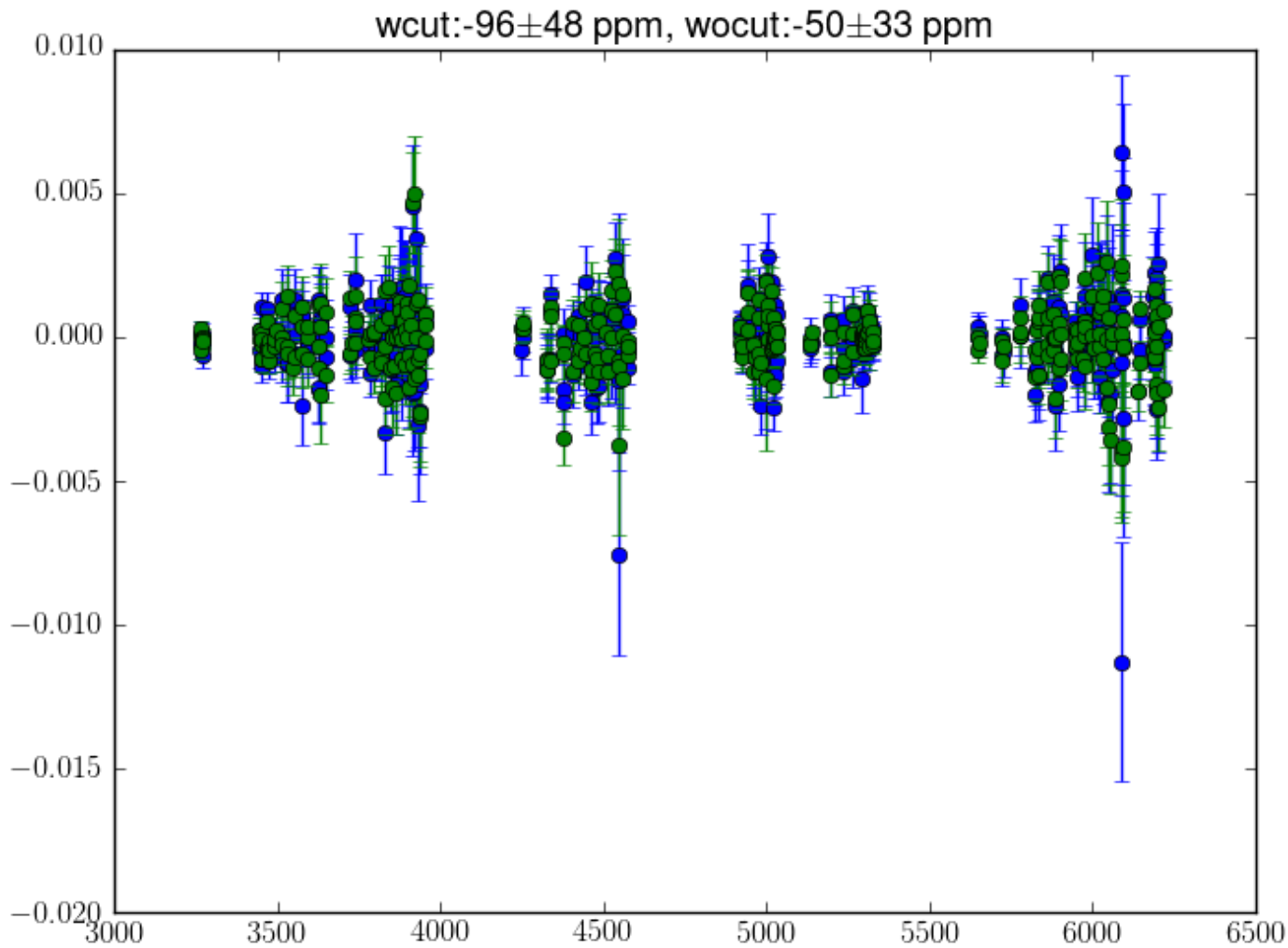


# False asymmetry

Pengjia Zhu

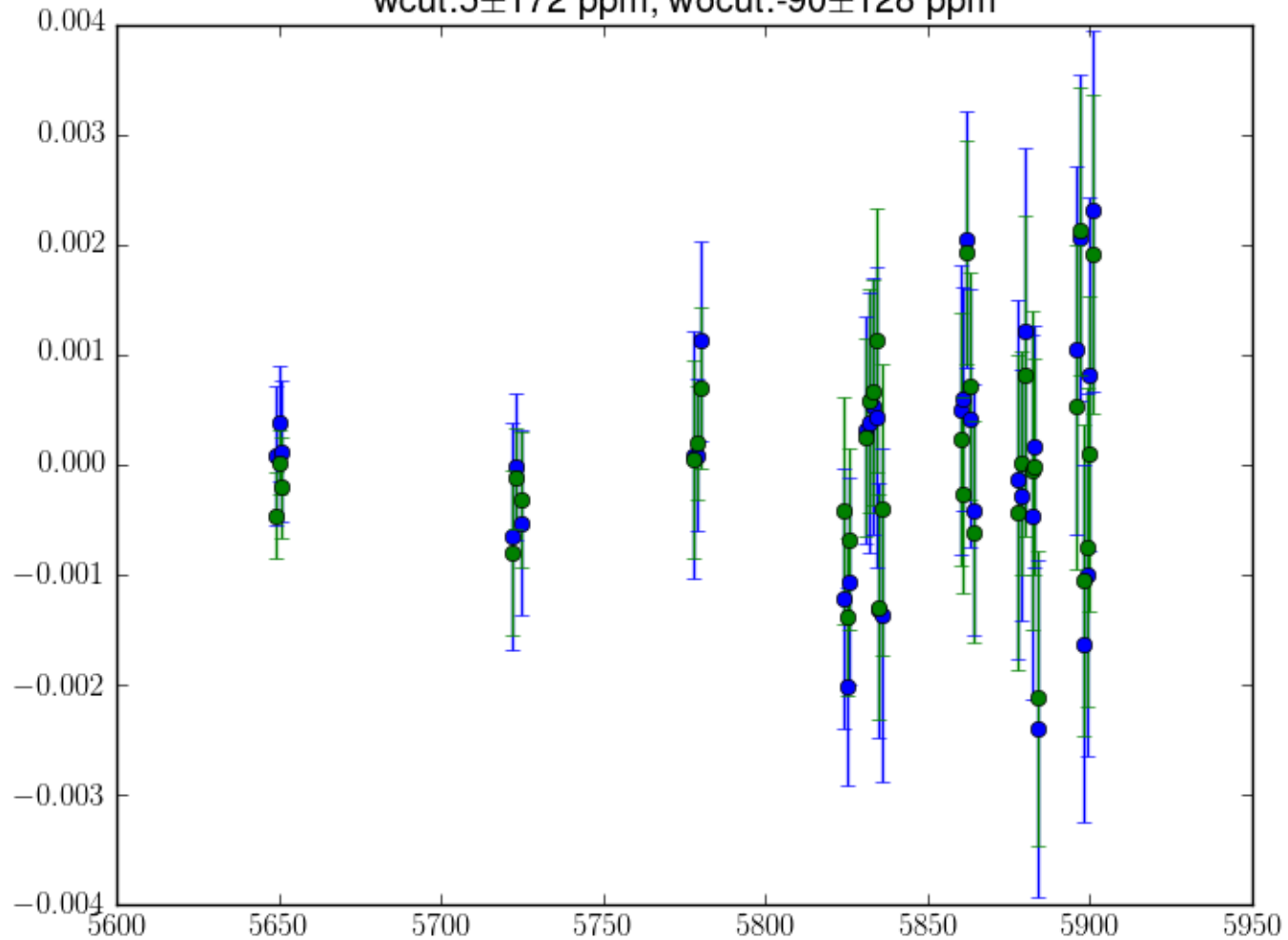


False asymmetry for whole run period

