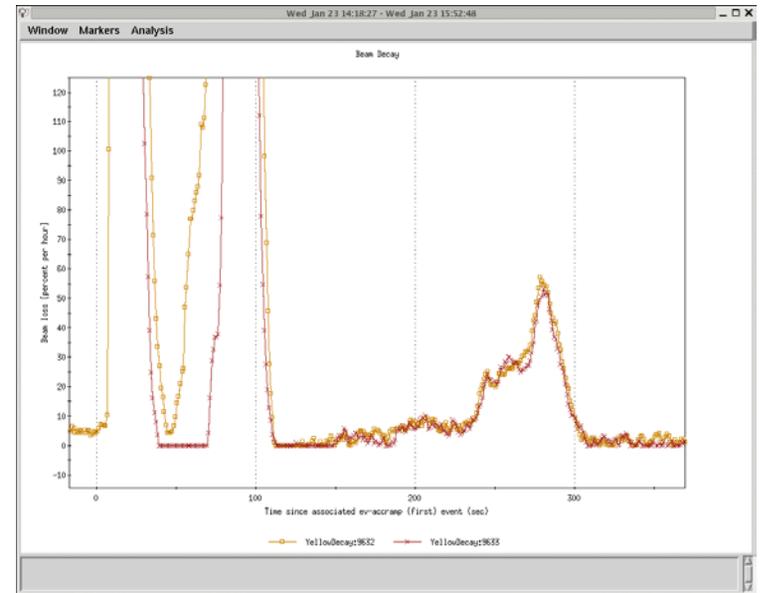
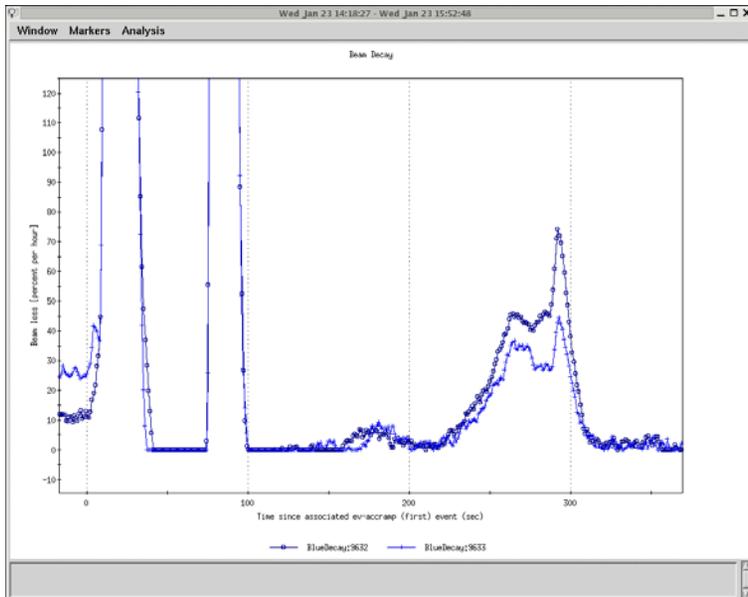


