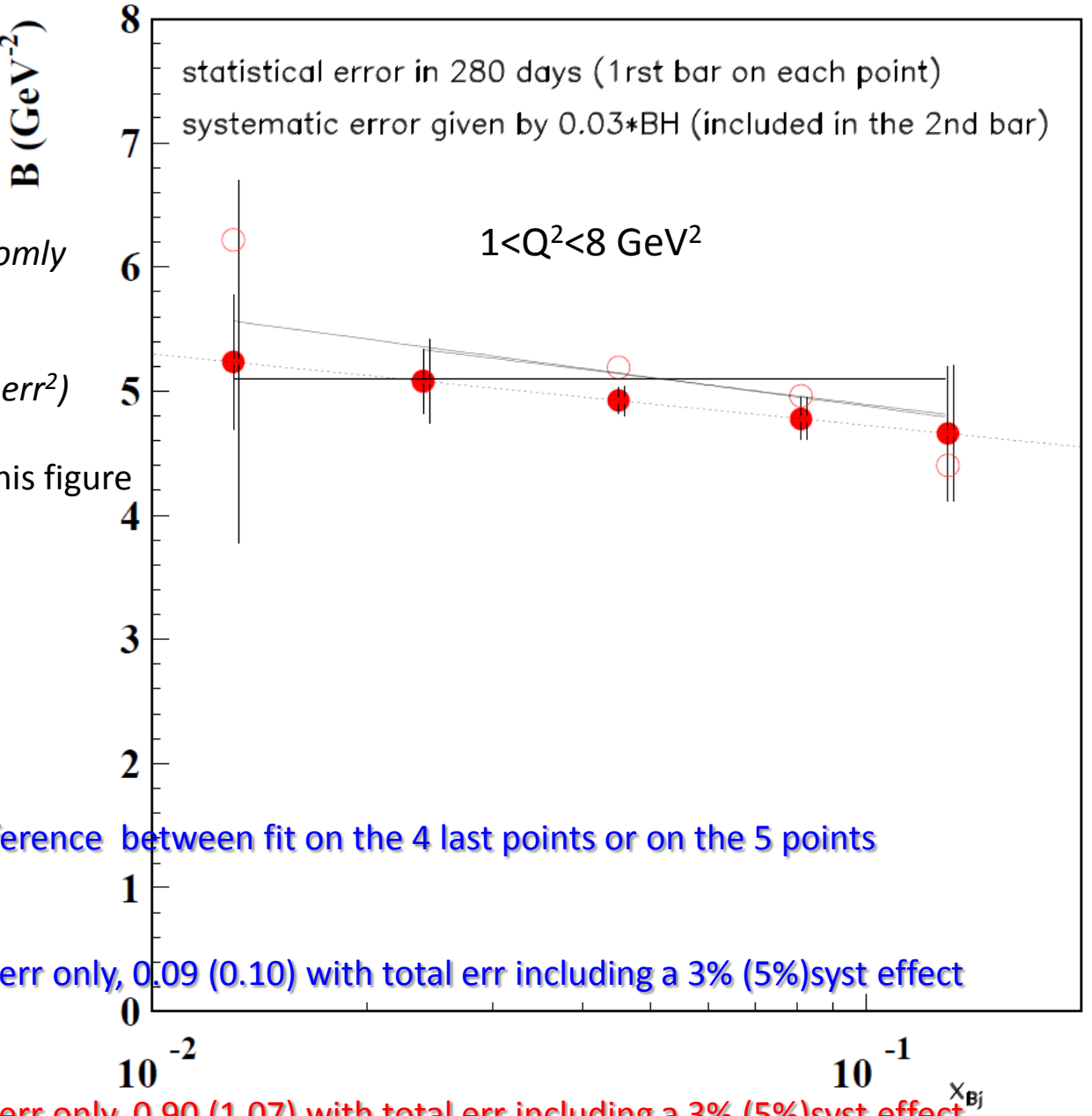
$dN/dt = \exp(-Bt)$

hypothesis
$B=5.83+2*0.125*\log(0.0012/x_{Bj})$



The open points are generated randomly acccording a gaussian distribution
centre = solid points
sigma=total error= $\sqrt{}$(stat_err^2+syst_err^2)