Green: without detector cut  
 Blue: with detector cut

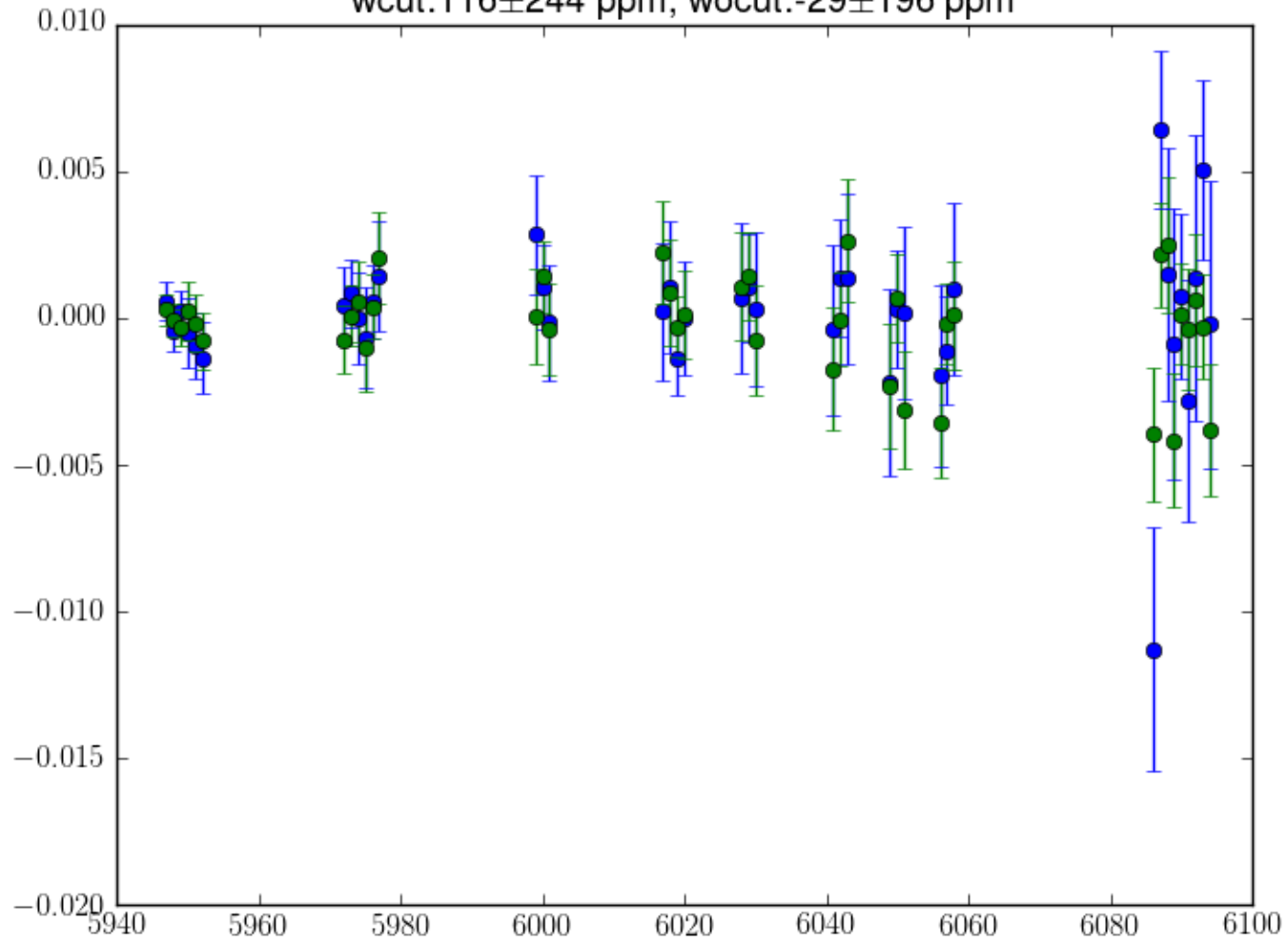
Asymmetry between:  
 $\frac{\text{pevents} \cdot \text{prescale}}{\text{pcharge} \cdot \text{plive}}$   
 $\frac{\text{mevents} \cdot \text{prescale}}{\text{mcharge} \cdot \text{mlive}}$

