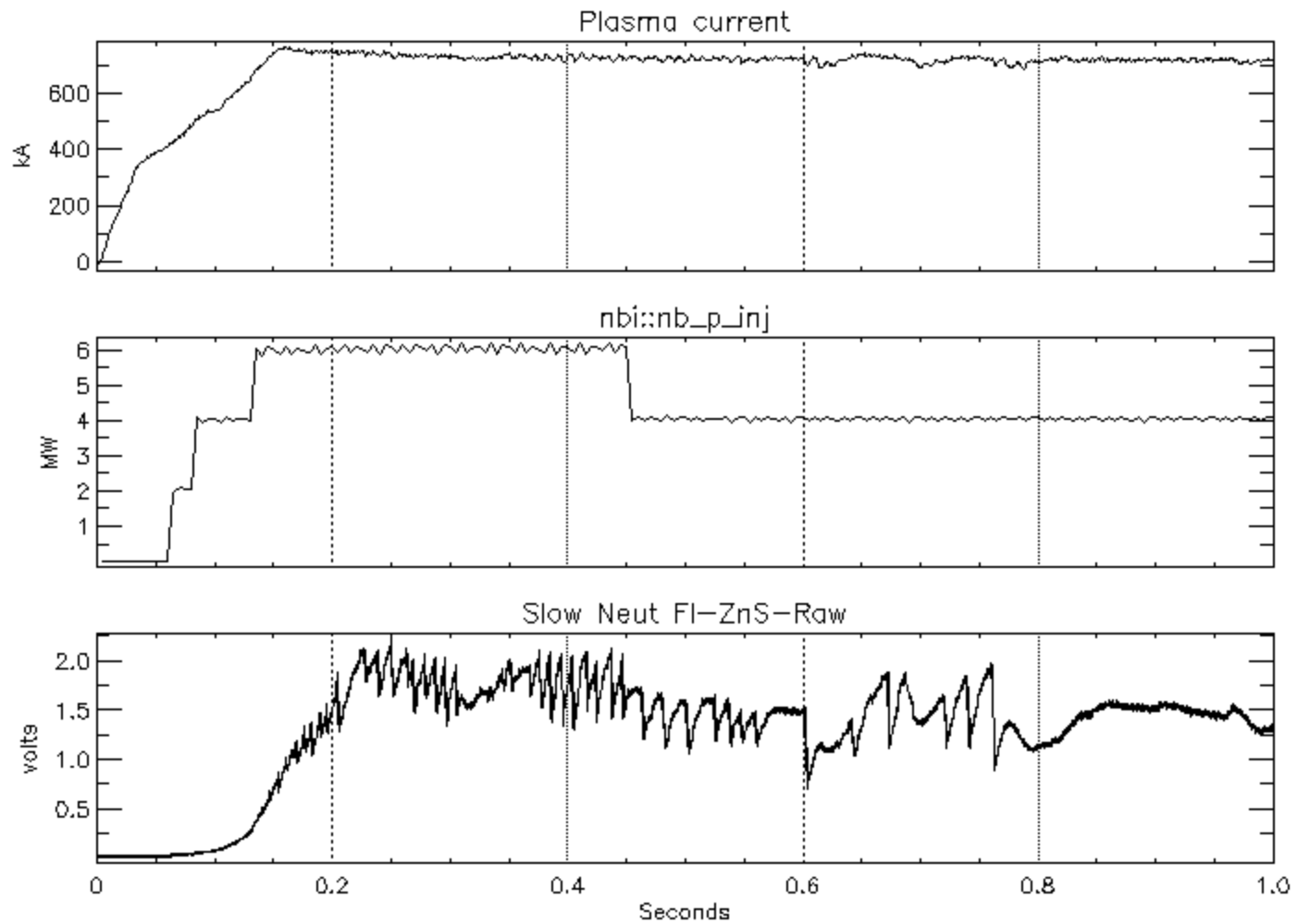


# XP 905 Goals

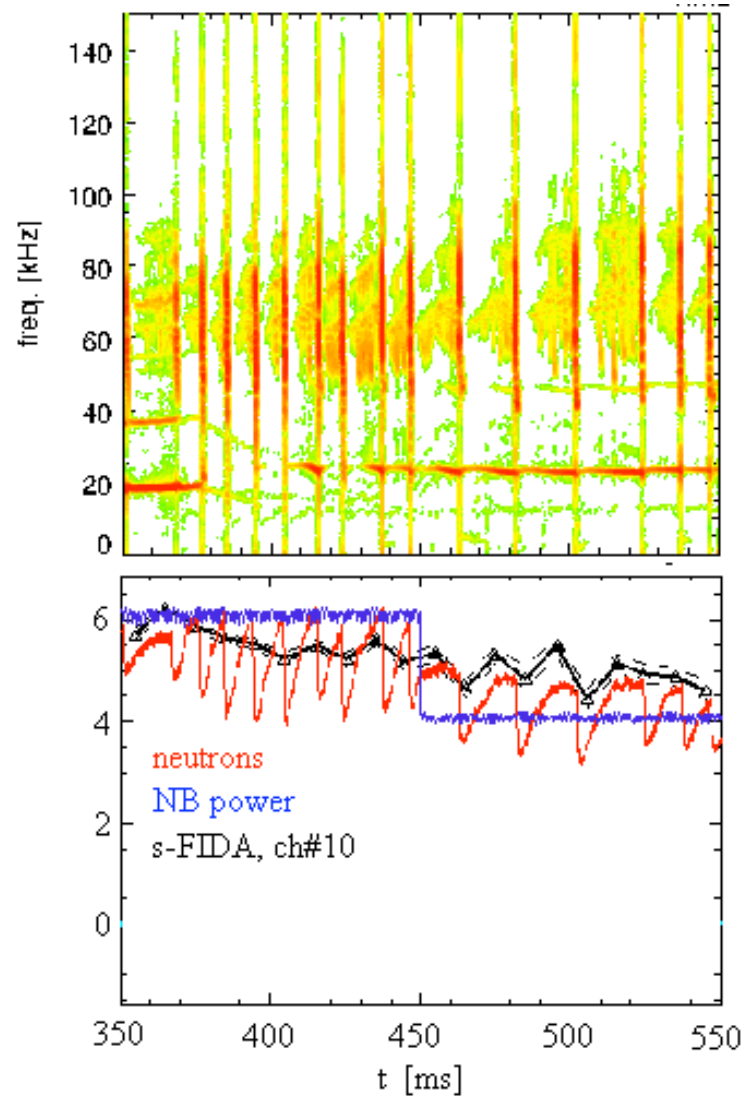
- Generate BAAE/EPM bursts during steady  $I_p$  phase of discharge, widely separated enough in time to allow good MSE measurements of the current profile before and after to assess effect of bursts
- ✓ Measure fast ion loss pitch angle and energy distributions sFLIP
- ✓ Measure effects on confined beam ions (FIDA)
- ✓ Measure mode structure with reflectometry, SXR arrays
- June 8 & 9: handful of good shots obtained