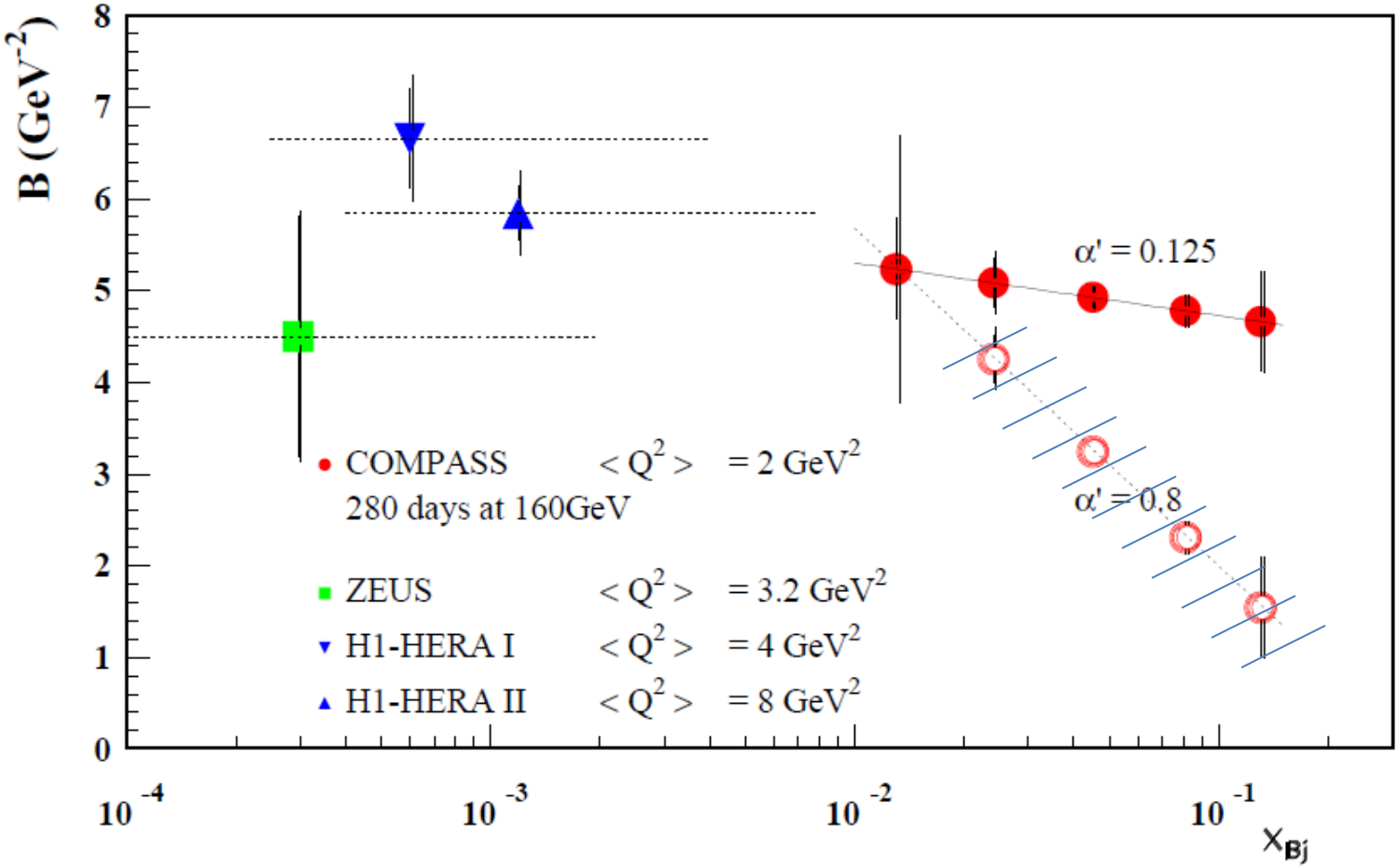
1) Fit b0 on the 5 open points of this figure
   b0=5.10 $\pm$ 0.09
   χ^2=0.87
2) Fit b1+2α'log(0.0012/xBj)
   b1=6.37 $\pm$ 0.93
   α'=0.168 $\pm$0.122
   χ^2=0.51

