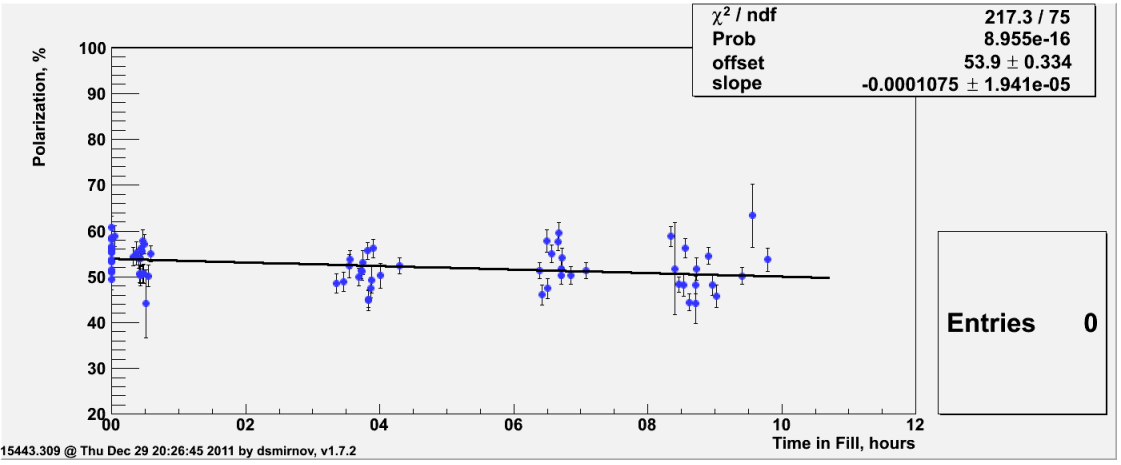
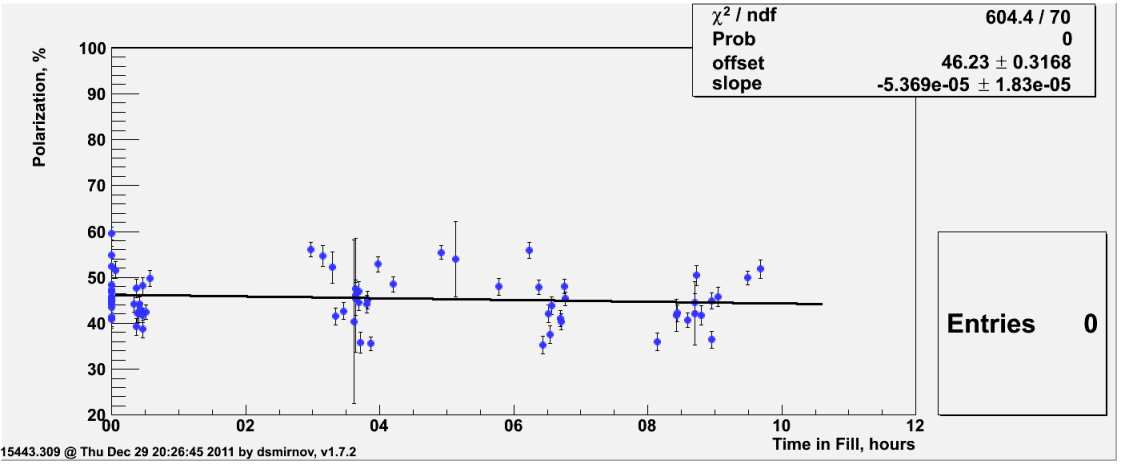
Polarization decay in a fill for 100 and 250 GeV beams

