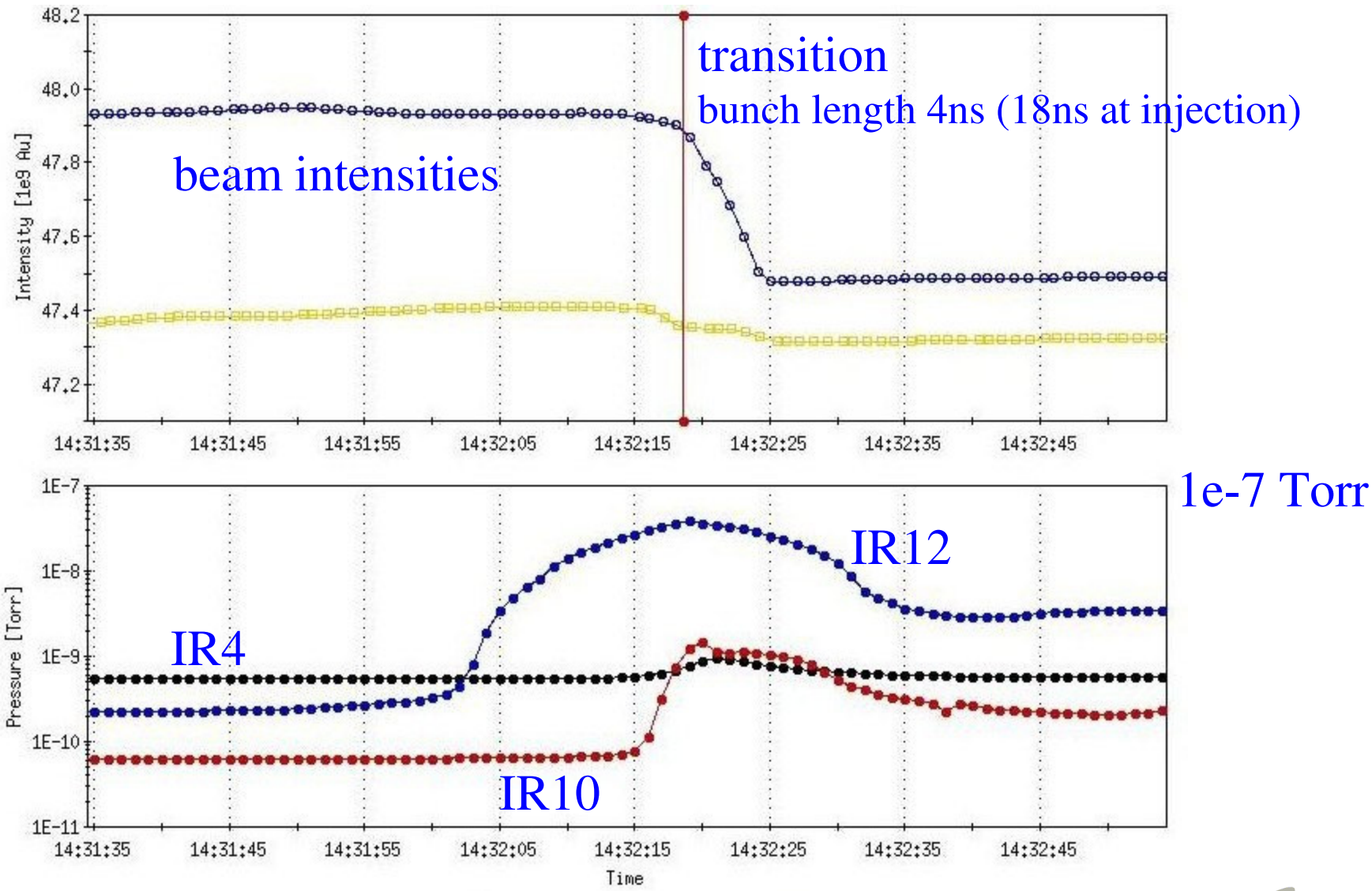
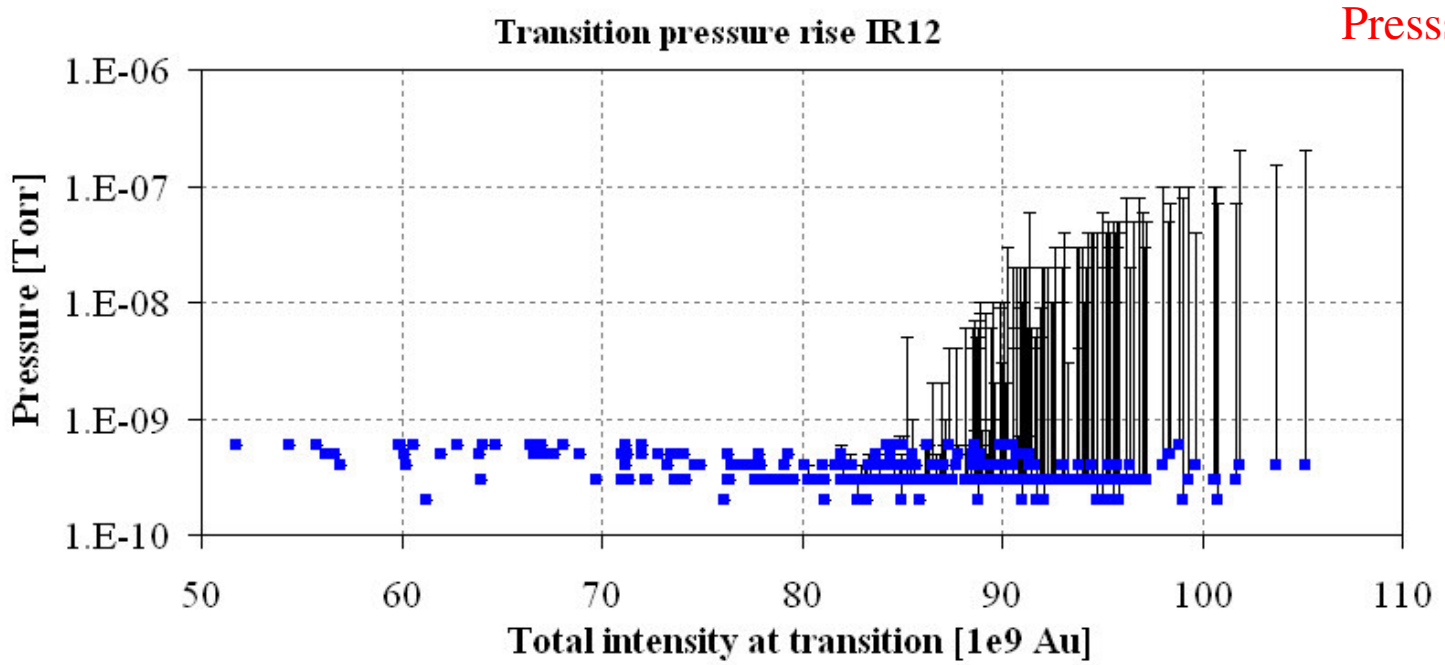
