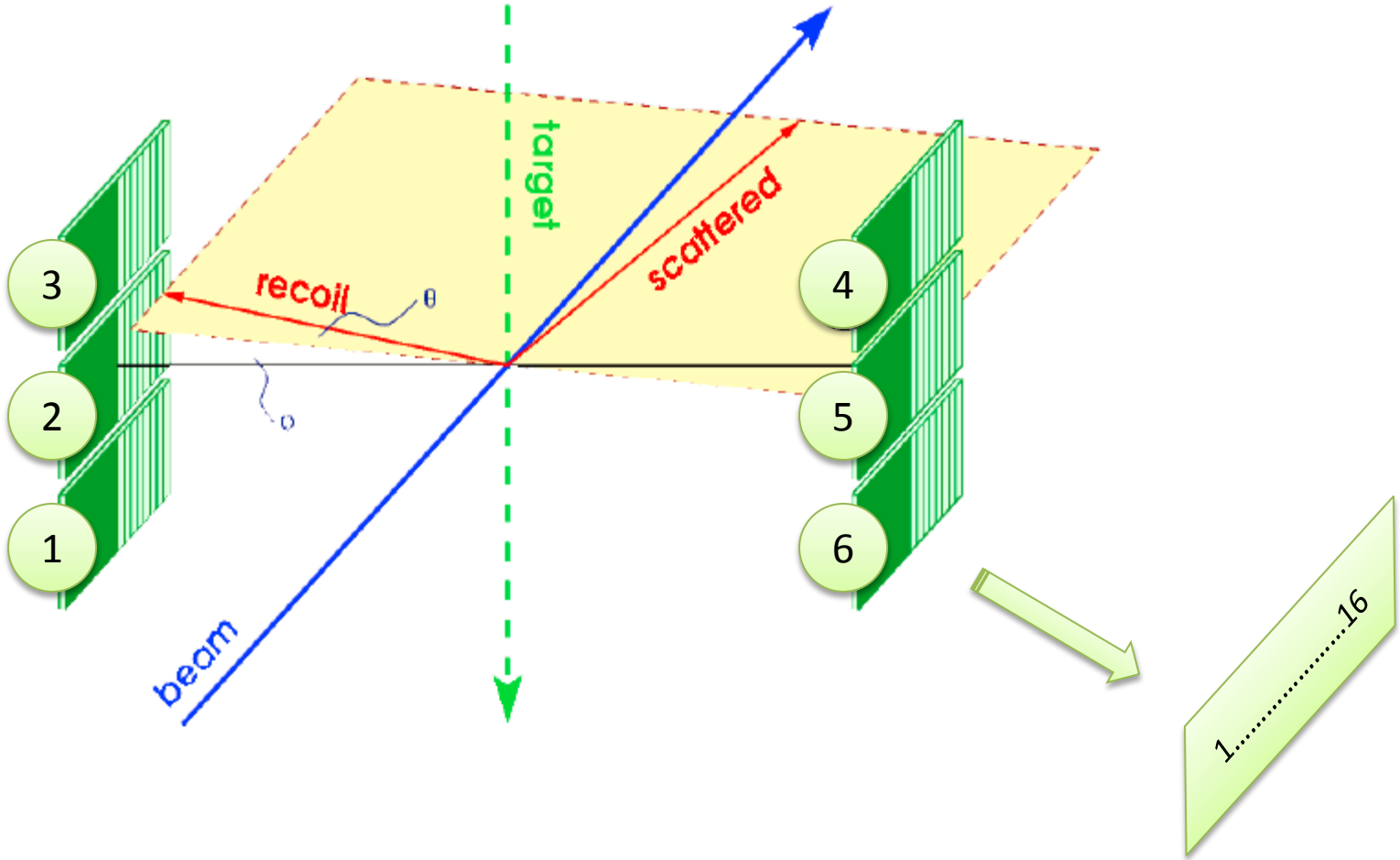
Hydron Jet Polarimeter
- Status –
03/08/2013