CNI group

Run 11 250GeV

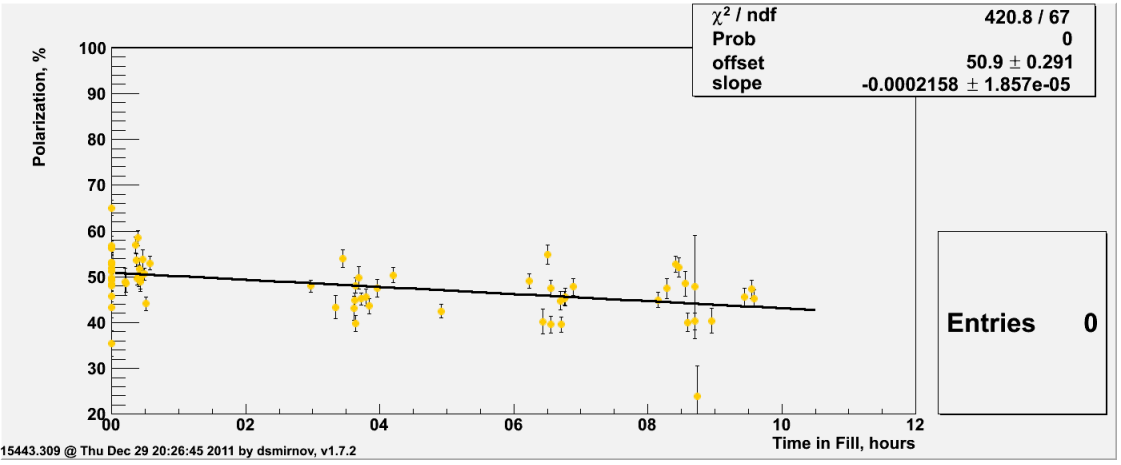


Blue-1 Upstream
slope = -0.39 ± 0.07 %/hour

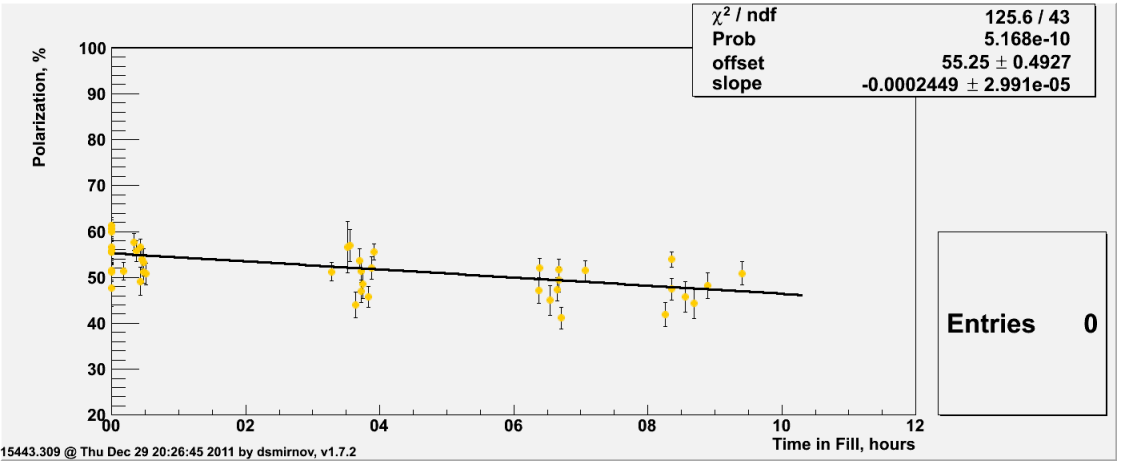


