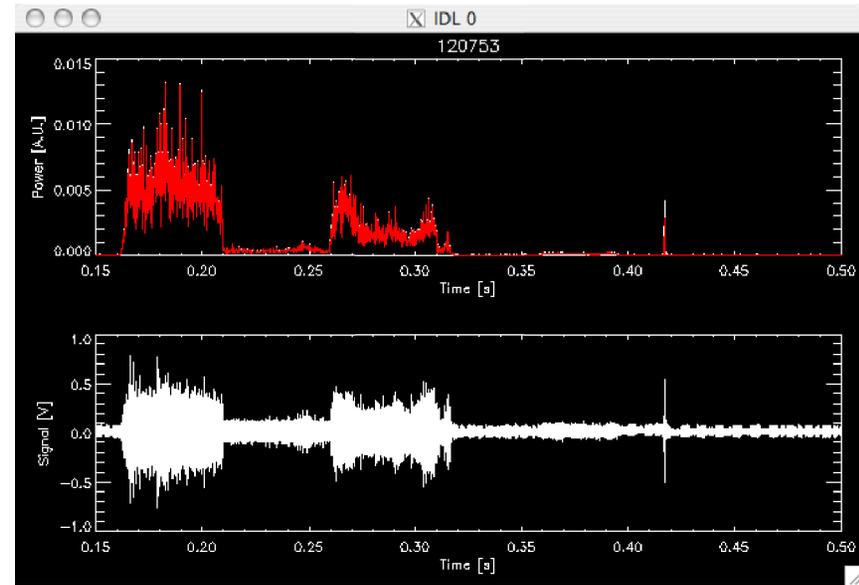
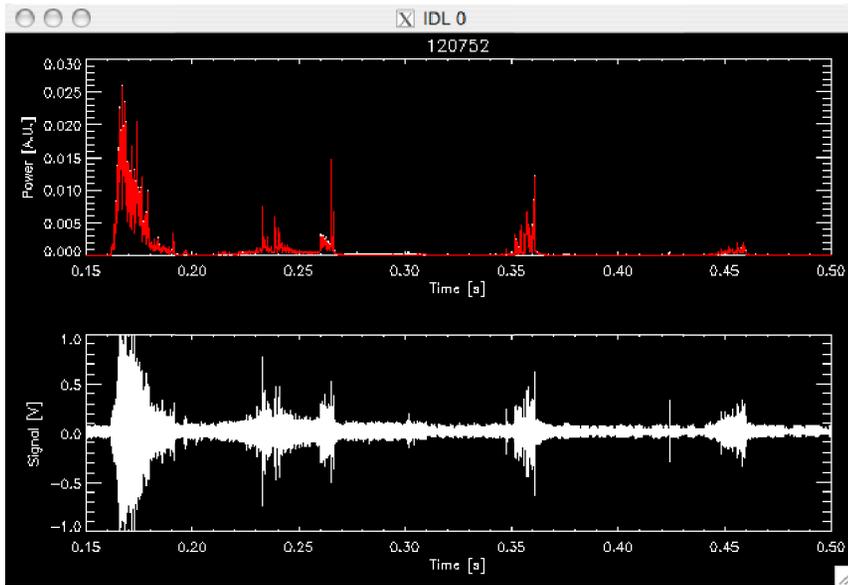
Peak Densities