Collimation during the ramp

APEX 1/24

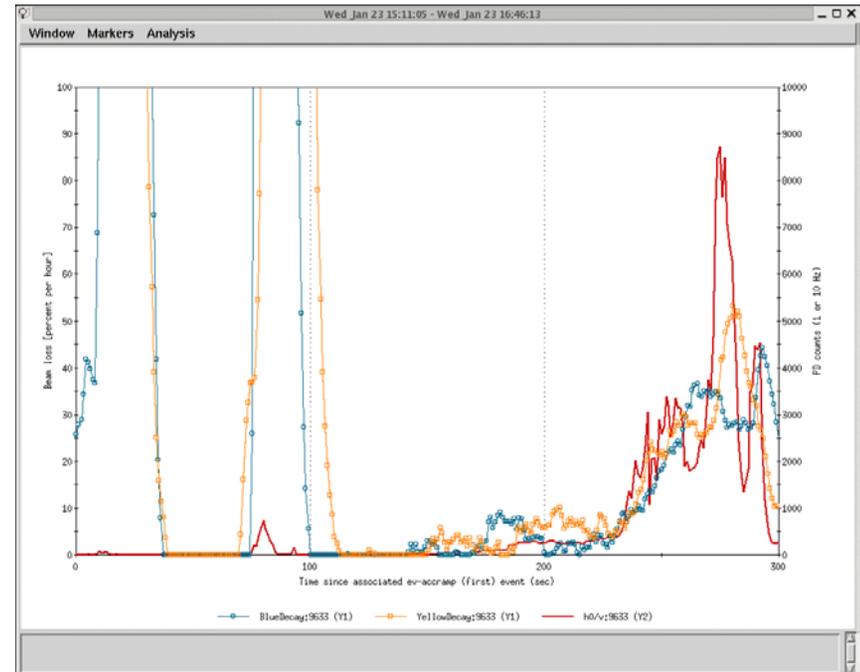
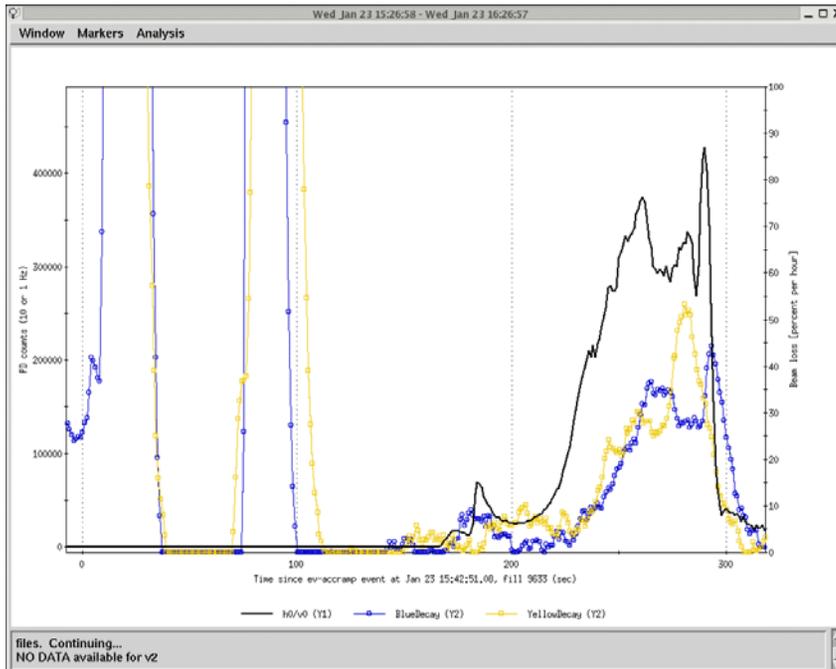
A. Drees, G. Robert-Demolaize

Effect on the beam decay signal



=> No overall effect on the beam decay signal (store to store fluctuations)

