LHCb VeloPixel fast simulation
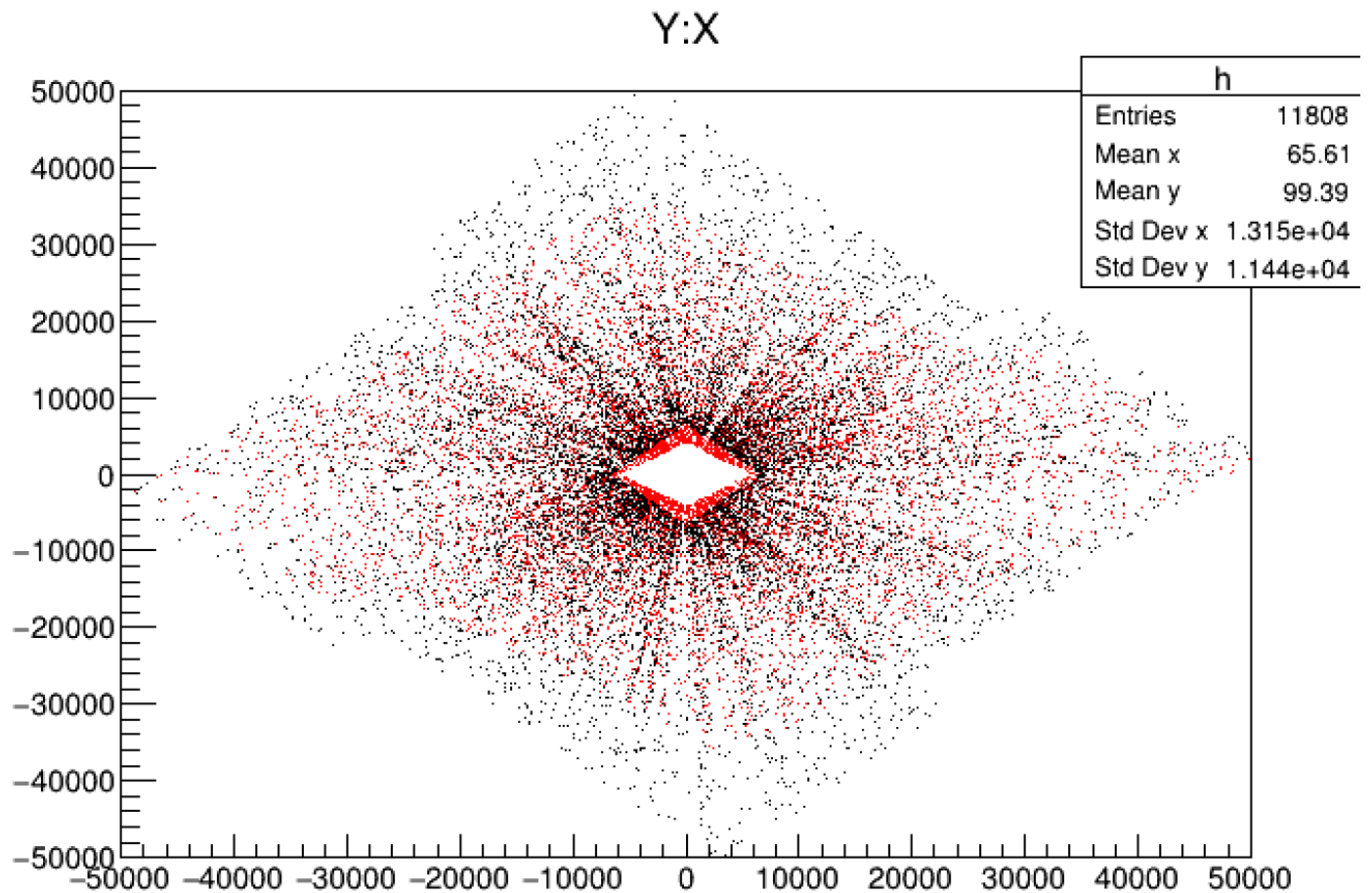
Serena Maccolini, Angelo Carbone, Tommaso Fulghesu
TIMESPOT meeting - WP4