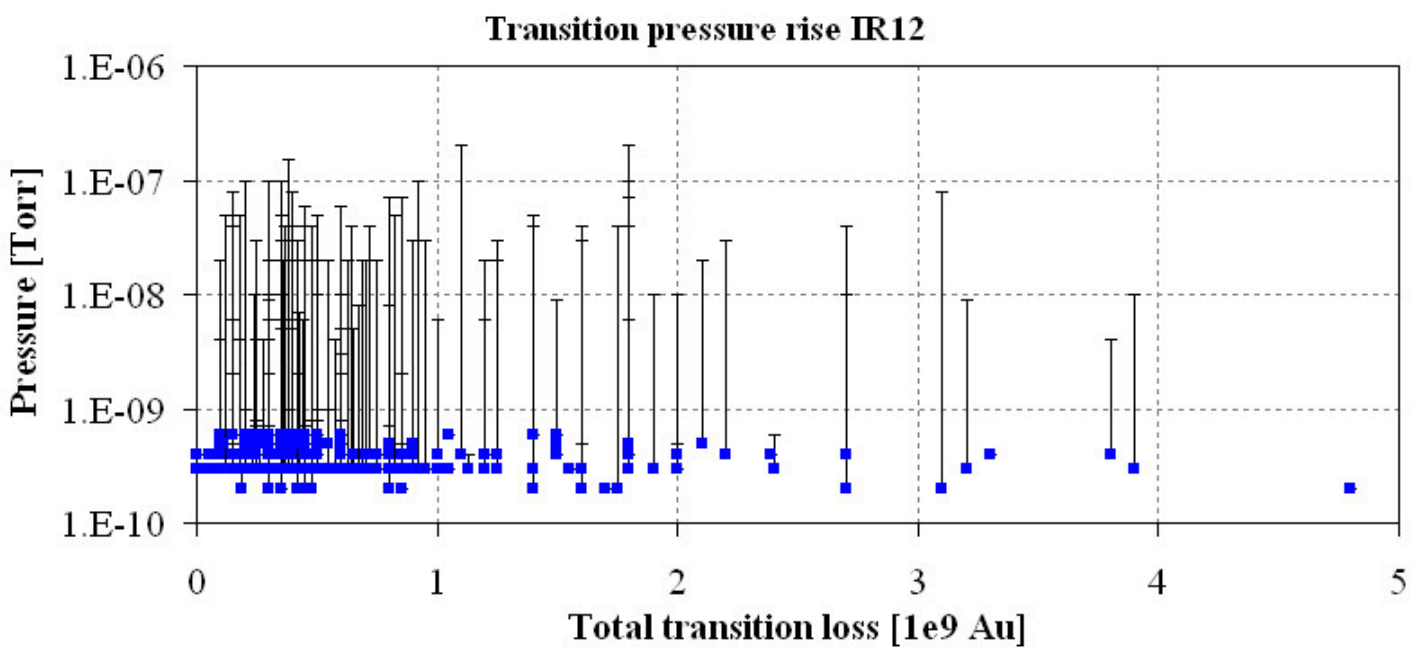
Typical transition pressure rise in Au-Au operation