# Good shot showing neutron drops

Shots:  
134195

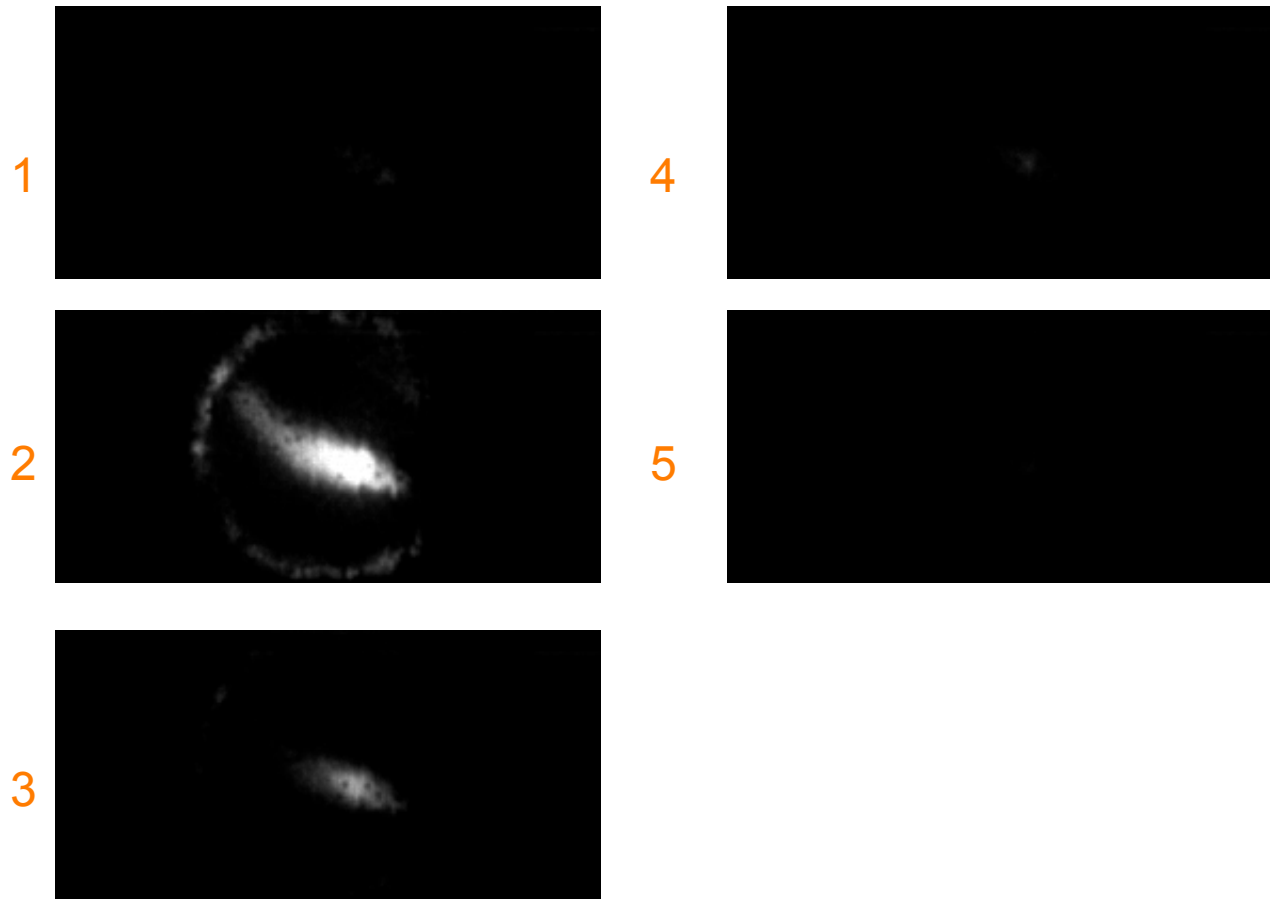


# FIDA data shows drop in confined fast ions coincident with bursts

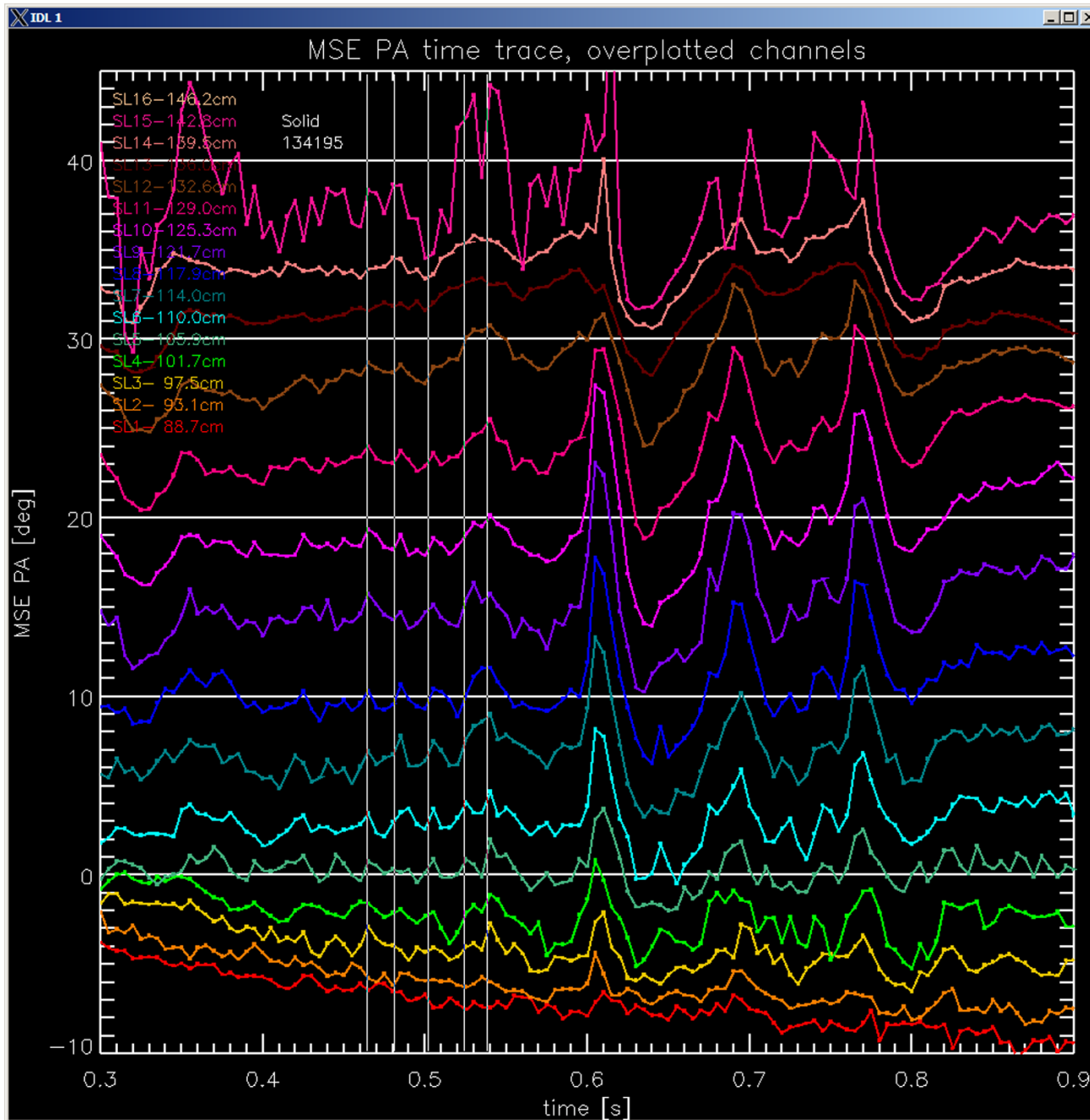


# sFLIP shows fast ion loss occurs within 100 $\mu\text{s}$ ( $\Delta S_n=36\%$ )

33  $\mu\text{s}$ /frame



Rotational braking, to determine mode freq near zero flow shear, not done



Changes in MSE pitch angle at bursts are comparable to those produced by other commonly occurring MHD (800-900 ms)