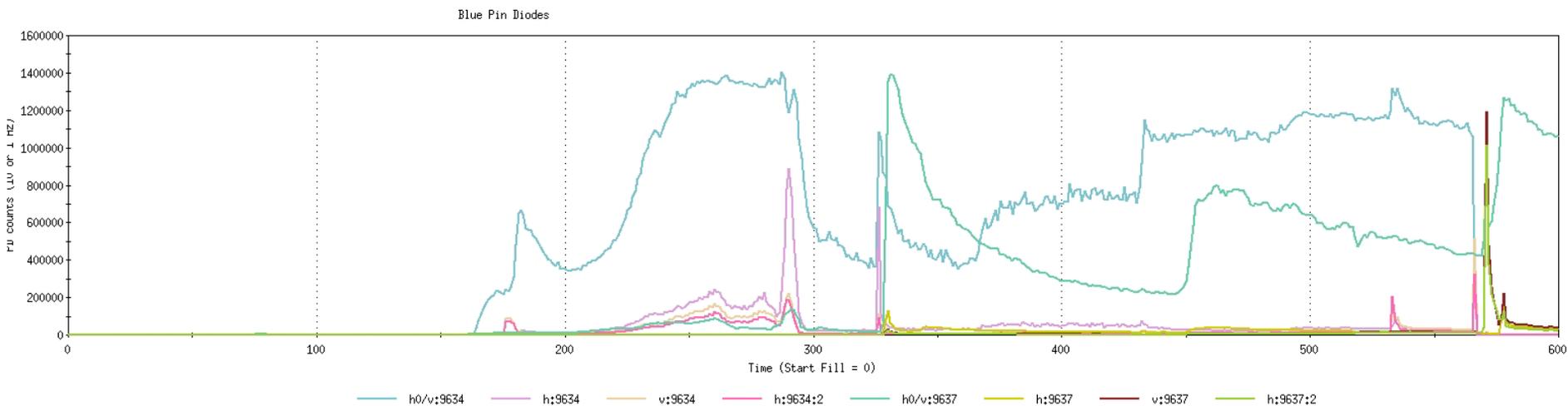
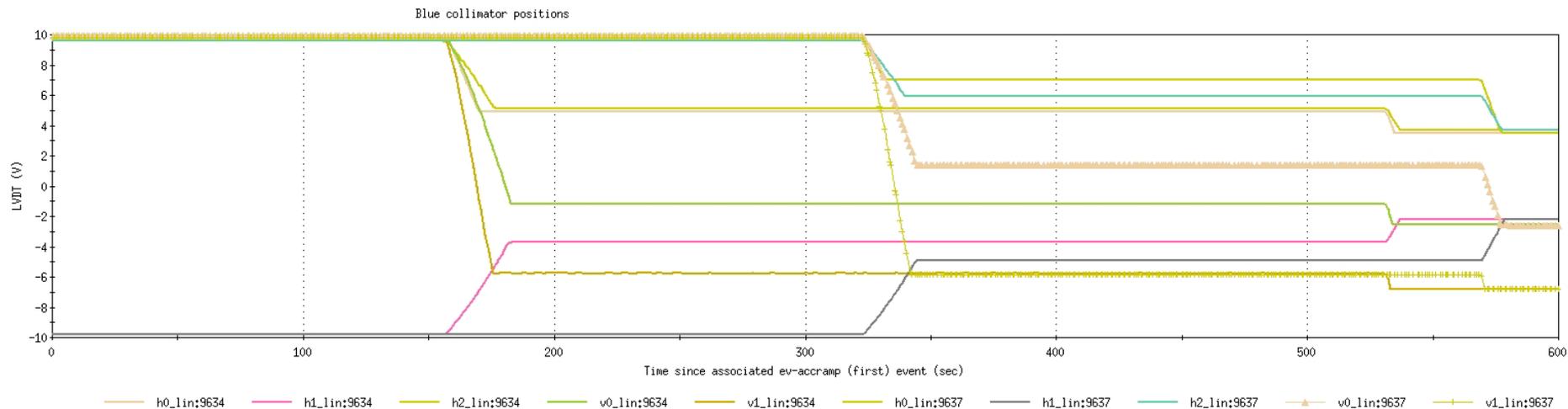
Pin diode signal vs. decay