Presssure rise at transition



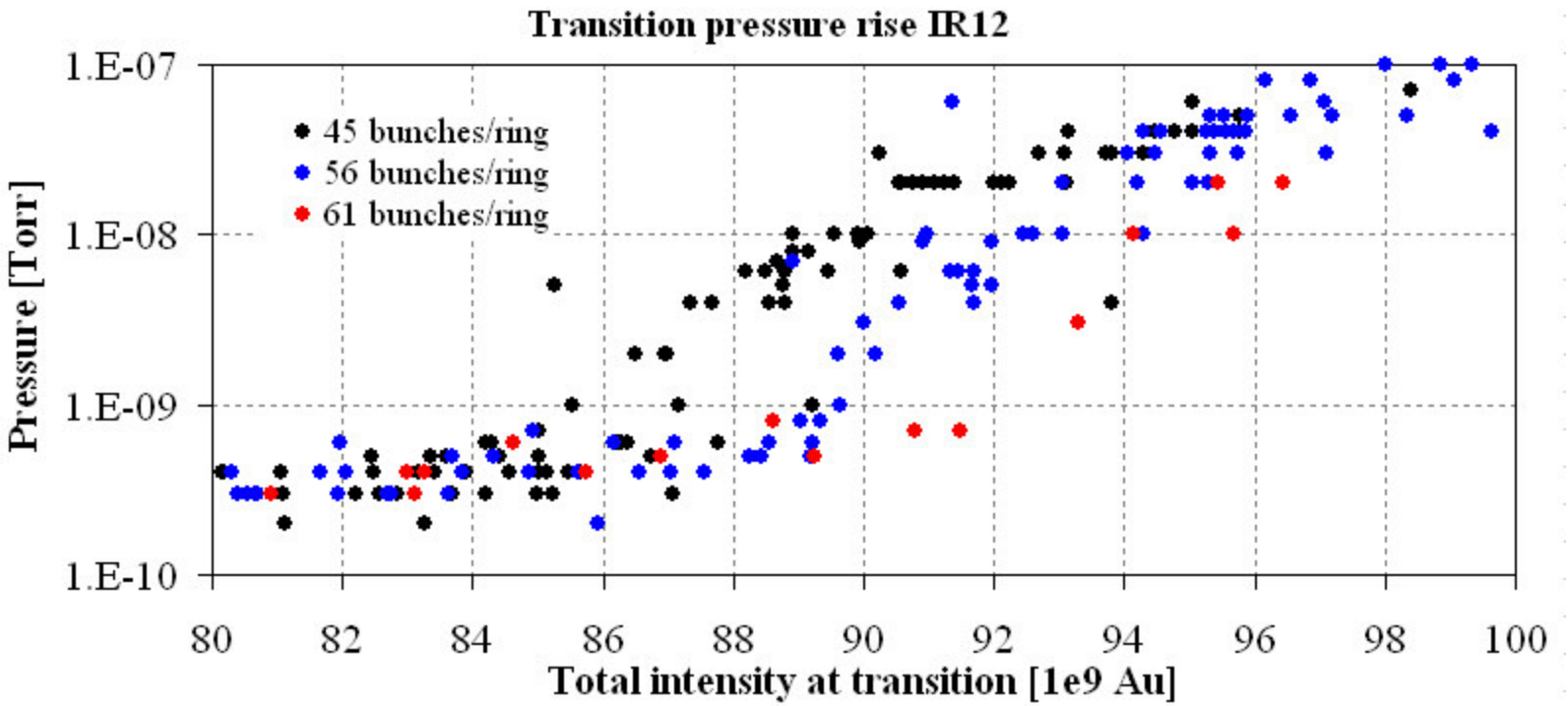
Strongly intensity dependent



No correlation with beam loss

→ suggests electron clouds

Stronger pressure rise for fewer bunches in IR12 (independent of pattern in IR10 – same as Run-3, S.Y. Zhang)