wcut: $5 \pm 172$  ppm, wocut: $-90 \pm 128$  ppm



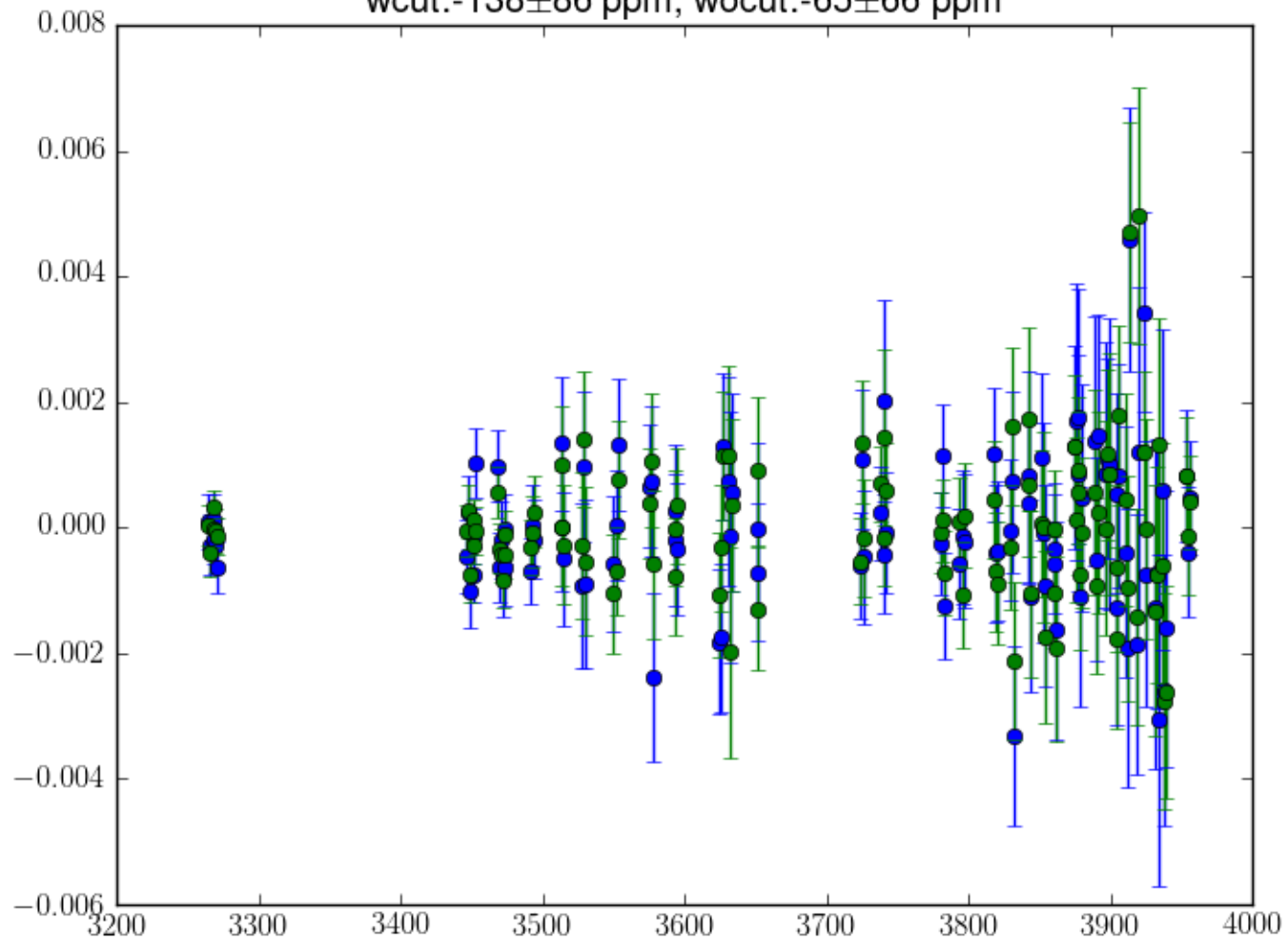
2.2GeV 5T Longitudinal

wcut:116±244 ppm, wocut:-29±196 ppm



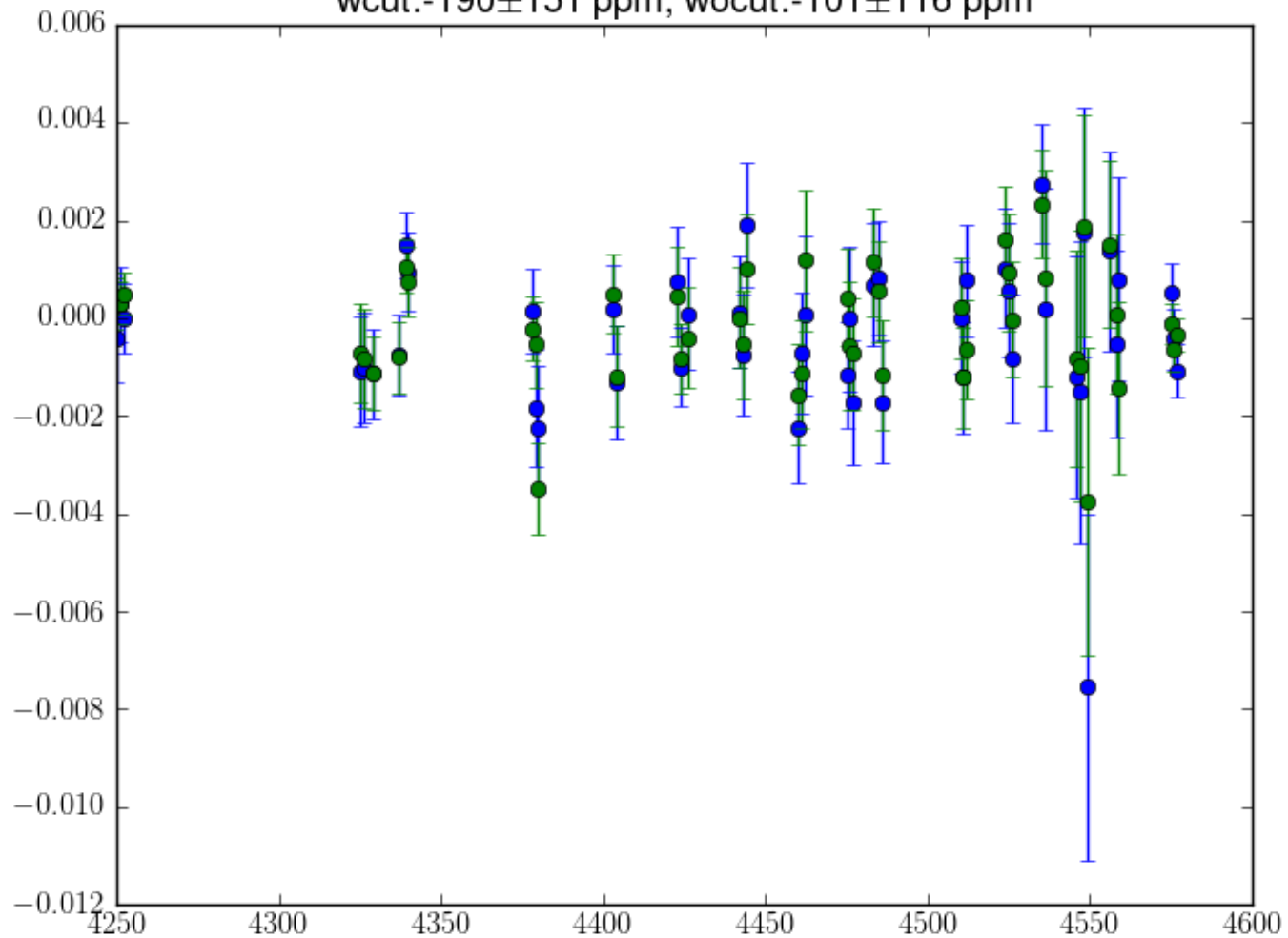
2.2GeV 5T Transverse

wcut:-138±86 ppm, wocut:-65±66 ppm

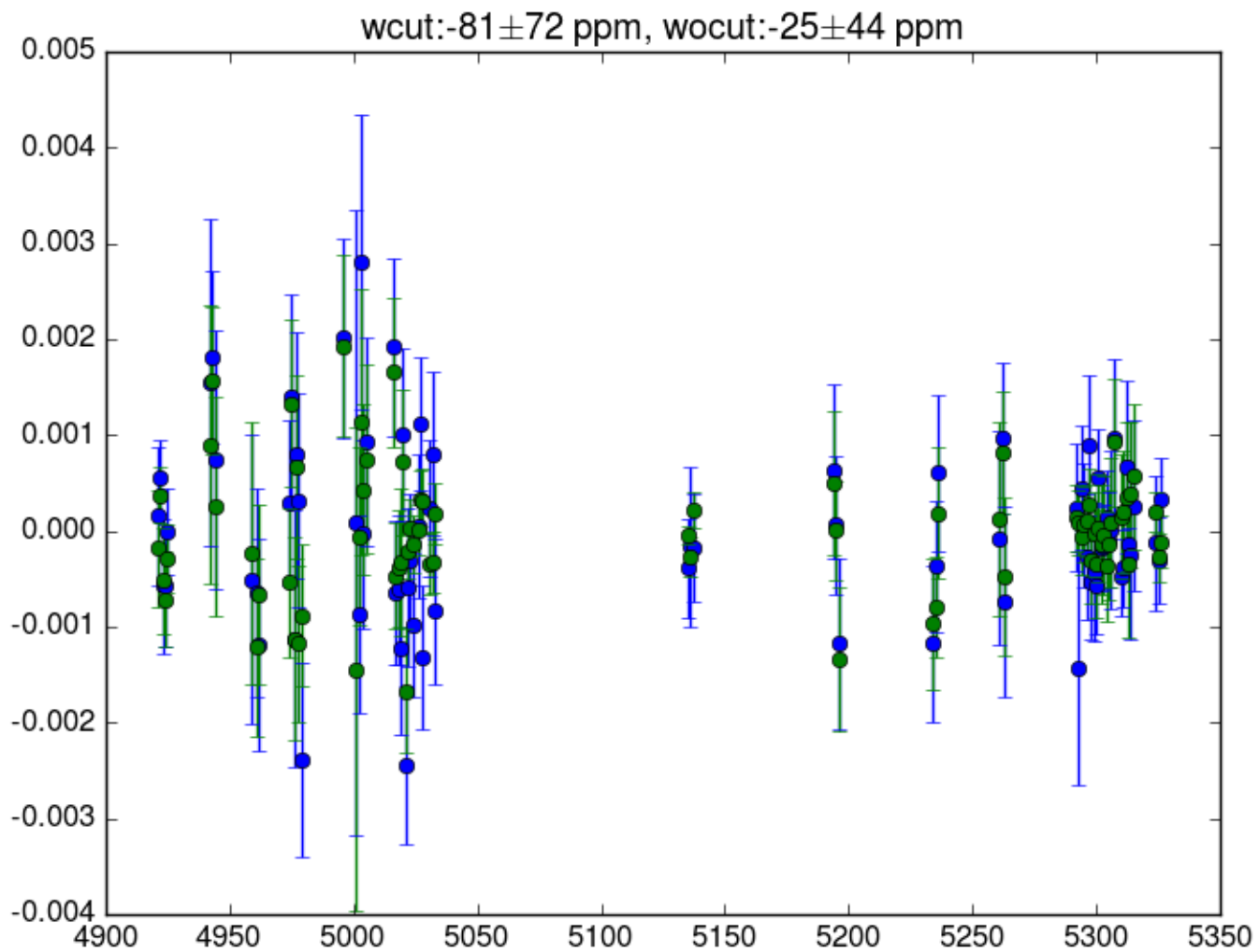


2.2GeV 2.5T Transverse