CONCLUSION: there is about no difference between fit on the 4 last points or on the 5 points

for the 1^{rst} fit,
The accuracy on b0 is 0.08 with stat err only, 0.09 (0.10) with total err including a 3% (5%)syst effect

For the 2nd fit,
The accuracy on b1 is 0.75 with stat err only, 0.90 (1.07) with total err including a 3% (5%)syst effect
The accuracy on α' is 0.10 with stat err only, 0.12 (0.14) with total err including a 3% (5%)syst effect

Towards a new Fig 8 in the GPD proposal v3.0 ?

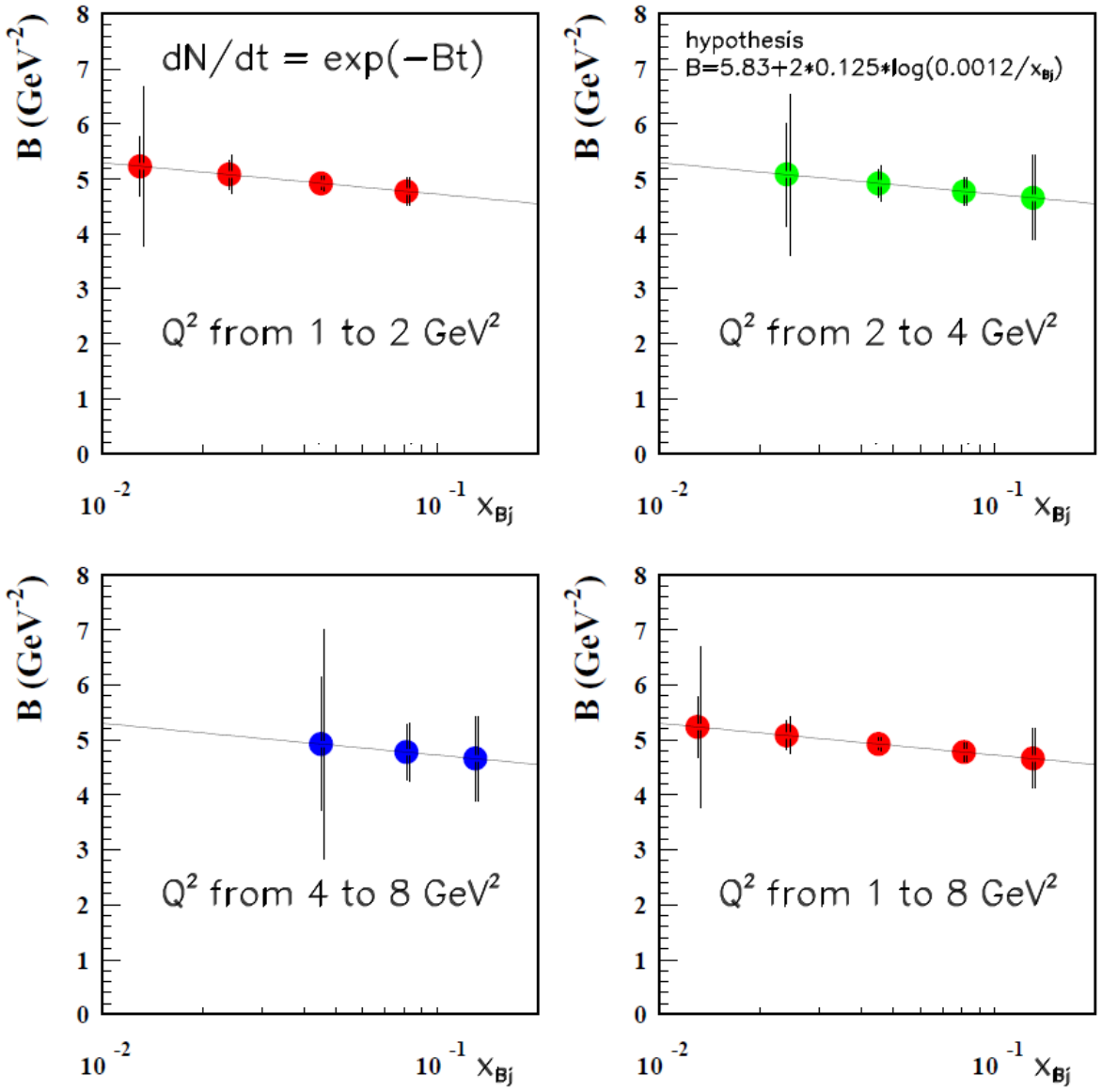


The mean value of B on the 4 or 5 points is determined with an accuracy better than 0.1
