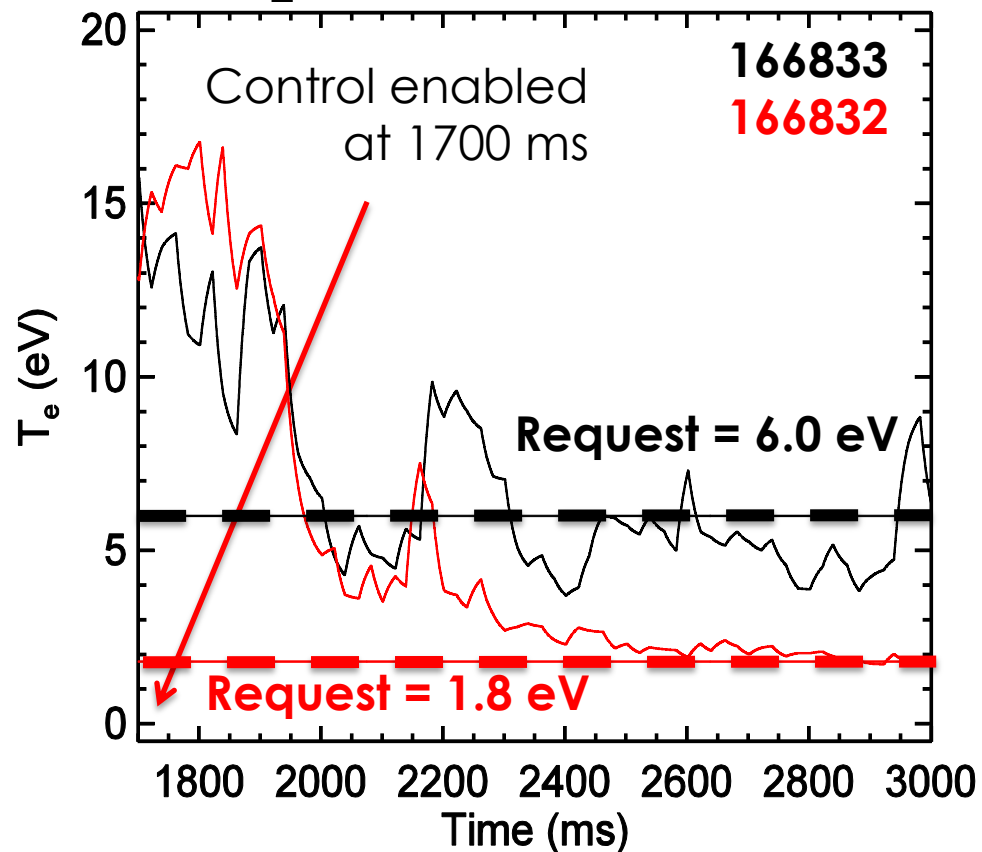


# DIII-D Controls Divertor Detachment with Feedback Gas Puff in H-mode & L-mode and D & He Plasmas

- **Controls  $T_e$  at divertor target**
  - H-mode: real time ELM removal  $\rightarrow$  ctrl. inter-ELM  $T_e$
  - Robust control of divertor detachment before and after onset
- **Between-shot redeployment to new scenarios**
  - Developed everything w/  $D_2$  puff  $\rightarrow$   $D_2$  plasma
  - Changed to  $N_2$  puff  $\rightarrow$  He plasma

## Detachment Control $N_2$ puff $\rightarrow$ He plasma



Versatile and adaptable detachment control system