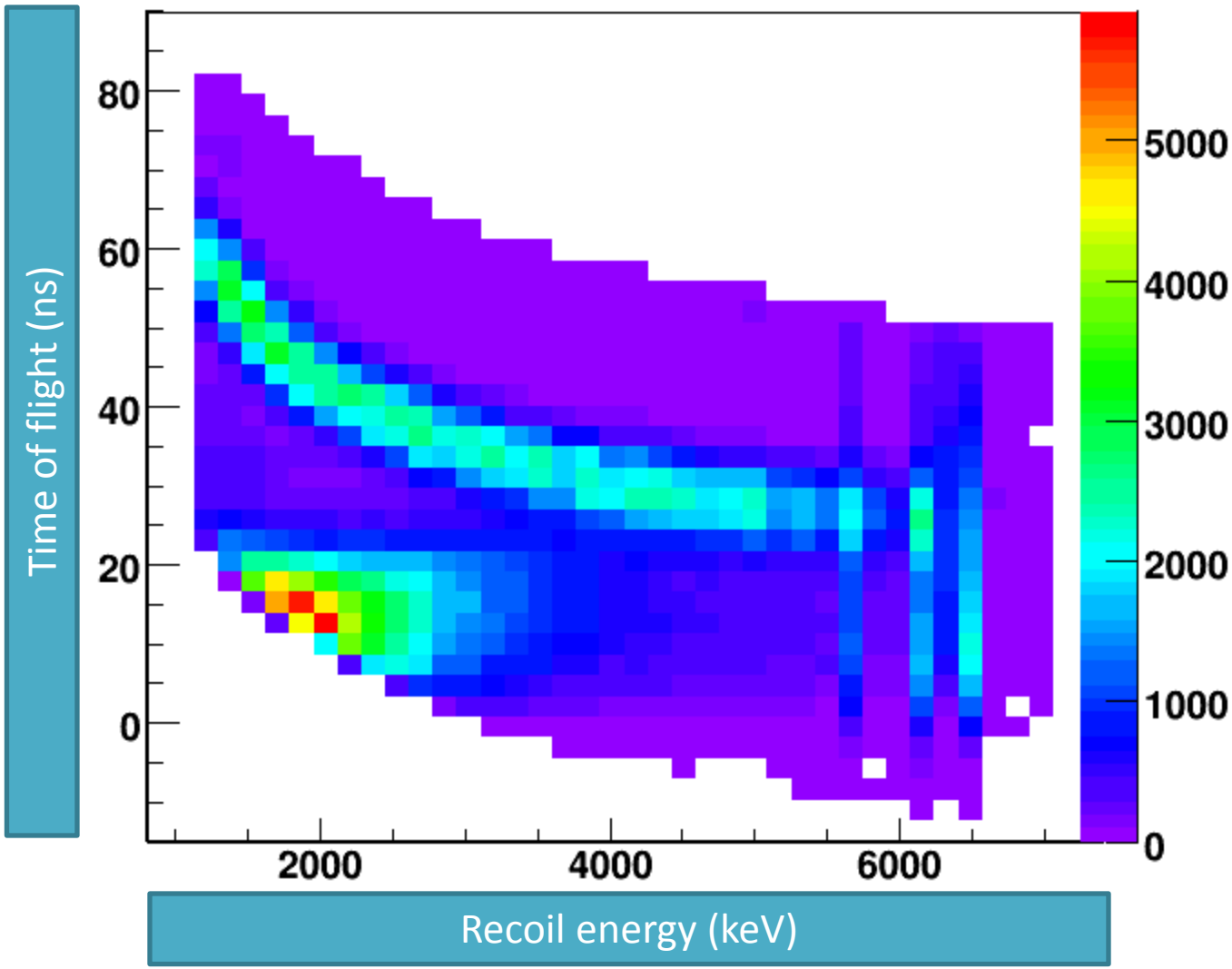
Oleg Eyser

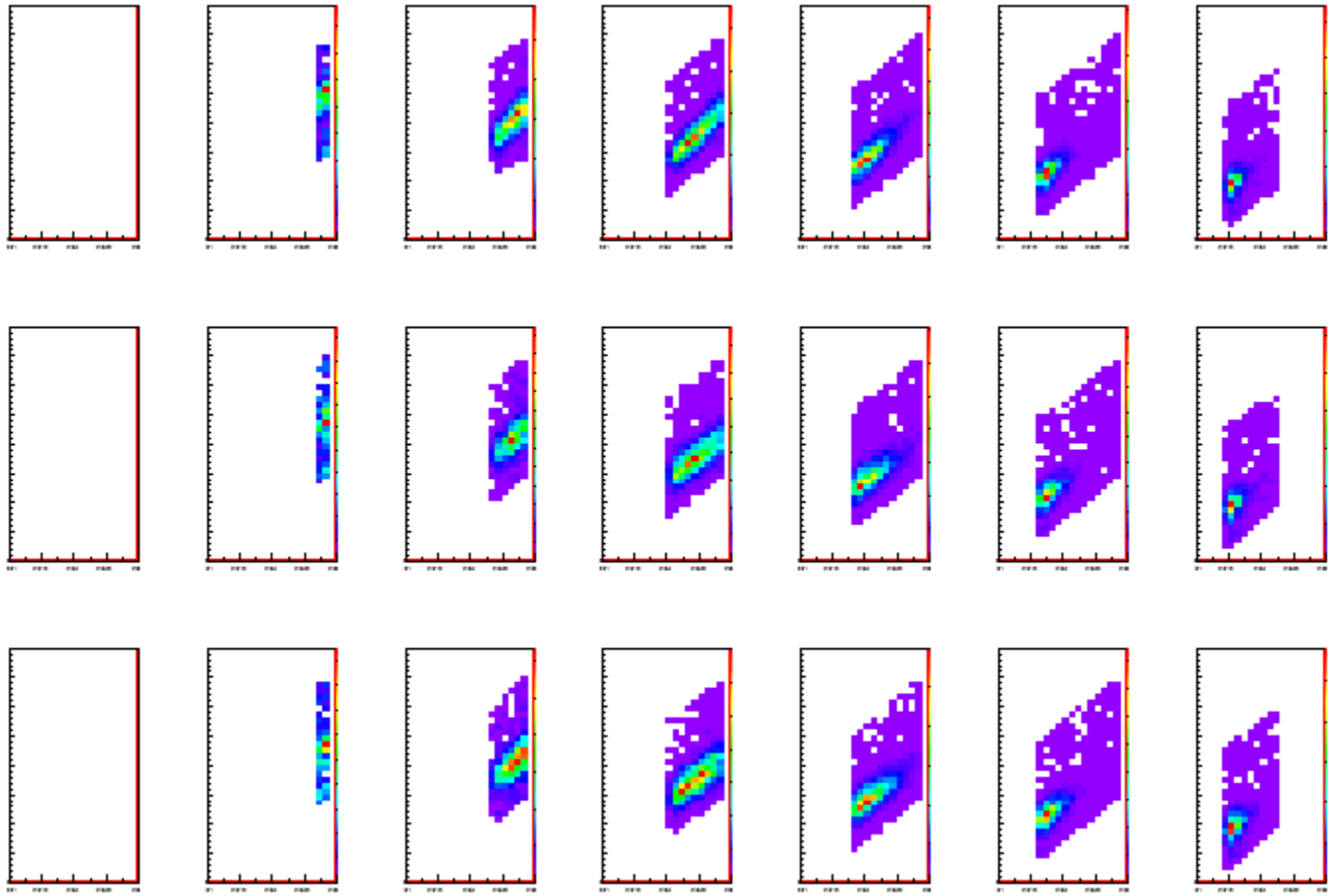


$$\varepsilon = A_N \cdot P$$

$$P_{beam} = \frac{\varepsilon