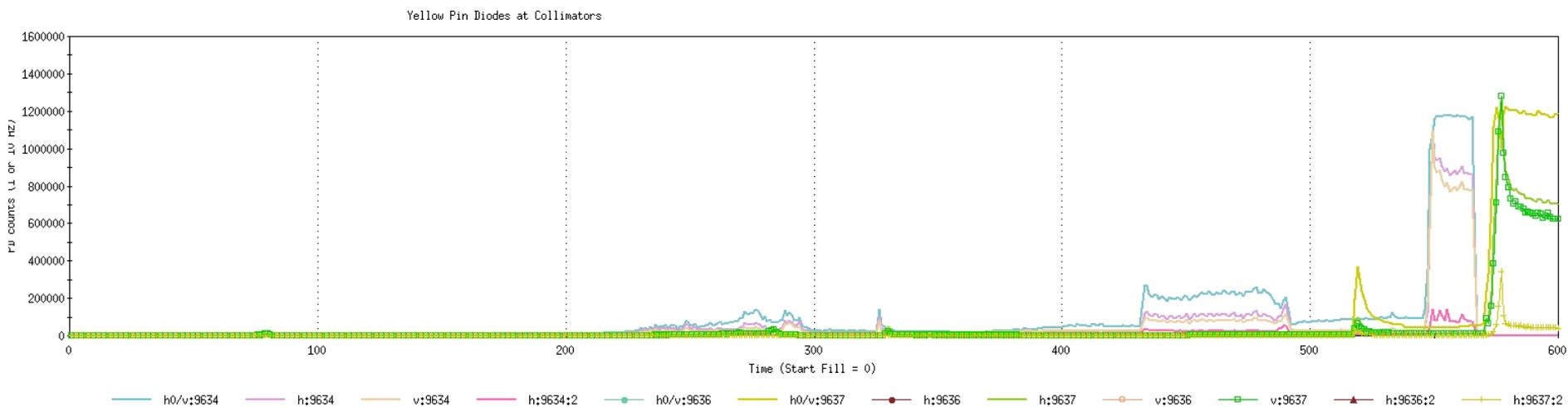
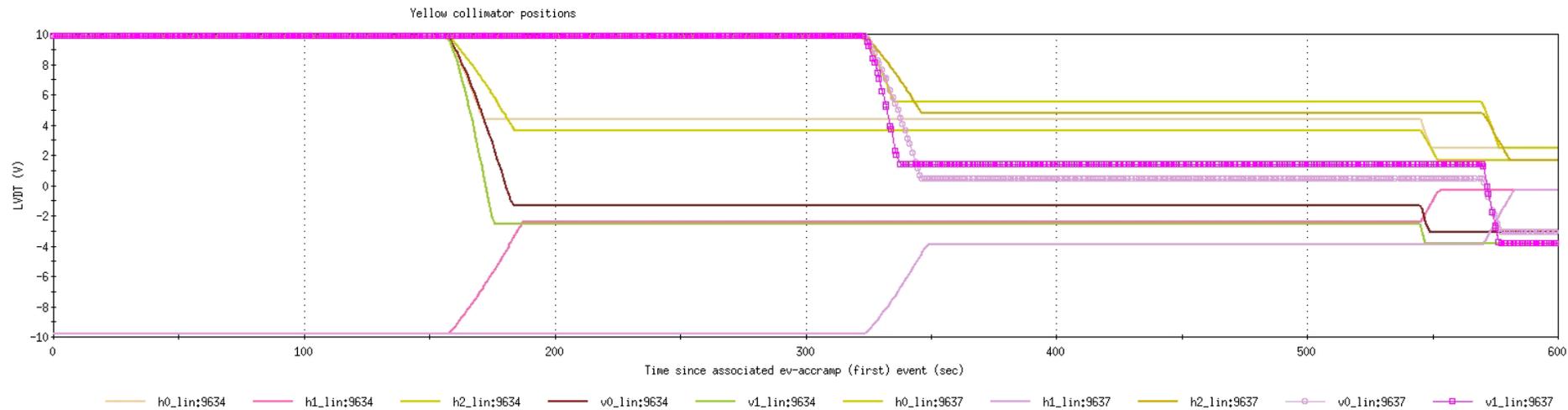
⇒ A signal of ~400kHz on the pindiodes seems to not contribute to beam decay and is therefore considered "safe"

⇒ The shape of the signal is correlated with both blue and yellow beam decay (yellow beam in the blue collimator area)

