

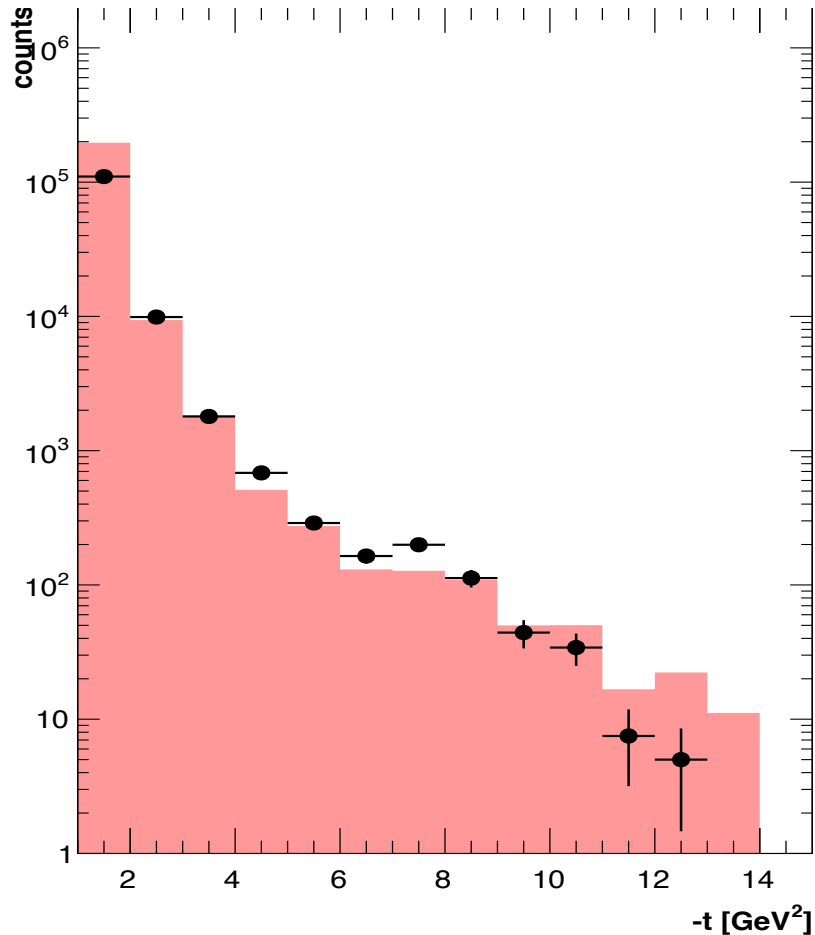
SRC/CT data collection status, Dec 15

	Start	End	Length	Triggers	PS triggers
He-4	11/10 16:00	11/20 10:00	234hrs/9.8 days	21.75B	1.46B
D2	11/20 22:00	11/23 13:00	52hrs*/2.2 days	7.99B	0.38B
C12	11/24 23:00	12/13 17:00	450hrs/18.8 days	46.63B	3.13B
D2: run until the end	12/15 2:00	12/21 7:00	149hrs/6.2 days	22.89B	1.09B
D2: before target change	12/15 2:00	12/17 10:00	56hrs/2.3 days	8.60B	0.41B
He-4: after target change	12/17 22:00	12/21 7:00	81hrs/3.4 days	7.53B	0.51B

*11 hours of beam are lost due to the solenoid dump

$$\gamma p \rightarrow \rho^0 p \rightarrow \pi^+ \pi^- p$$

(In this case, He-4 data)



Sampling from most Helium-4 runs throughout experiment.
40% of existing data (~10.5 days)

Require 2 positive tracks, 1 negative tracks, 0 showers
Kinematic Fit: p, π^+, π^- share same vertex

Event Selection Cuts:

- Confidence Level > 0.002
- $E_\gamma < 6$ GeV
- $|E_\gamma + m_N - E_\rho - E_p| > 1$ GeV
- $51 < |Z_{vertex}| < 79$ cm
- PID (CDC, BCAL, TOF) Standard for Protons and π^+
 - See explanation in: https://halldweb.jlab.org/wiki/index.php/Spring_2017_Analysis_Launch_Cuts
- $|u| > 1$ GeV²
- $|t| > 1$ GeV²
- $t > 0.2u + 2$ GeV²
- $u > 1.5$ GeV · $P_{miss}^- + 1$ GeV²
- Accidental photons subtracted
- Crude background subtraction (50% from each t-bin)

