

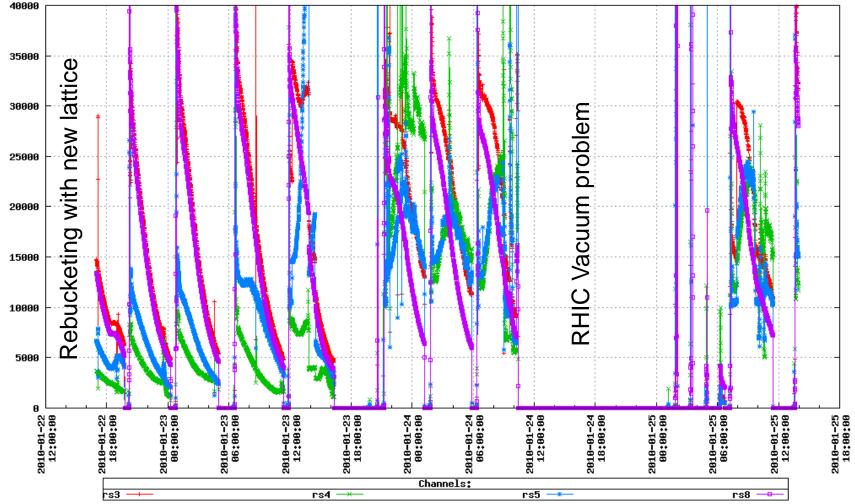
BBC coincidence rate

Yellow Beam background Blue Beam background ZDC coincidence rate No rebucketing and no stochastic cooling.

STAR tuned for optimum data taking efficiency.

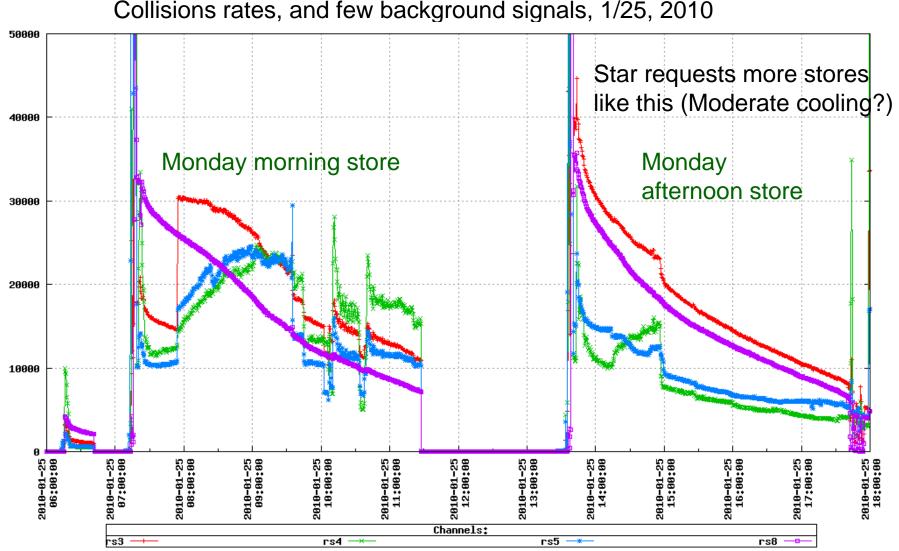
Shift crews work on efficient data taking.





BBC coincidence rate Yellow Beam background Blue Beam background ZDC coincidence rate

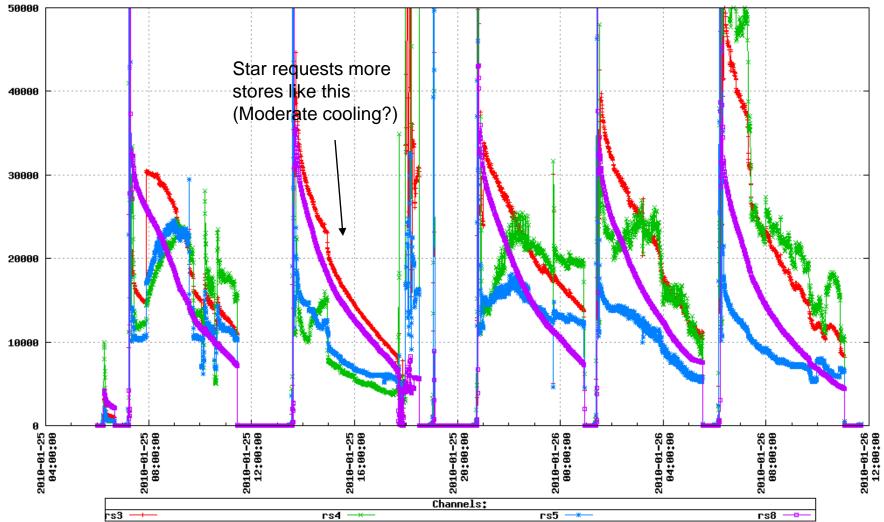
With rebucketing and stochastic cooling in Yellow.



BBC coincidence rateThe large backgrounds lead STAR to decrease the rateYellow Beam backgroundThe varving conditions lead to Shift crow inofficienciesBlue Beam backgroundThe varving conditions lead to Shift crow inofficiencies

ZDC coincidence rate

The varying conditions lead to Shift crew inefficiencies as they work to adapt to dynamic conditions.



## Collisions rates, and few background signals, 1/25, 2010

BBC coincidence rate Yellow Beam background Blue Beam background ZDC coincidence rate

• The large backgrounds lead STAR to decrease the rate that we take events by up to  $\sim 40\%$ .

• The varying conditions lead to Shift crew inefficiencies as they work to adapt to dynamic conditions.