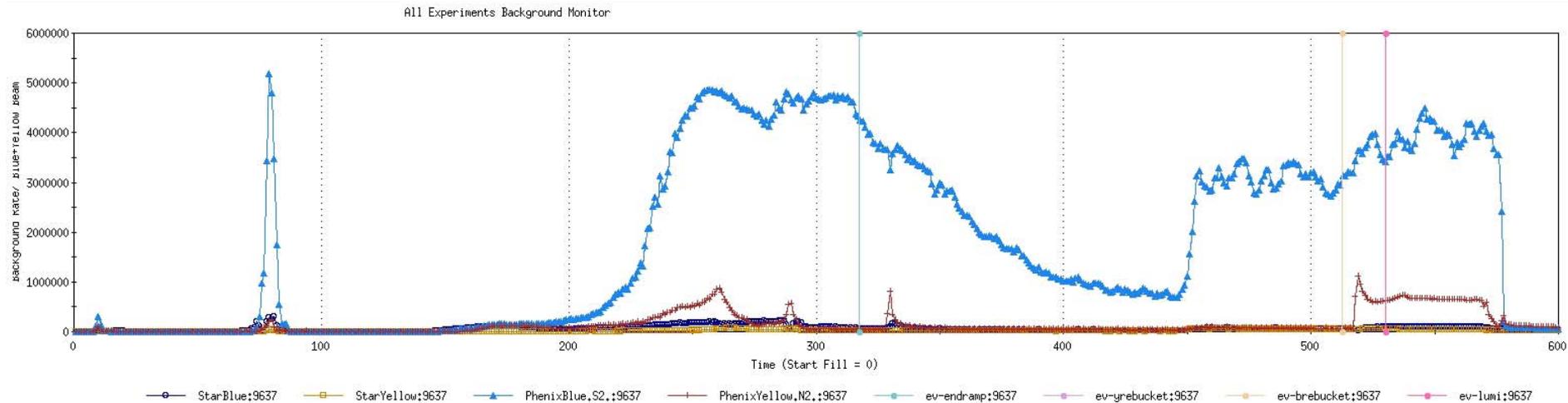
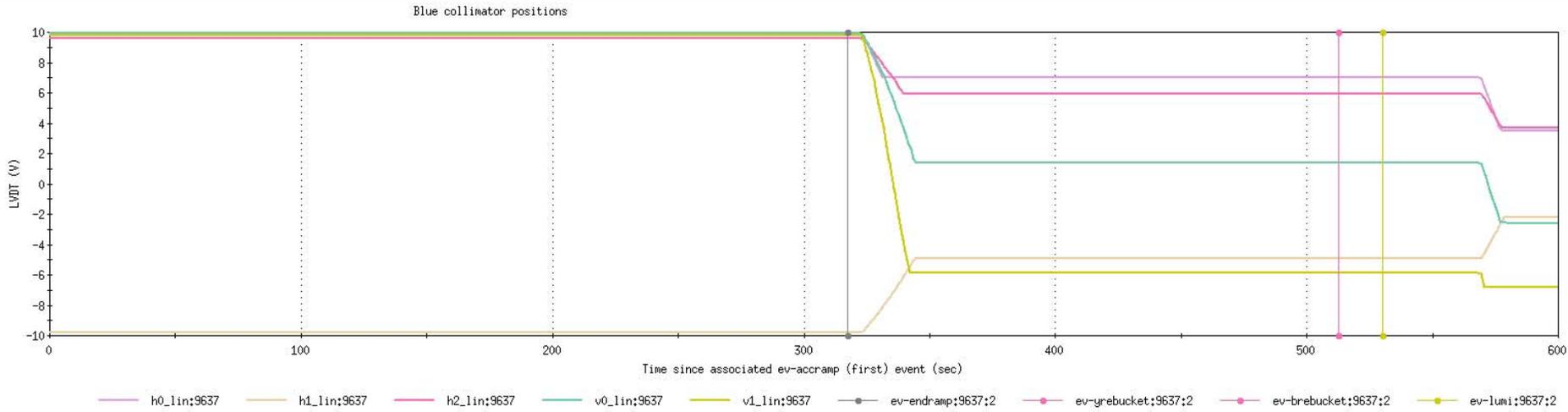
Physics beam – Comparing ramps