Blue-2 Downstream
slope = -0.19 ± 0.07 %/hour

Run 11 250GeV



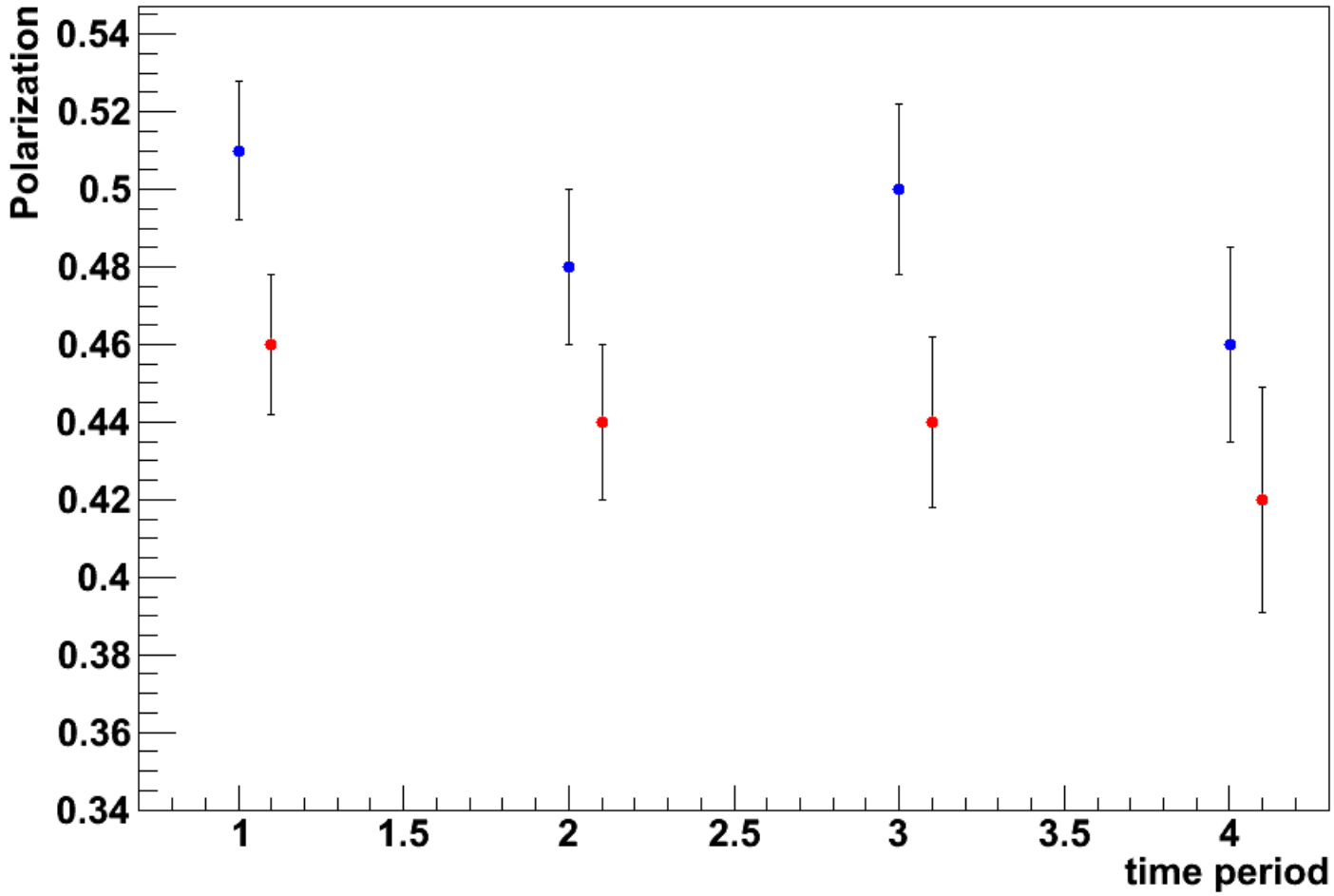
Yellow-2 Upstream
slope = -0.79 ± 0.07 %/hour