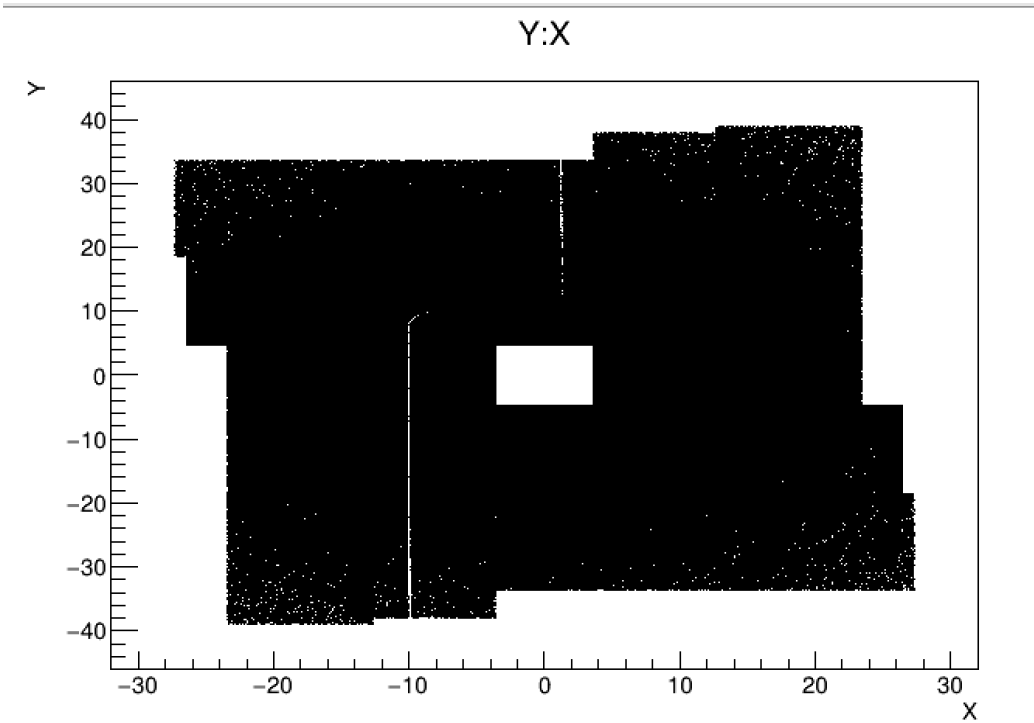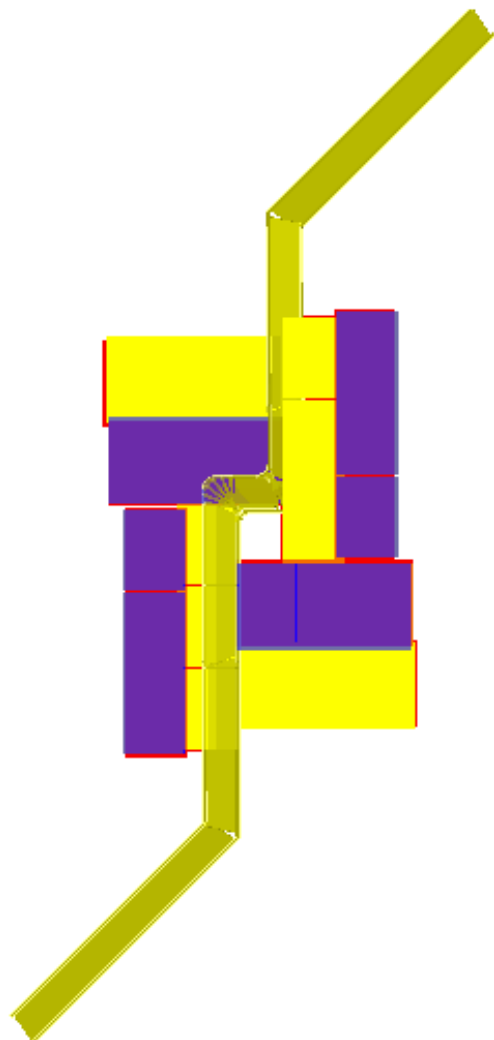15 April 2021