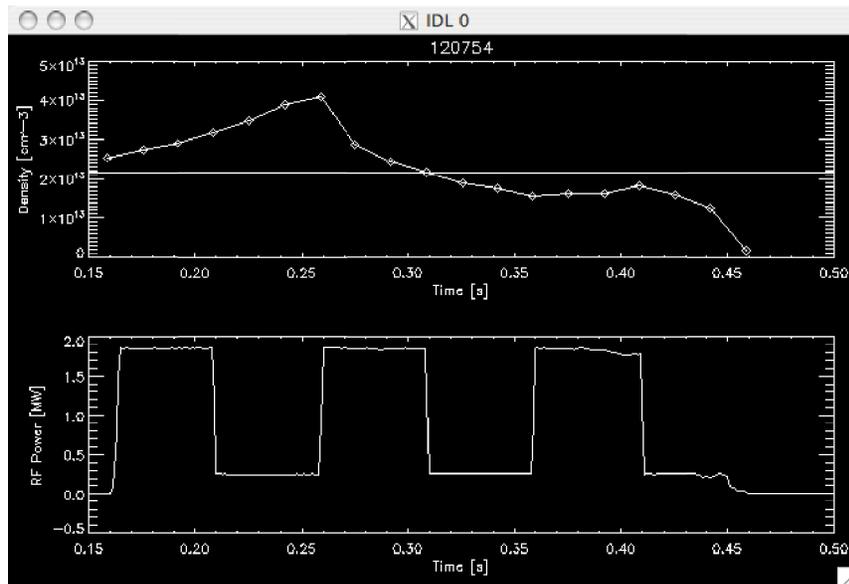
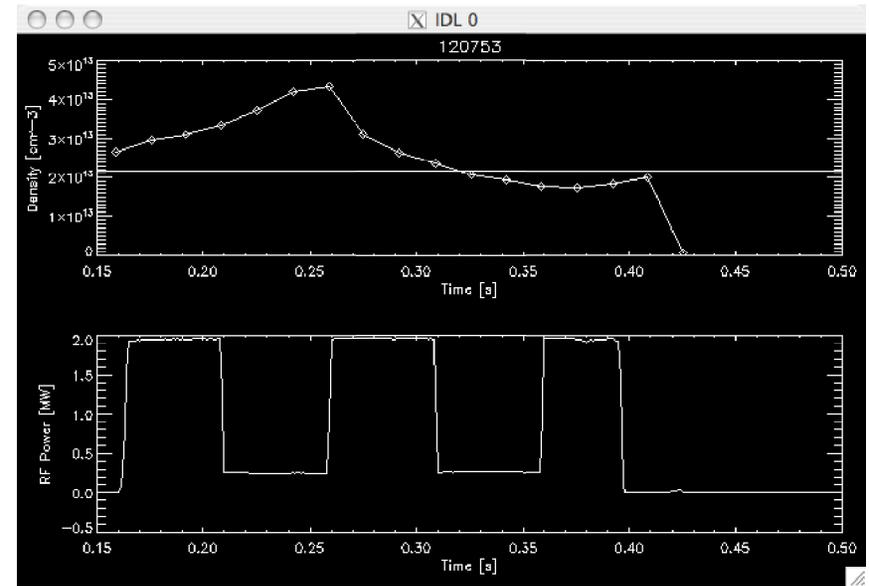
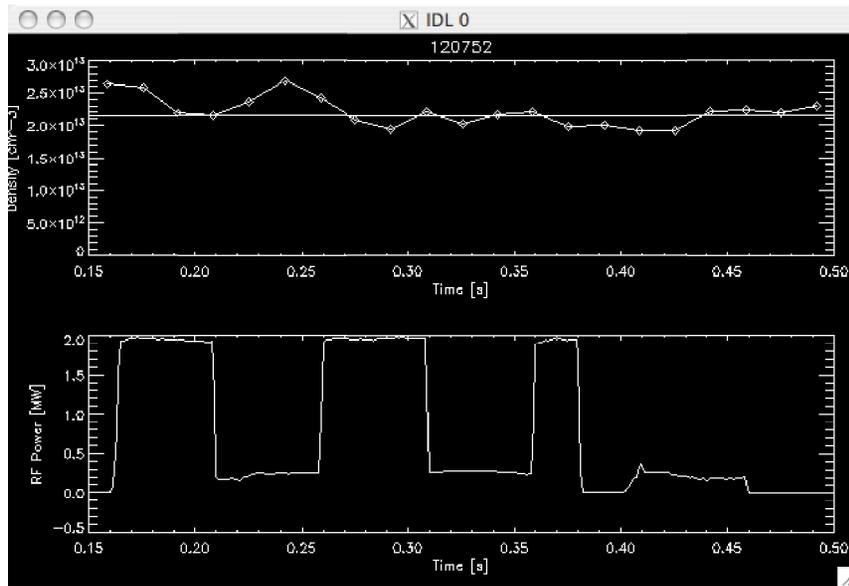
Signal Spectra, 3.5 kG



Signal/Power



Peak Densities



Coherent Chirps