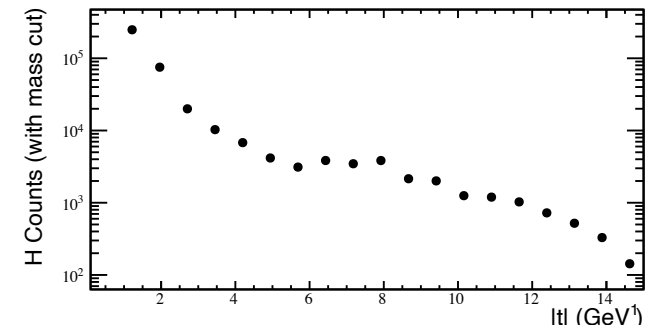
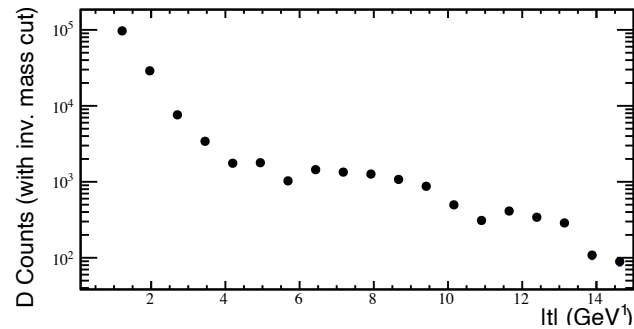
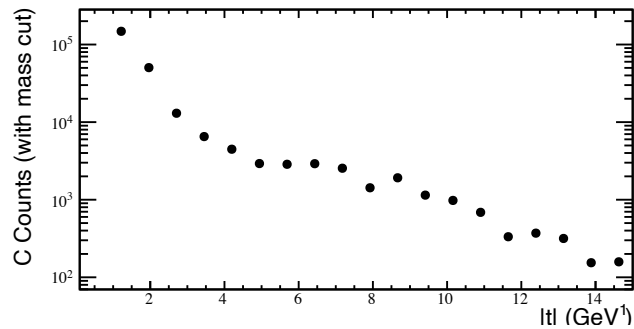
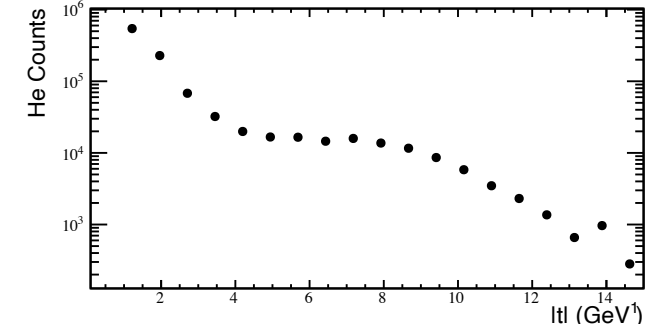
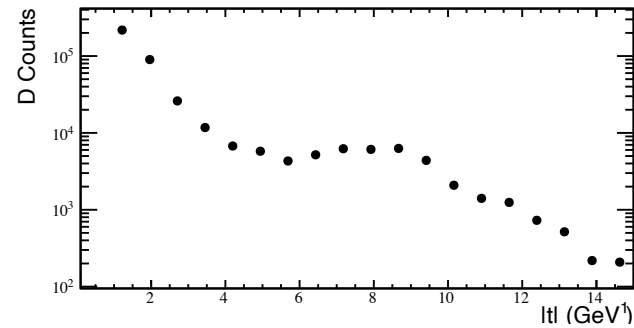
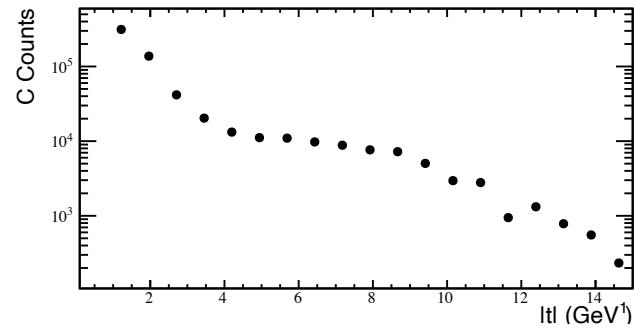
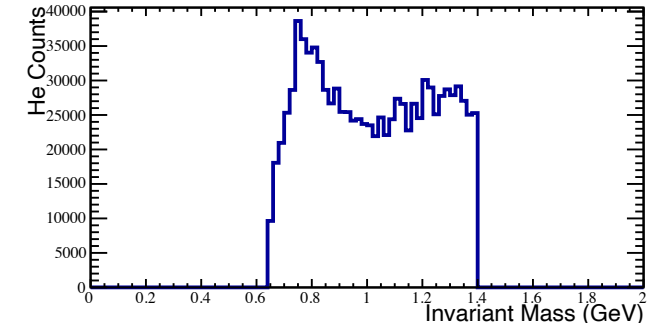
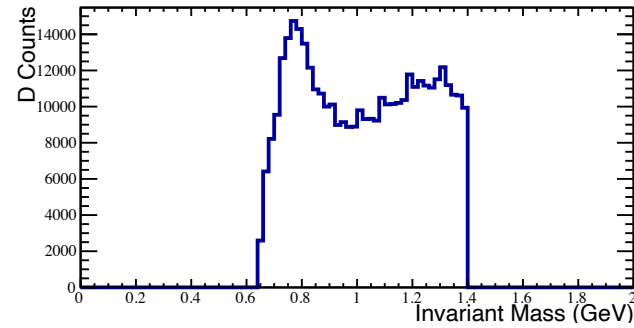
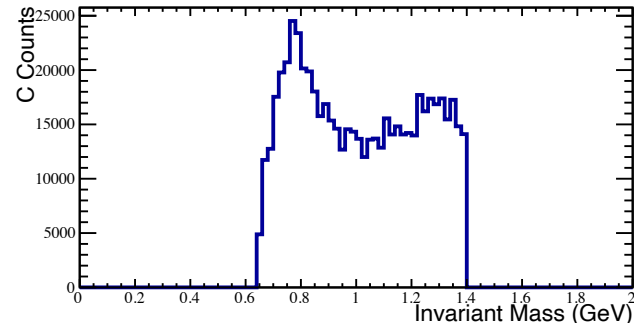
$$0.65 < M_\rho < 0.95 \text{ GeV}$$