wcut: $-190 \pm 151$  ppm, wocut: $-101 \pm 116$  ppm

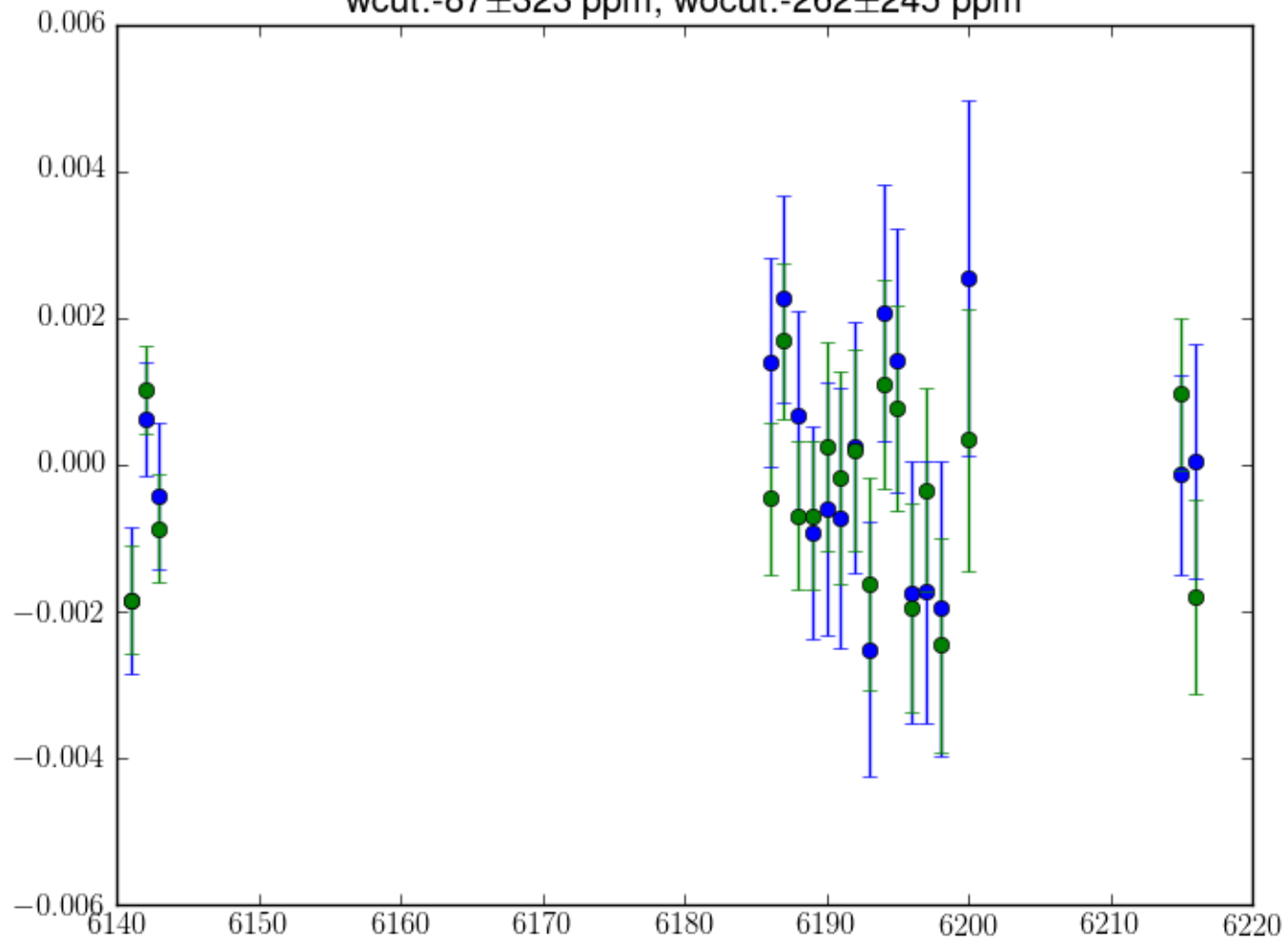


1.7GeV 2.5T Transverse



1.1GeV 2.5T Transverse

wcut: $-87 \pm 323$  ppm, wocut: $-262 \pm 245$  ppm

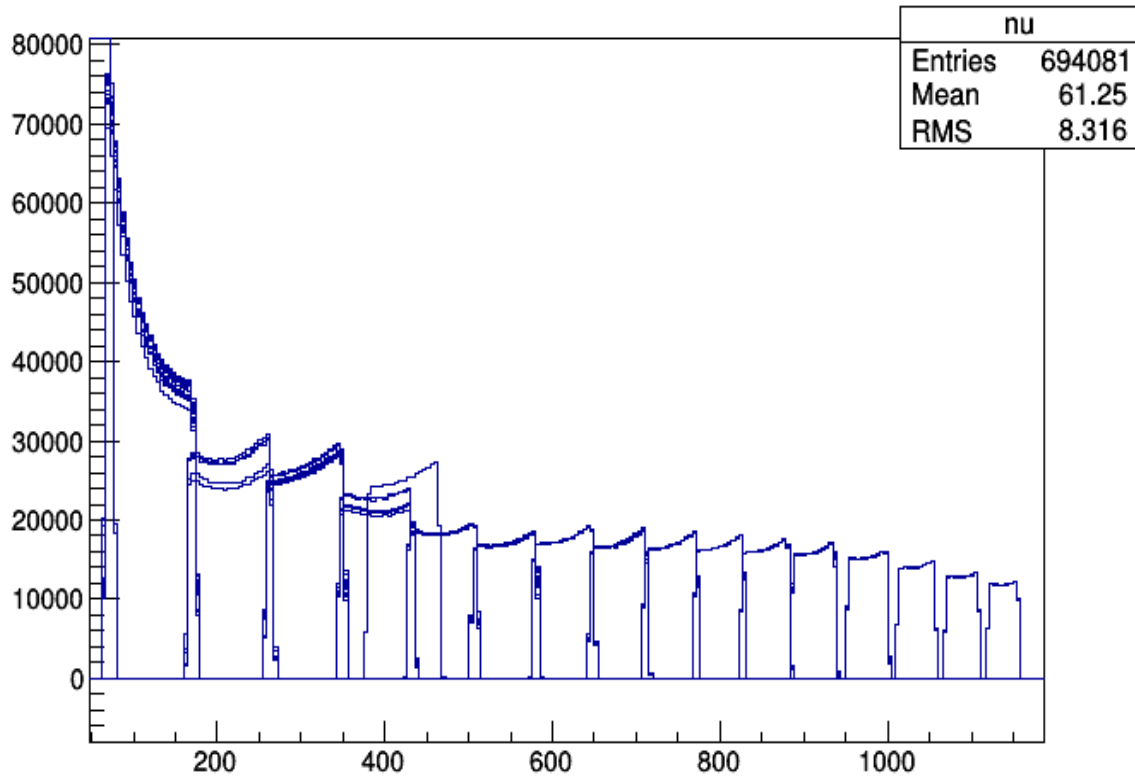


3.3GeV 5T Transverse



Other job ongoing: Yield check for 1.7GeV, 2.5T