_{beam}}{\varepsilon_{jet}} \cdot P_{jet}$$

Example from Run 12





t_{of}

$\sqrt{1/T_{kin}}$

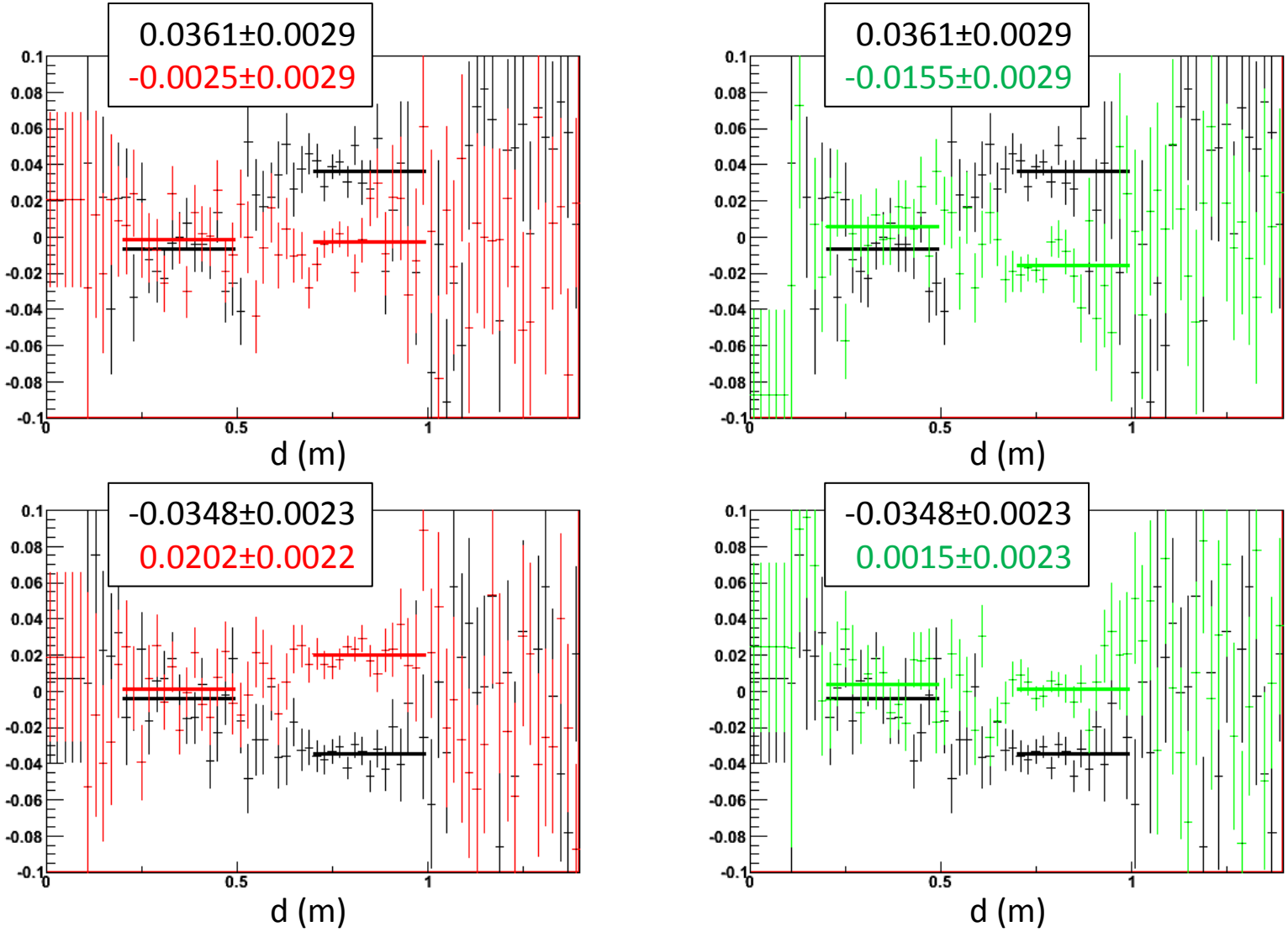
with global T_0 offset

$$d[m] = 0.3 \cdot t_{of}[ns] \cdot \sqrt{\frac{2T_{kin}[MeV]}{m_p}}$$

Asymmetries in fill 17169

upstream (strips 1-8)

downstream (strips 9-16)