serena.maccolini@cern.ch
University of Bologna and INFN Bologna

Y vs X MChit distribution

- Red = 45° in ZY
  Black = 0° in ZY

Y:X

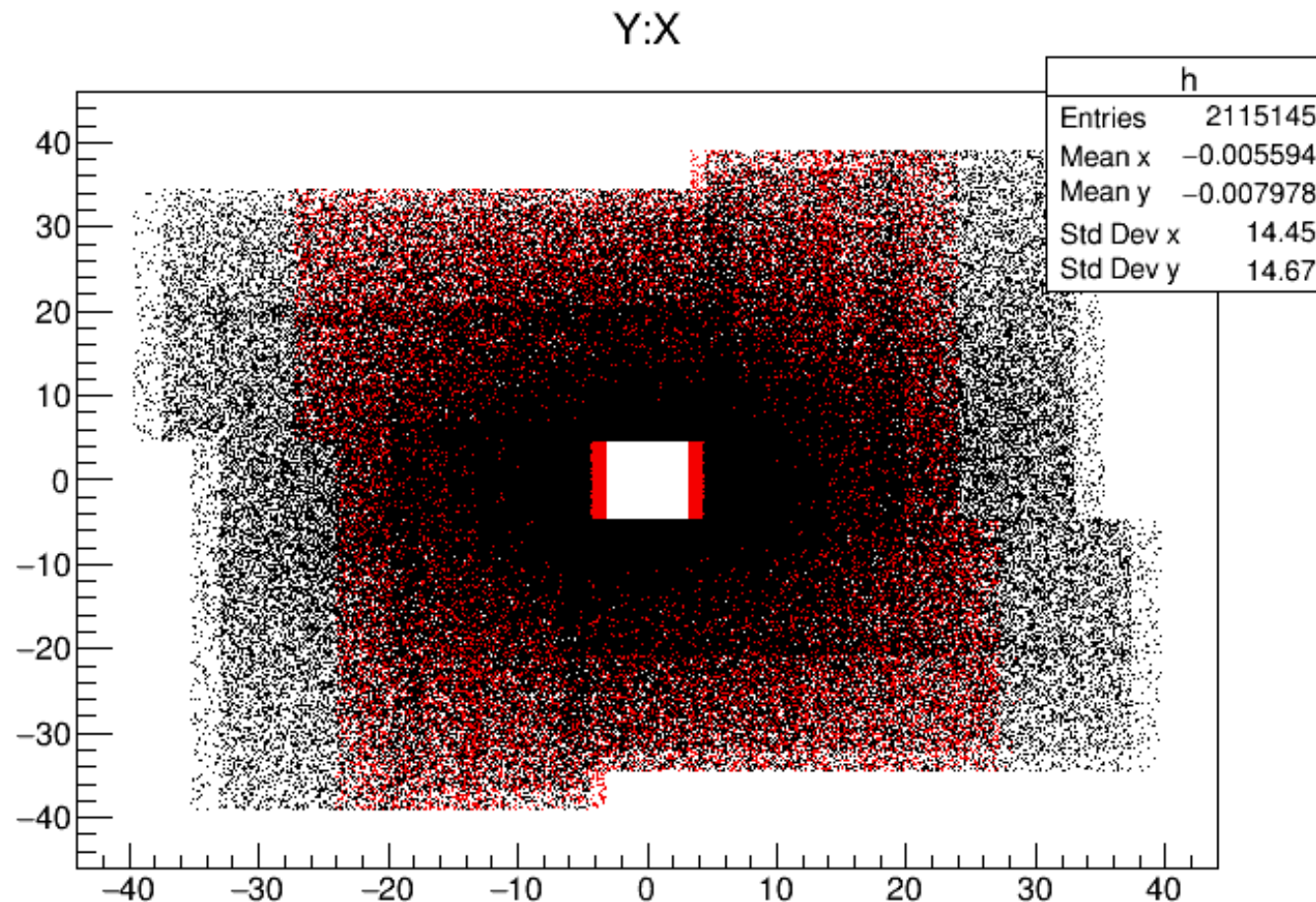| h	
Entries	11808
Mean x	65.61
Mean y	99.39
Std Dev x	1.315e+04
Std Dev y	1.144e+04