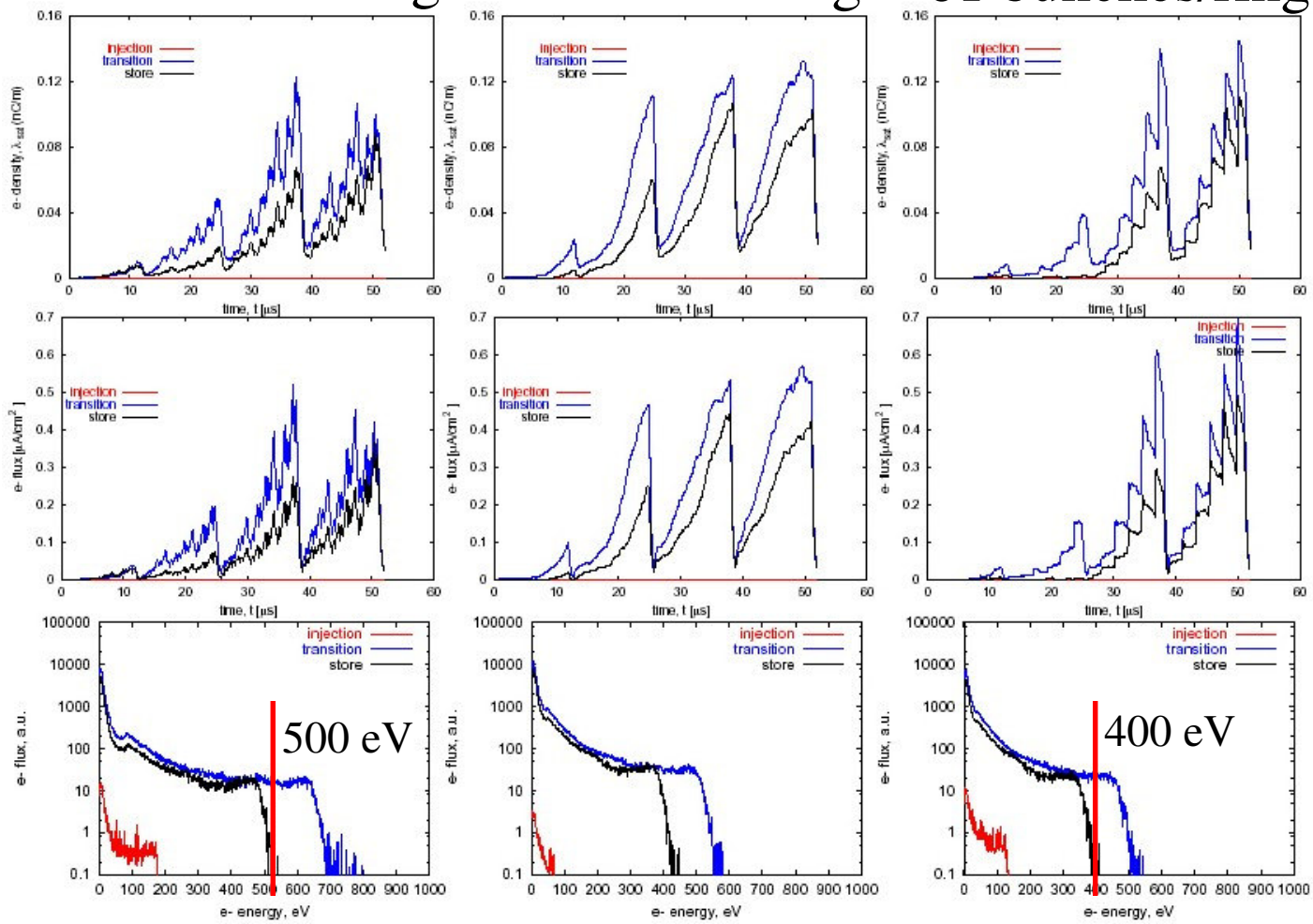


→ Behavior can be quantitatively reproduced in e-cloud simulation (U. Iriso)

With fewer bunches, cloud density and current into wall is reduced, but <u>electron impact energy is increased</u>, and can lead to larger desorption. (simulation by U. Iriso)

45 bunches/ring | 56 bunches/ring | 61 bunches/ring

e-cloud density

current into wall

electron impact energy