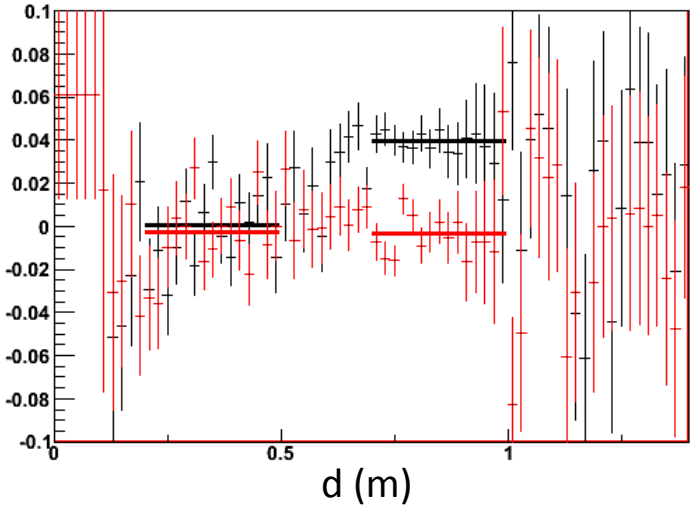
target | beam 1

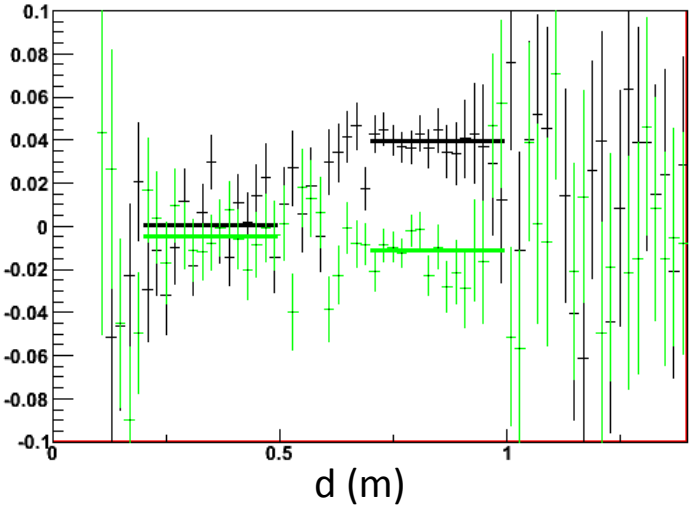
target | beam 2

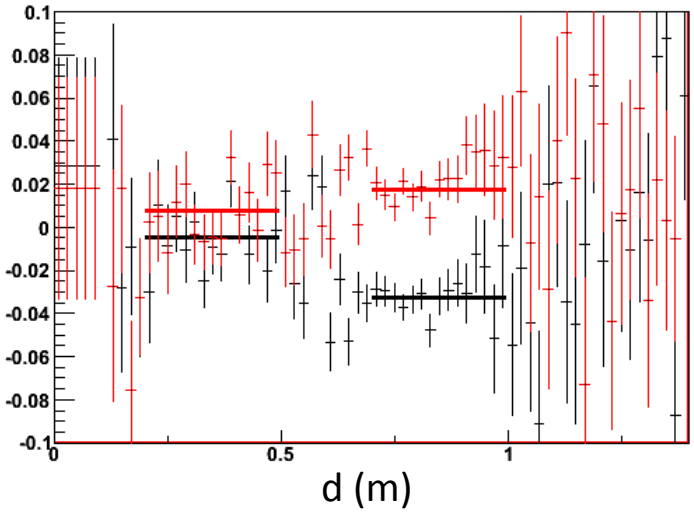
Asymmetries in fill 17186

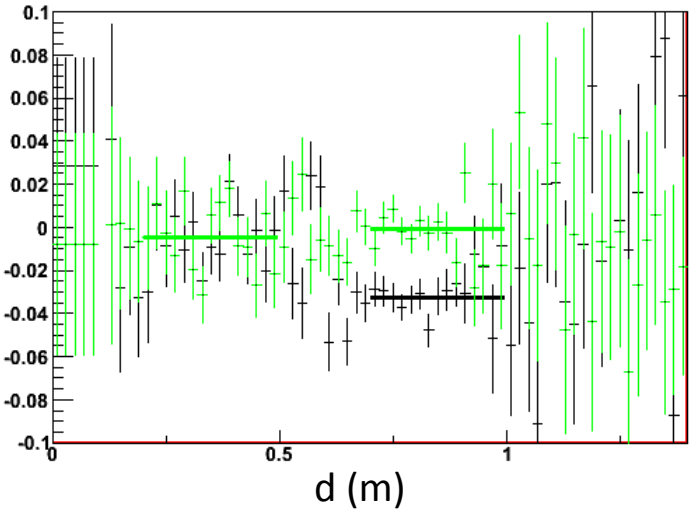
upstream (strips 1-8)

downstream (strips 9-16)







