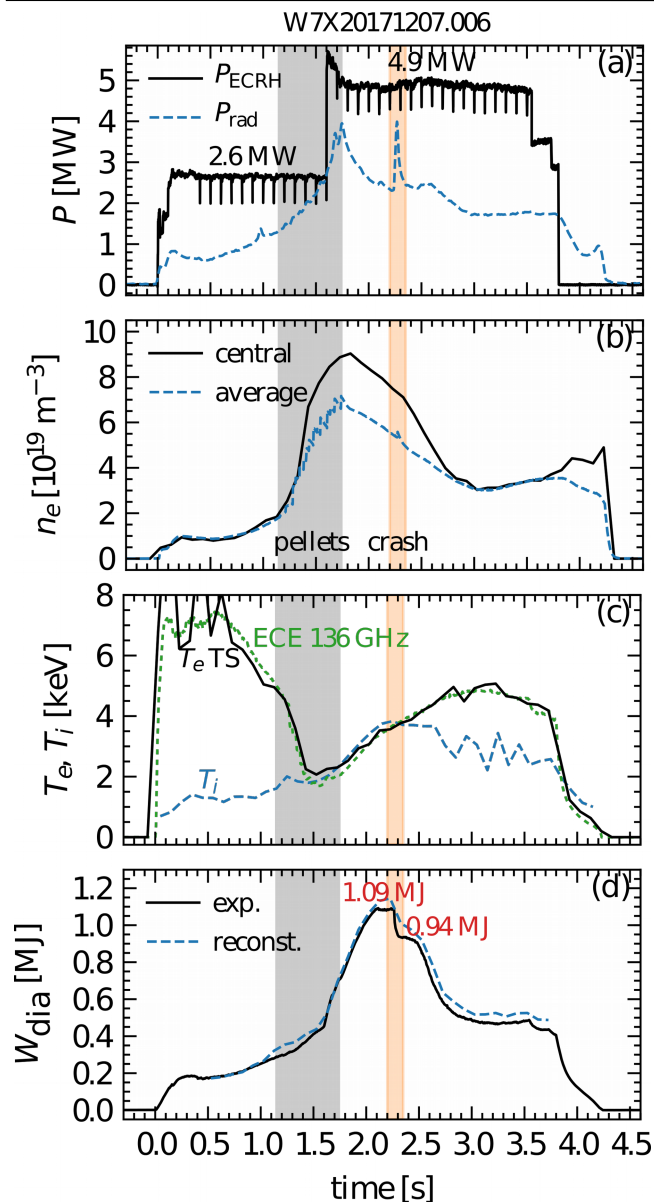


High density and high performance operation with pellet injection in W7-X



- two types of pellet injection experiments:
 - (i) improved confinement and beta;
 - (ii) high density $> 1.2 \cdot 10^{20} \text{ m}^{-3}$ (X2 cut-off)
- achieved: T_i about 3.5 keV, confinement time about 0.22 s, at n_e about $0.8 \cdot 10^{20} \text{ m}^{-3}$
- T_e profile broadening due to diamagnetic shift of the ECRH deposition
- significant neoclassical ion heat flux in the improved phase, about 40% of the heating