But the slope α' is only determined
For α' =0.125 with a limited accuracy of 0.10 (only stat) or 0.12 (0.14) with sys effect given by 3% (5%)of BH
For α' =0.3 with a raisonable accur. of 0.088 (only stat) or 0.109 (0.121) with sys effect given by 3% (5%) of BH
For α' =0.8 with a good accuracy of 0.059 (only stat) or 0.067 (0.074) with sys effect given by 3% (5%) of BH

=> we can determine slope α' larger than 0.3 with accuracy better than 30%

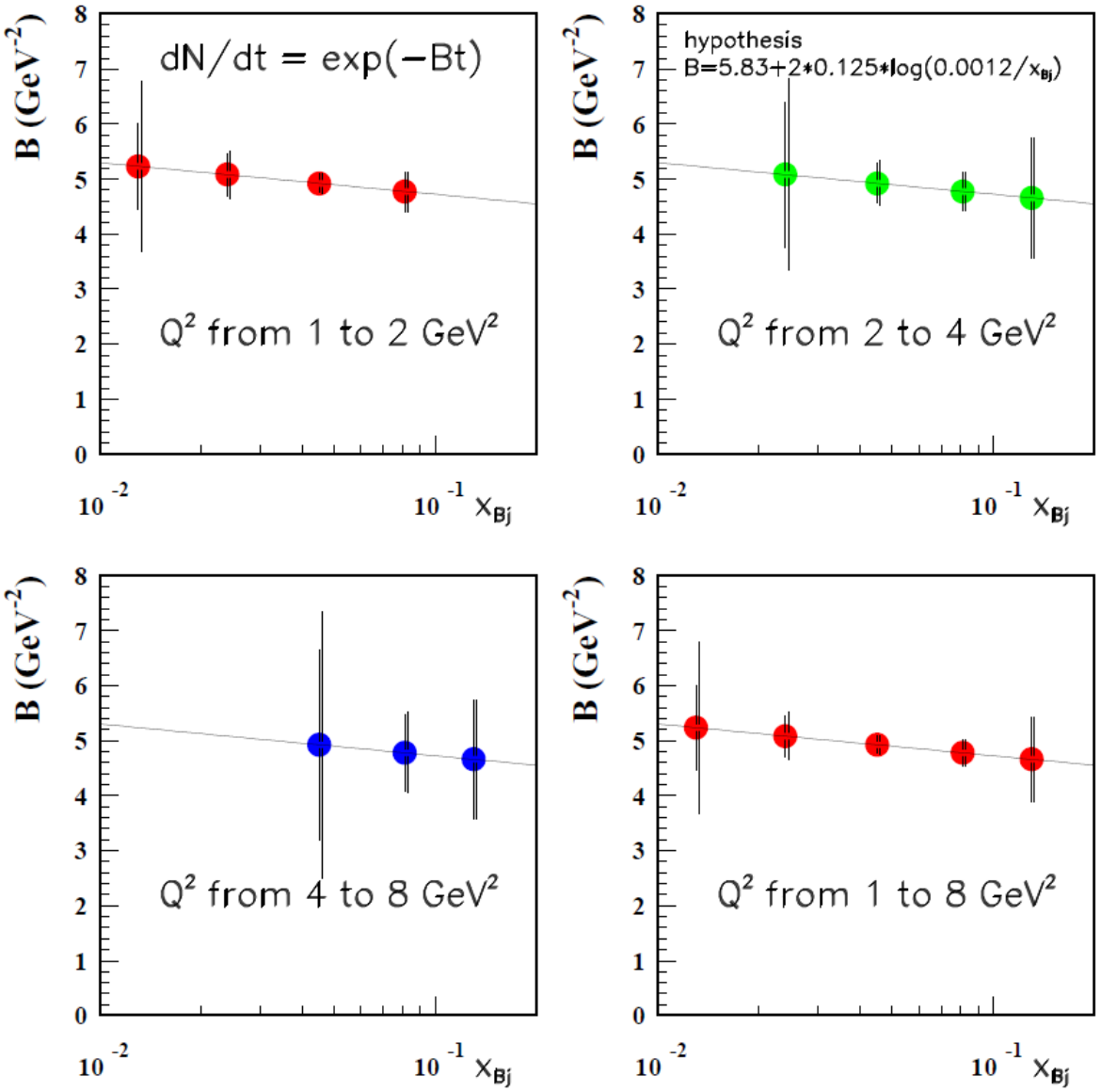
statistical error in 280 days (1rst bar on each point)