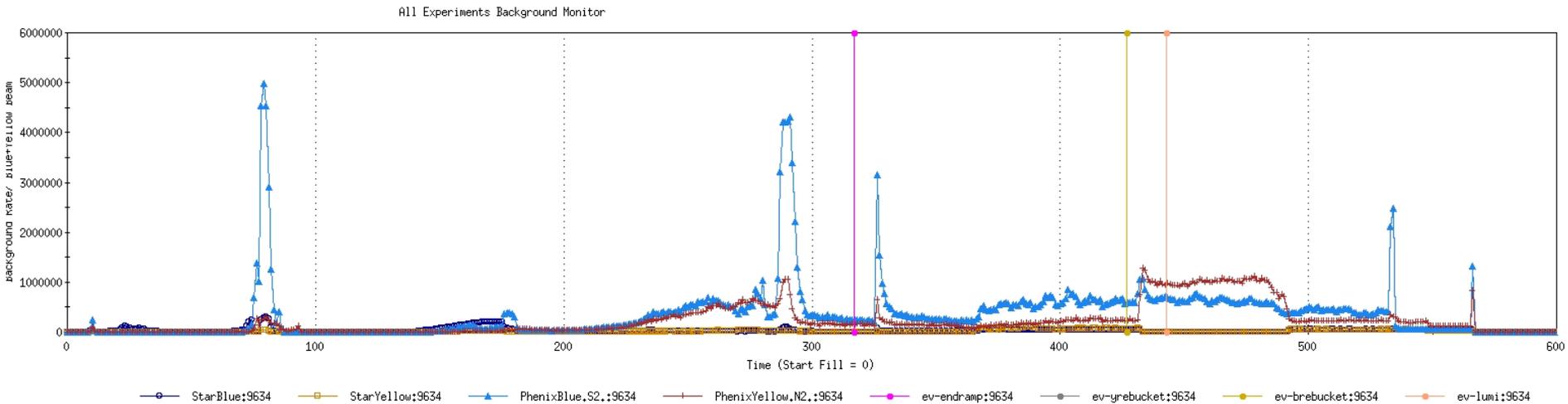
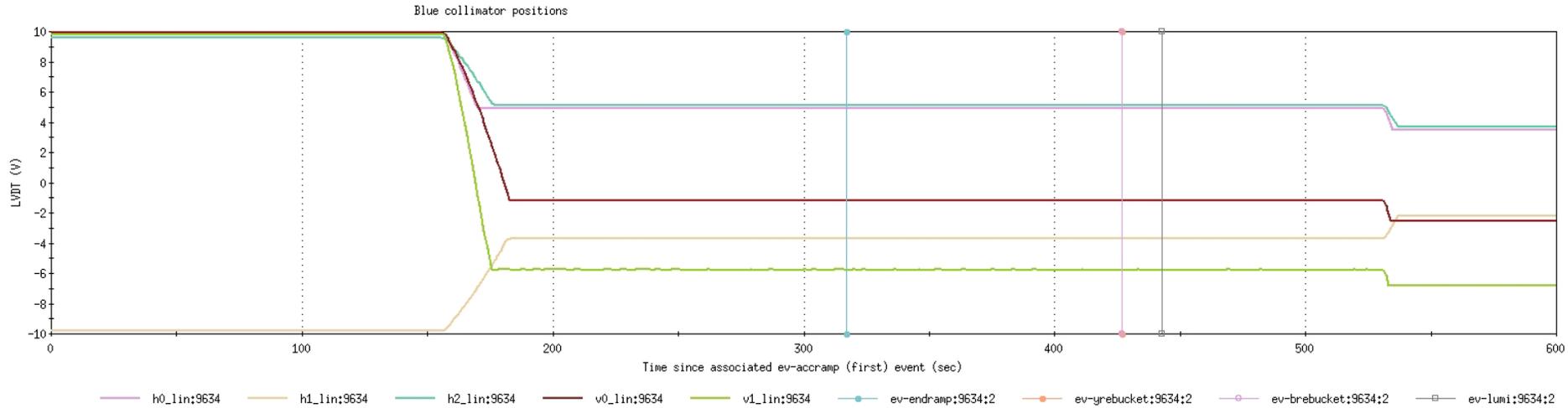
Physics beam – Comparing ramps