- /eos/lhcb/user/b/bsiddi/TimespotSims/Events"+str(ZYtheta)
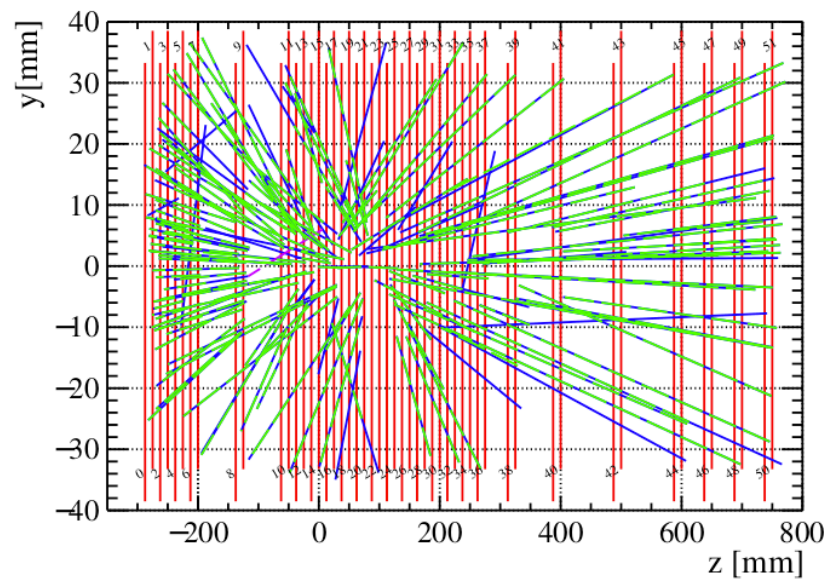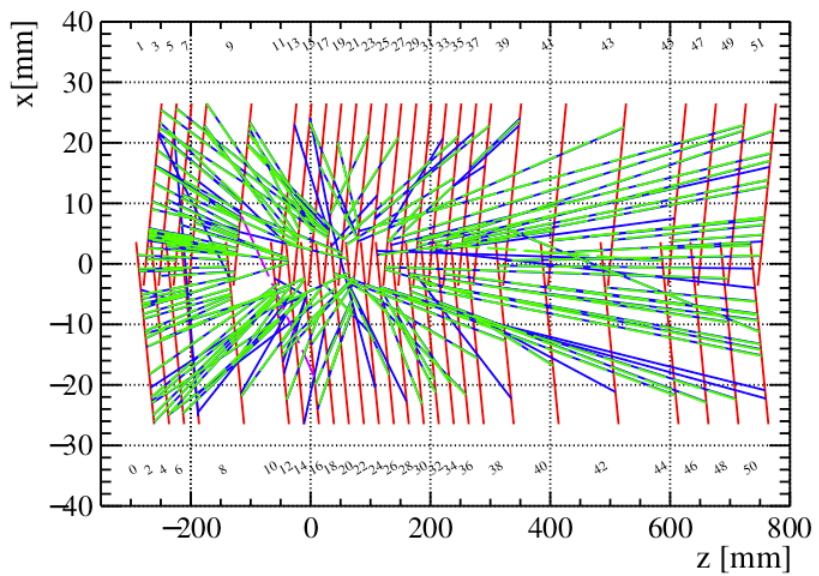 +"DegreeNominalFull_MT_AllEvent_withPrimary.json

Rivelatore "dritto"