[https://hallaweb.jlab.org/wiki/index.php/G2n\\_1711\\_25T](https://hallaweb.jlab.org/wiki/index.php/G2n_1711_25T)



HRS Momentum (MeV)	Material #	Spread (%)	Runs	Events (M)
<a href="#">1031</a>	7	1.00	14	88.4
<a href="#">1031</a>	8	0.17	2	2.4
<a href="#">1097</a>	7	0.81	13	89.6
<a href="#">1167</a>	8	1.73	18	111.2
<a href="#">1241</a>	8	0.89	19	126.4
<a href="#">1287</a>	8	0.00	1	2.4
<a href="#">1320</a>	8	7.86	19	116.0
<a href="#">1405</a>	8	4.97	20	136.0
<a href="#">1494</a>	8	14.57	6	19.0
<a href="#">1589</a>	7	5.12	21	144.2
<a href="#">1590</a>	8	0.85	3	3.1
<a href="#">1691</a>	7	1.44	3	5.5
<a href="#">1691</a>	8	0.00	1	7.0
<a href="#">572</a>	8	0.15	5	29.4
<a href="#">622</a>	8	0.68	6	35.4
<a href="#">676</a>	8	0.48	6	38.2
<a href="#">735</a>	8	0.49	9	51.8
<a href="#">798</a>	8	0.52	13	80.7
<a href="#">856</a>	8	0.48	10	65.1
<a href="#">911</a>	8	0.16	10	70.1
<a href="#">969</a>	7	0.58	15	100.6

HRS Momentum: 1320MeV

Difference for 4565,4566:

Larger slow raster

Lower dead time

Larger prescale setting

More Detail need to continue