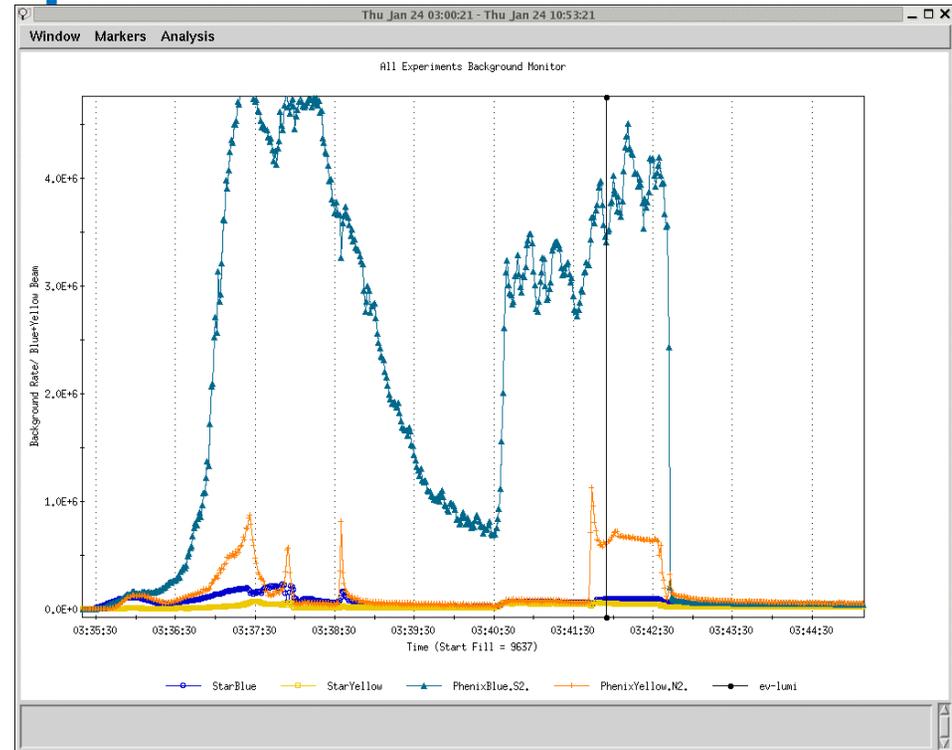
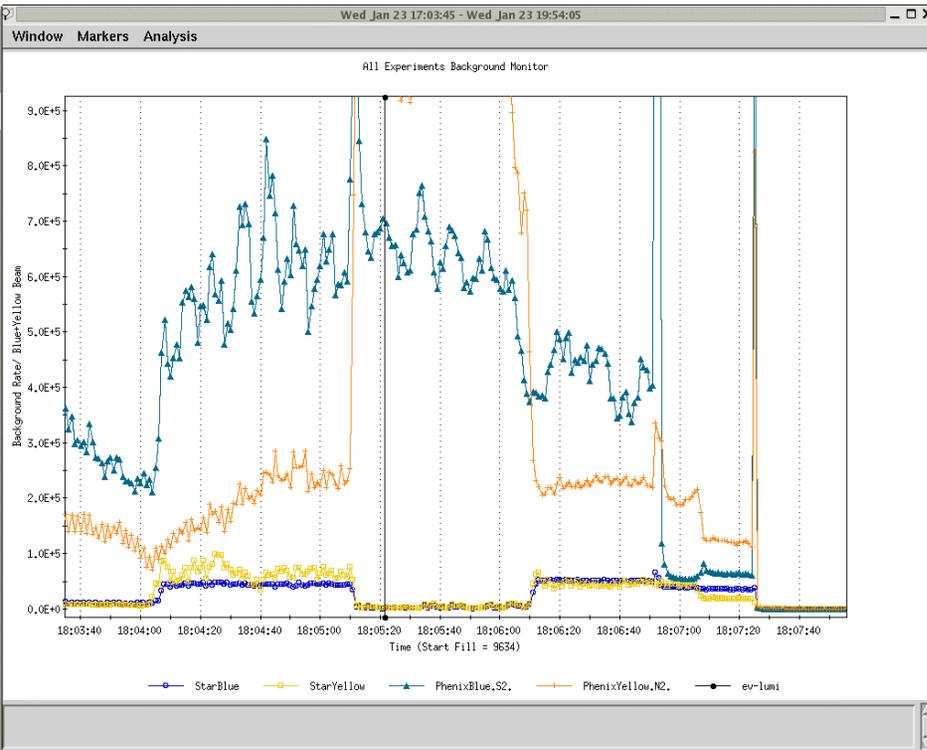
Background – Comparing ramps



Background – Comparing ramps



Background – Comparing ramps



Background signals in IR6 and 8 during/after a ramp with blue collimators in (left) and w/o collimators on the ramp (right). Yellow collimators are too far out to have an effect. Both ramps/stores have about the same beam intensities. However, initial background signals in the blue ring are reduced by a factor of 7 in PHENIX and 2 in STAR.

Latest collimated ramp