Y:X

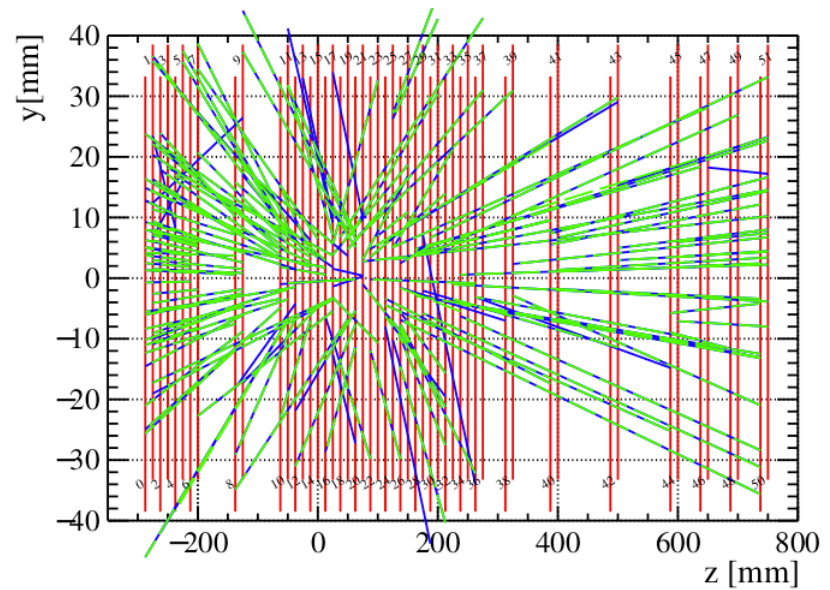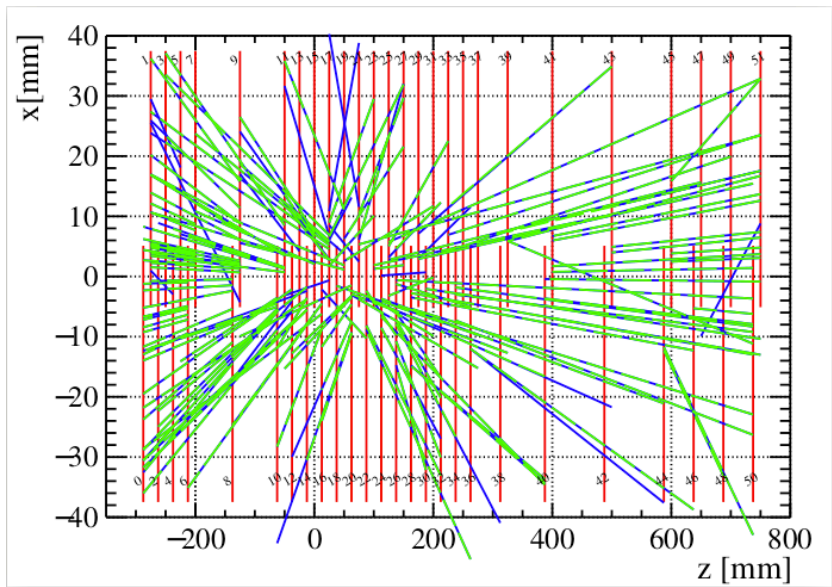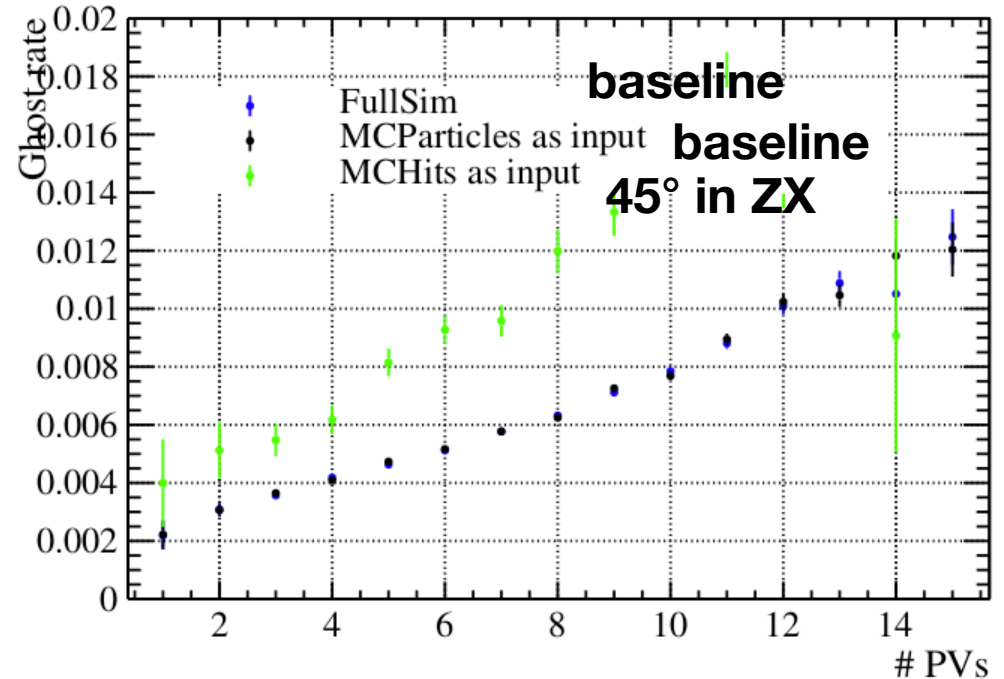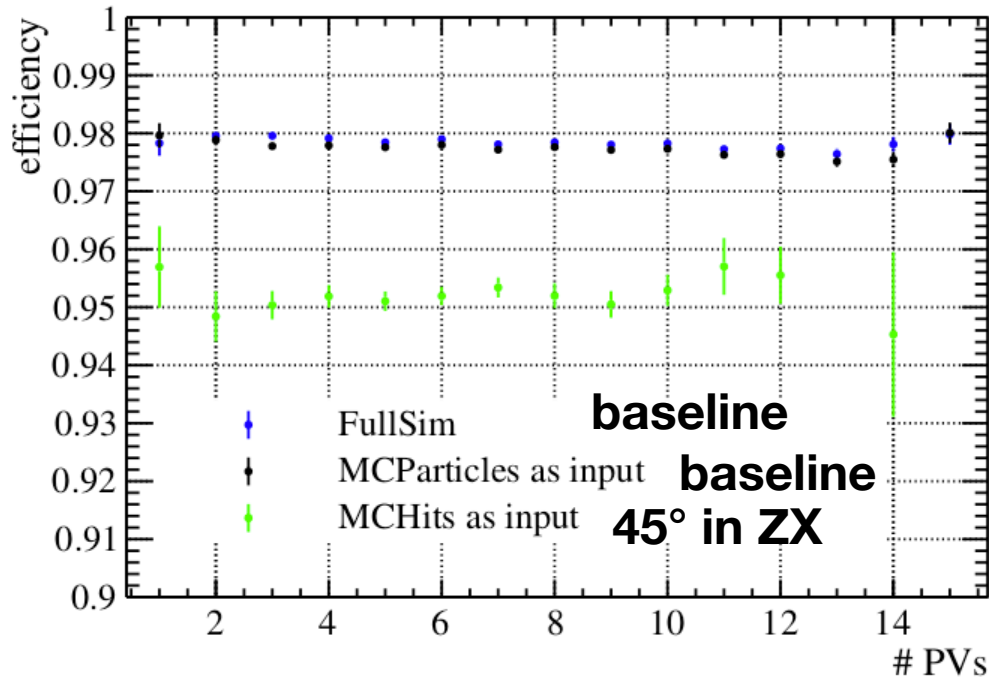RFfoil to fix!

- Tilted (red) vs baseline (black)

Y:X

h	
Entries	2115145
Mean x	−0.005594
Mean y	−0.007978
Std Dev x	14.45
Std Dev y	14.67

- Waiting for correct input for the axis (X,Z) of rotation

0° in ZY and 45° in XY (baseline)
vs
45° in ZX and 0° in XY (test)

Performances

- Worse than expected, maybe a bug, maybe it's correct. (plot di ieri)