Yellow-2 Downstream
slope = -0.86 ± 0.11 %/hour

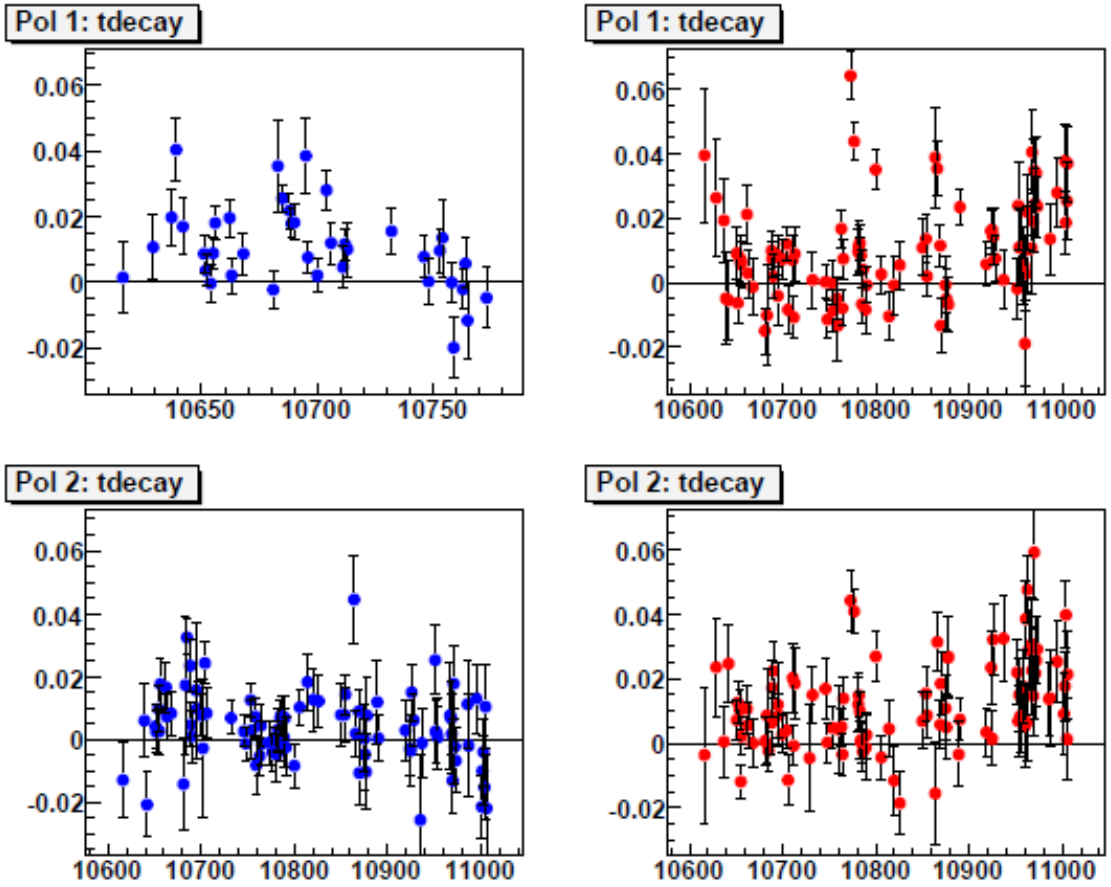
Run 11 250 GeV H-Jet

Polarization by 2-hour time period in fill
Red: yellow beam blue: blue beam



Run9

$1/T_{decay}$ (h)