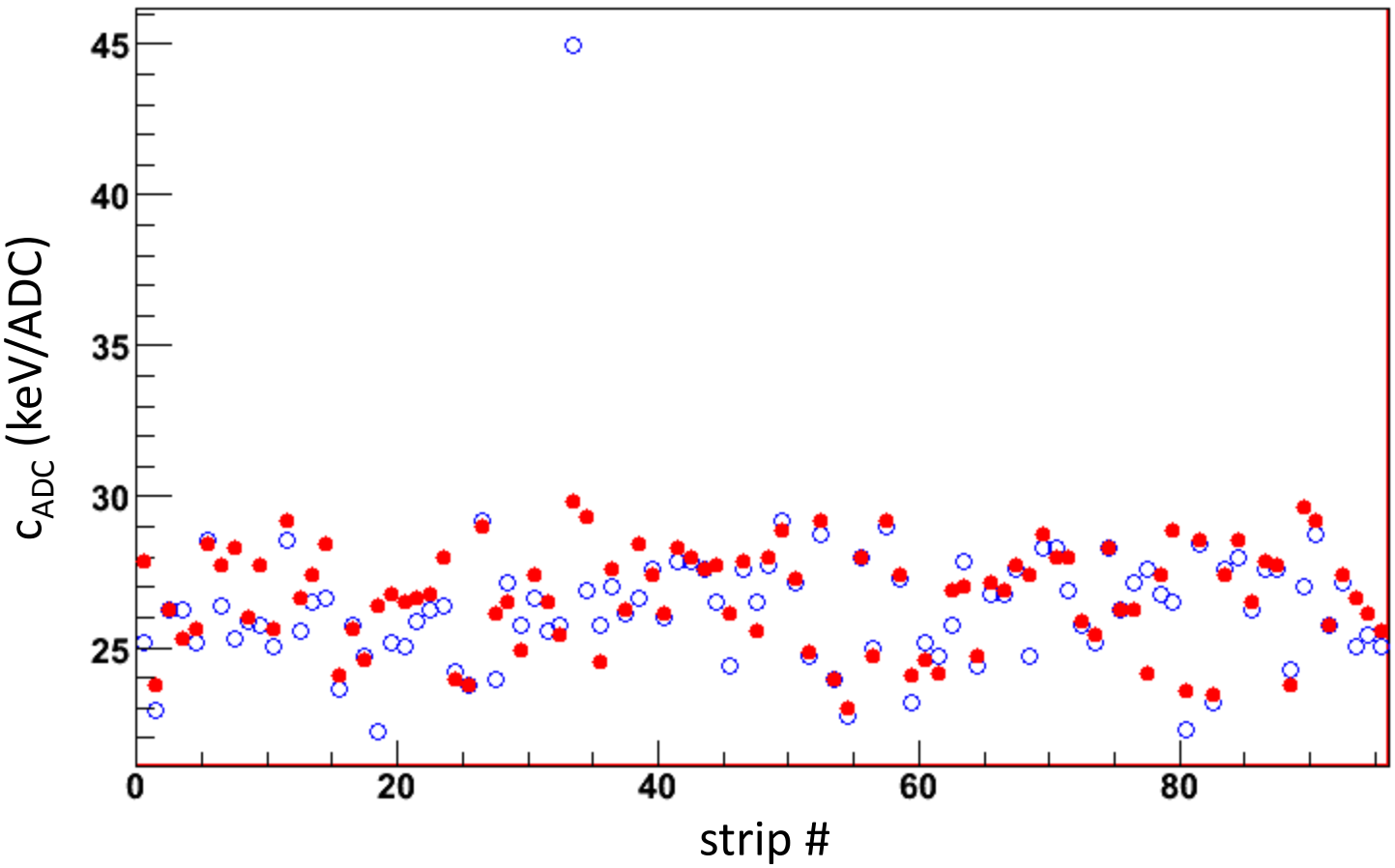


target | beam 1

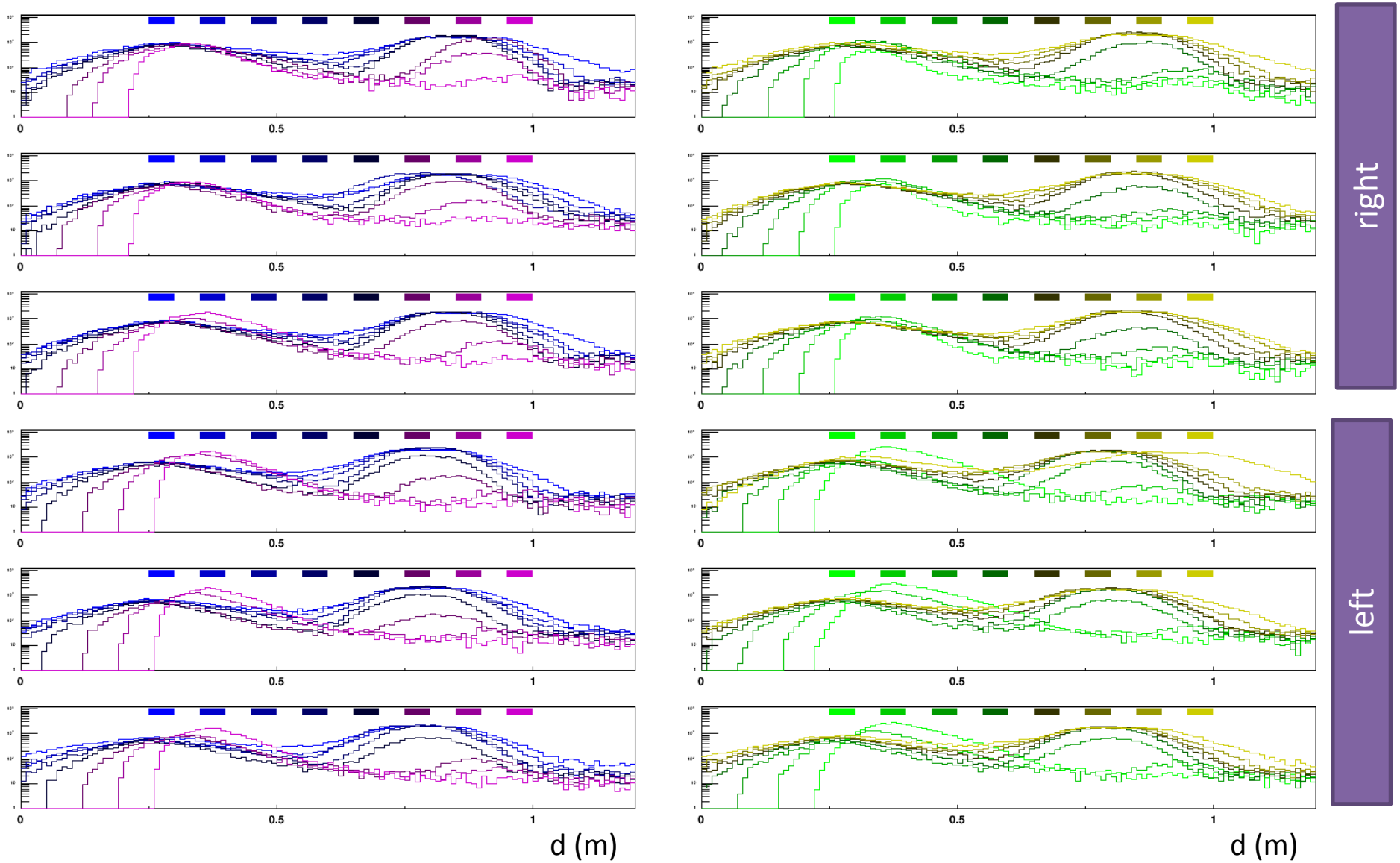
target | beam 2

https://wiki.bnl.gov/rhicspin/Polarimetry/H-jet/Run13