systematic error given by 0.03*BH (included in the 2nd bar)



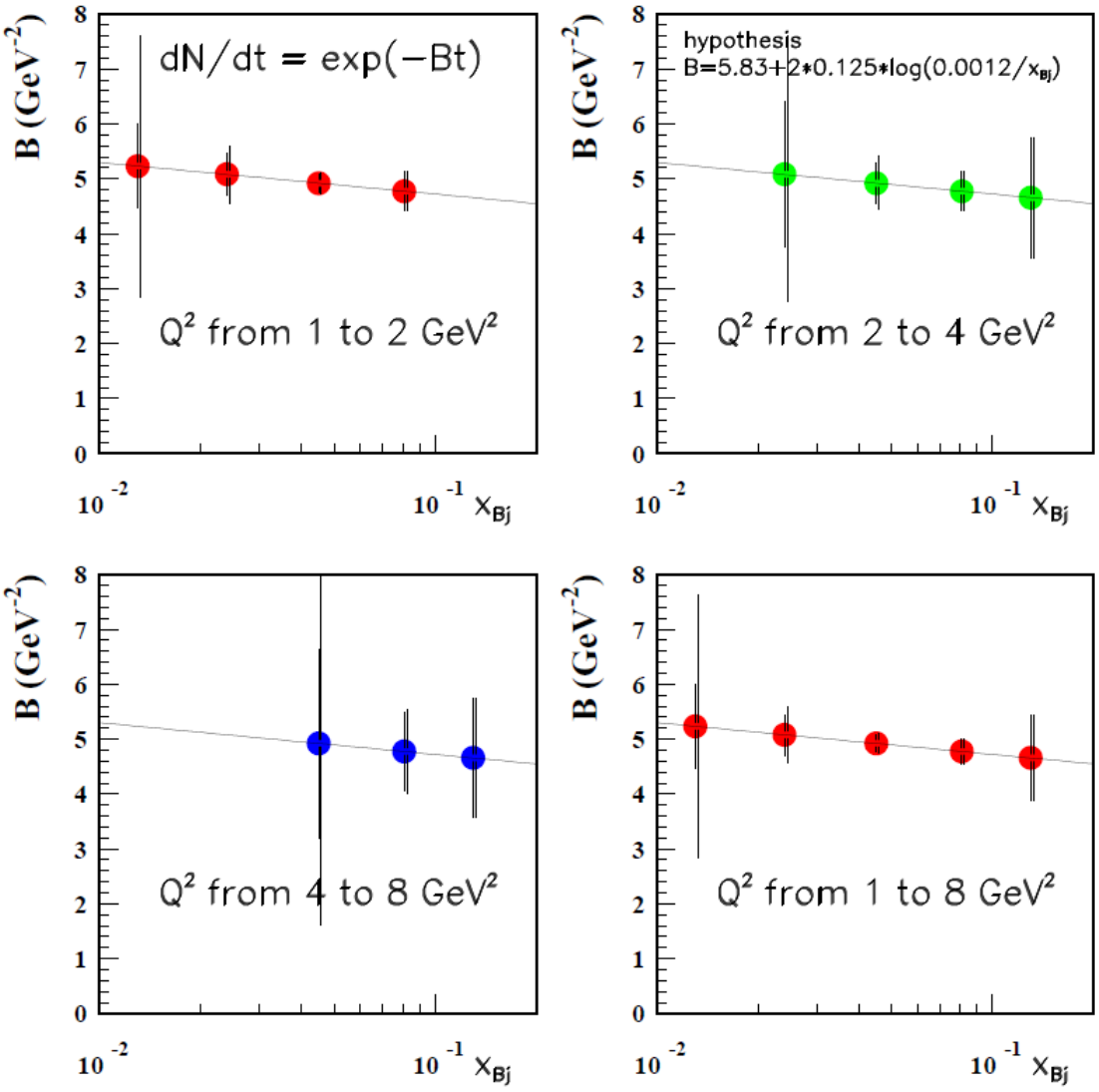
statistical error in 140 days (1rst bar on each point)