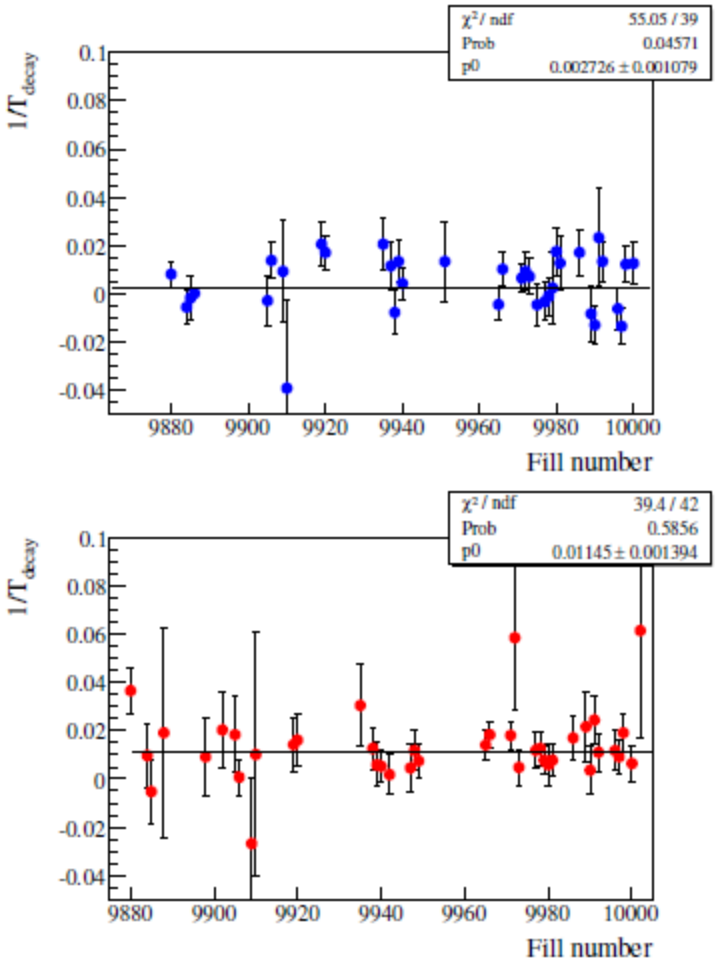
From Run9 pC AN

On the average $1/T \sim 0.01\ h^{-1}$
Means ~1% per hour

Up to $1/T = 0.02\text{-}0.03\ h^{-1}$ or so,
which means ~2-3% per hour

Run8

$1/T_{decay}$ (h)



From Run8 pC AN

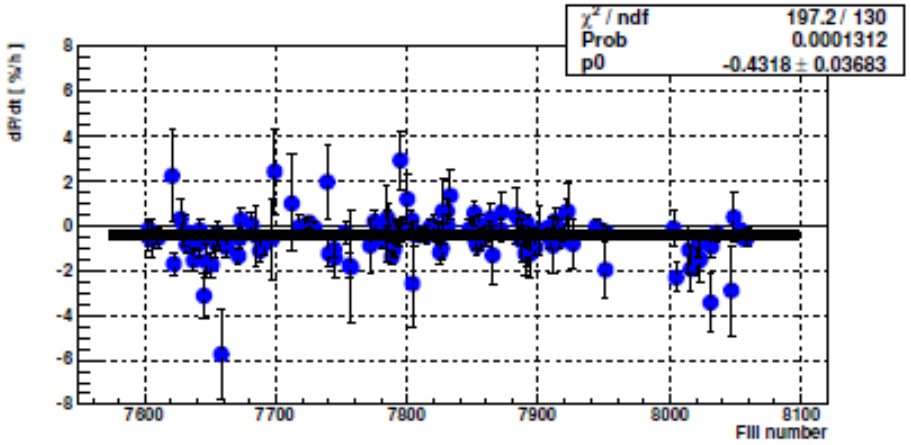
On the average 1/T~0.01 h^{-1}
Means ~1% per hour in yellow

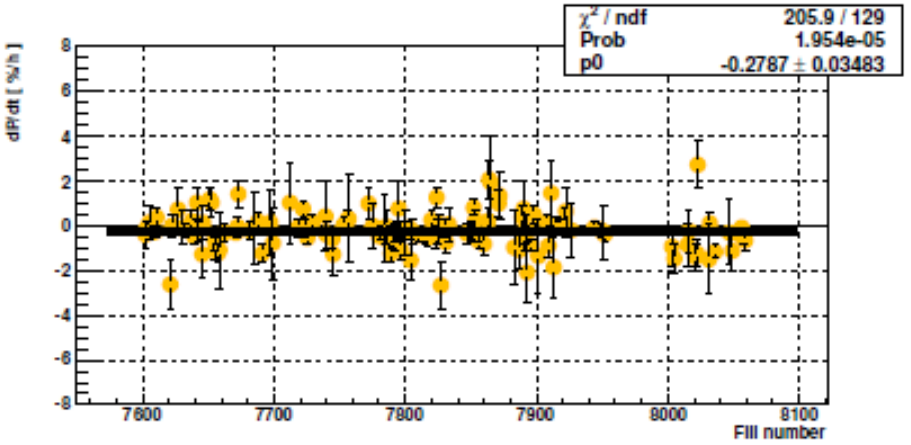
Somewhat on the average
better in blue (0.3% per hour)
but varies more

Run6:

From Carlos's CNI presentation o n Sep 27, 2007

dP/dt (%/h)





Absolute polarization decay ~0.3-0.4% per hour
Which translates to **relative decay ~0.6-0.8% per hour**