New calib_2802.909.dat



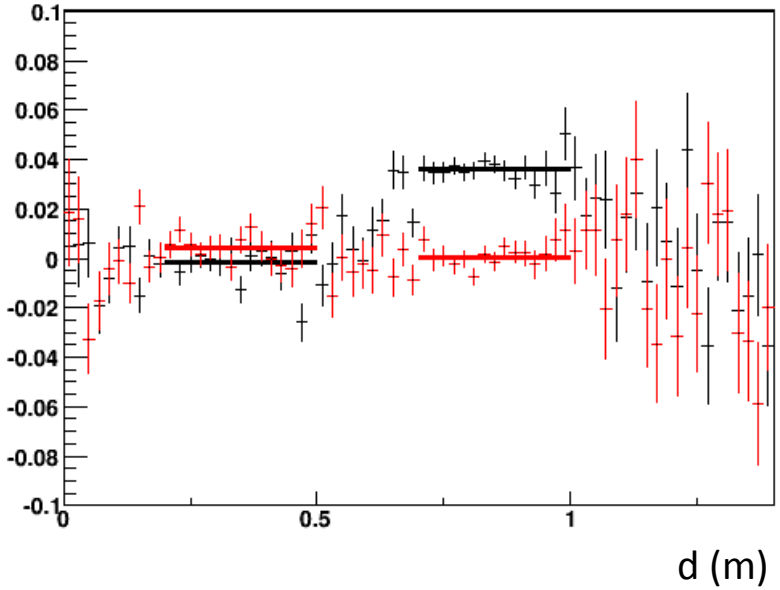
- Compared to calib_2002.806.dat
- Gd not used at the moment / no dead layer included