systematic error given by 0.03*BH (included in the 2nd bar)



statistical error in 140 days (1rst bar on each point)

systematic error given by 0.05*BH (included in the 2nd bar)

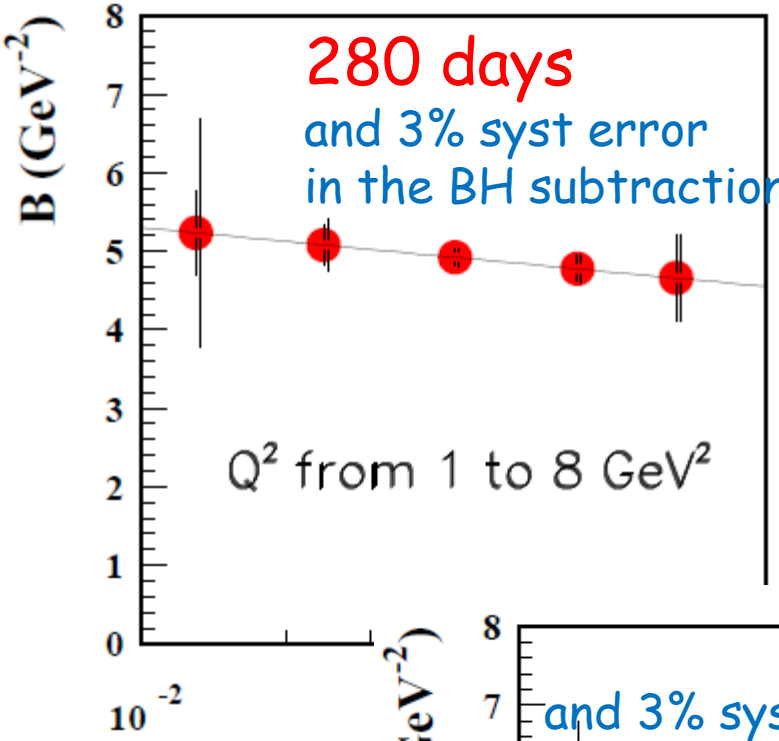


Conclusion

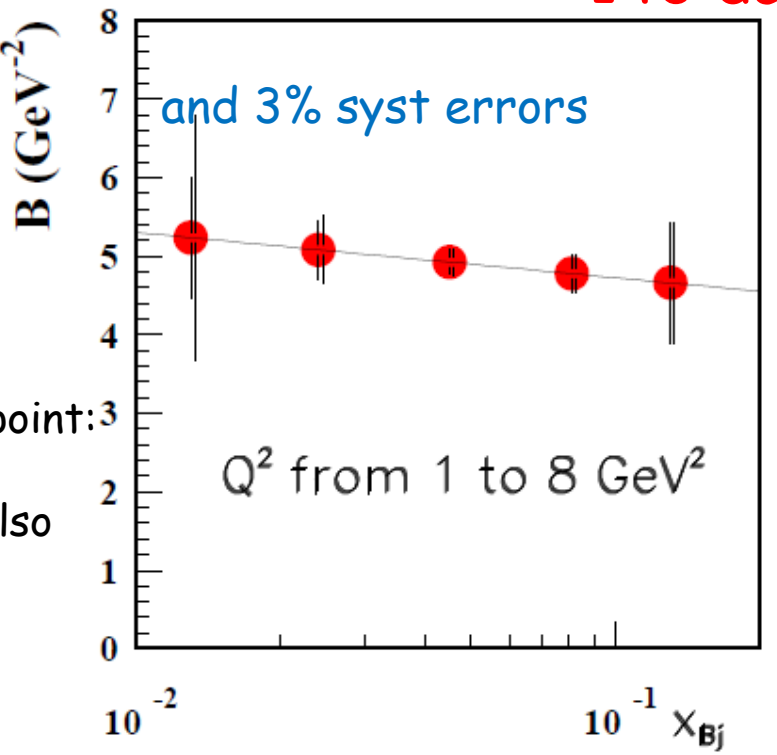
The first point in x_{Bj} has a too large syst. err. to be used for the t-slope determination; it is essential for the relative normalistion

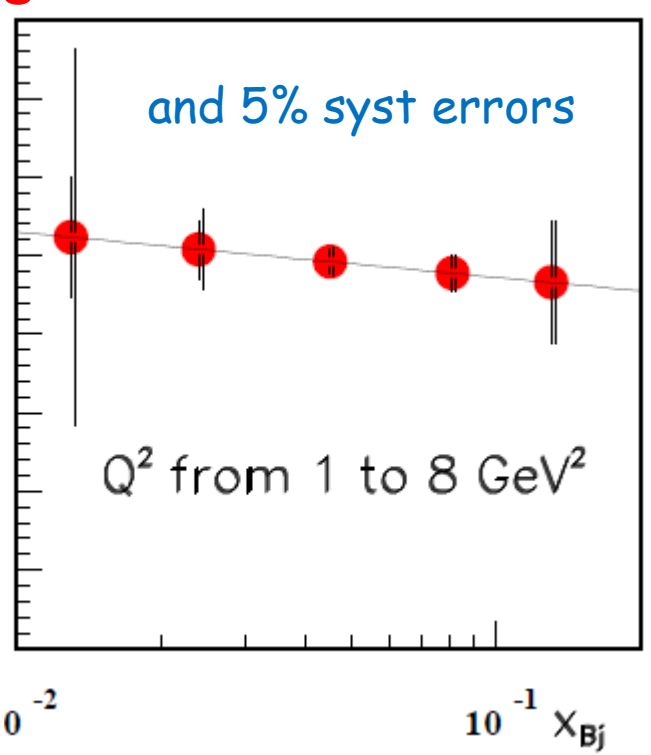
In the other 4 points the syst. err. is smaller than the syst. one.

Are we able to determine only <B>
or also a significant t-slope?



140 days





1rst err. bar on each point: stat. err. only
2nd err. bar included also the syst. err

Eur.Phys.J.C44:1-11,2005. HERAI data (all stat): 1996-2000

W=82 GeV Q^2=4 GeV^2 => x=0.6 E-3

b= 6.66 ± 0.54 ± 0.43 GeV-2

Phys.Lett.B659:796-806,2008 HERAII data (electron only): 2005-2006

W=82 GeV Q^2=8 GeV^2 => x=1.19 E-3

b= 5.84 ± 0.30 ± 0.35 GeV-2

hep-ex:0812.2517v3 ZEUS data (positrons): 1999-2000

Q2=3.2 GeV2 W=104 GeV

b = 4.5 ± 1.3(stat.) ± 0.4(syst.) GeV−2