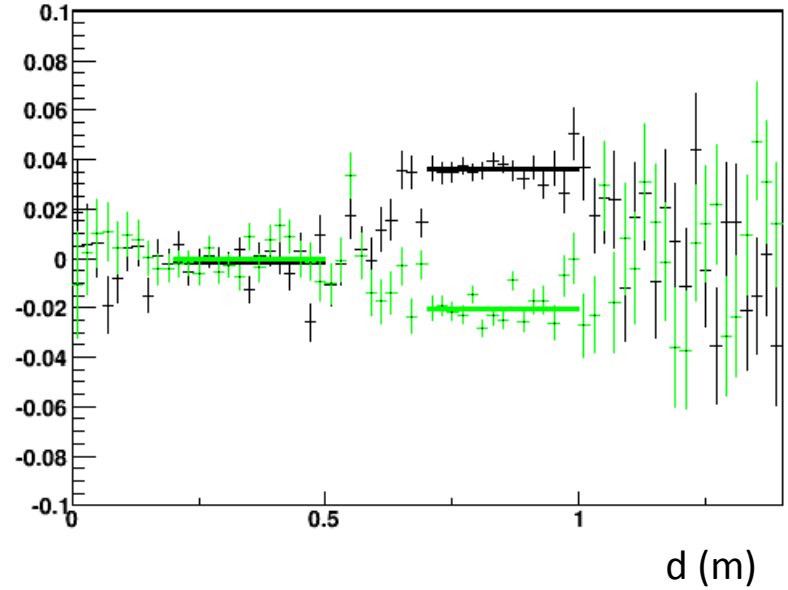


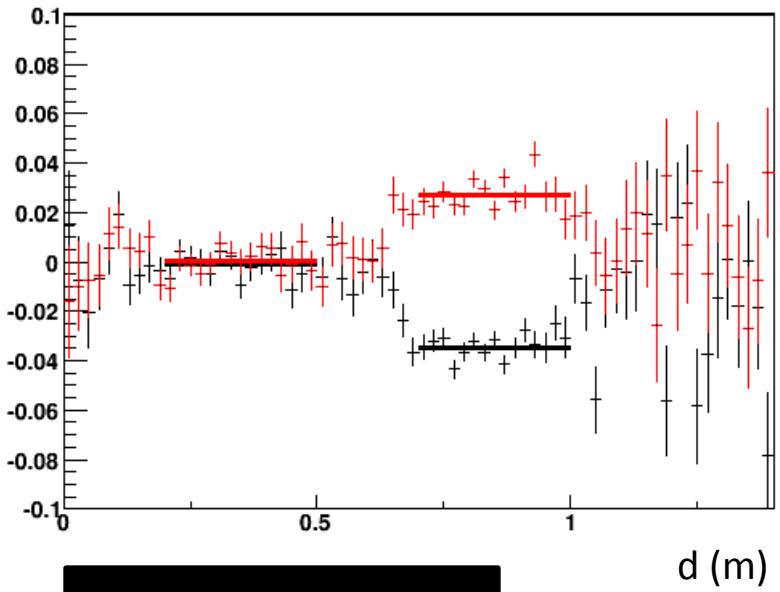
downstream

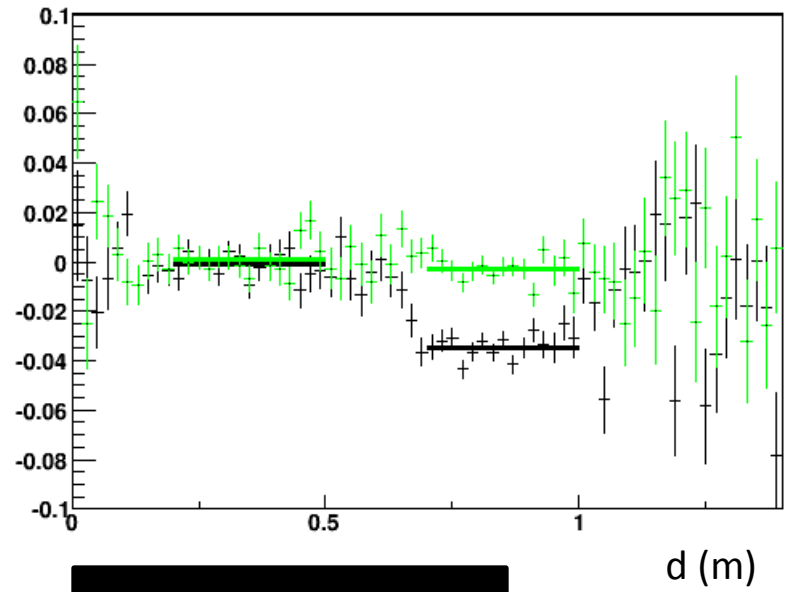
$$d = t_{of}\sqrt{\frac{2T_R}{m_P}}$$

upstream









target

target

beam 1

beam 2