40% of data are analyzed.
Data points are scaled to
100% of data on tape.

$$\gamma p \rightarrow \rho^0 p \rightarrow \pi^+ \pi^- p$$

current dataset, before target change to D2 yesterday

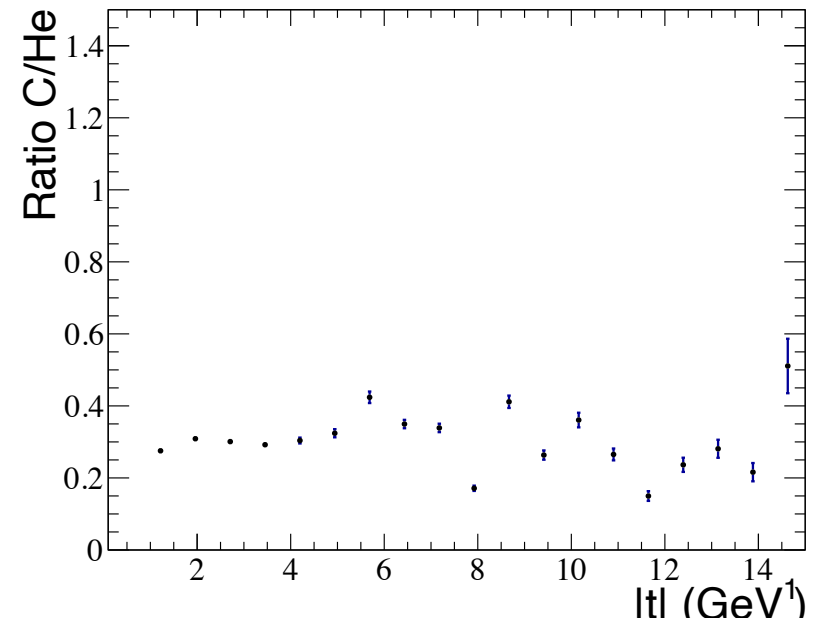
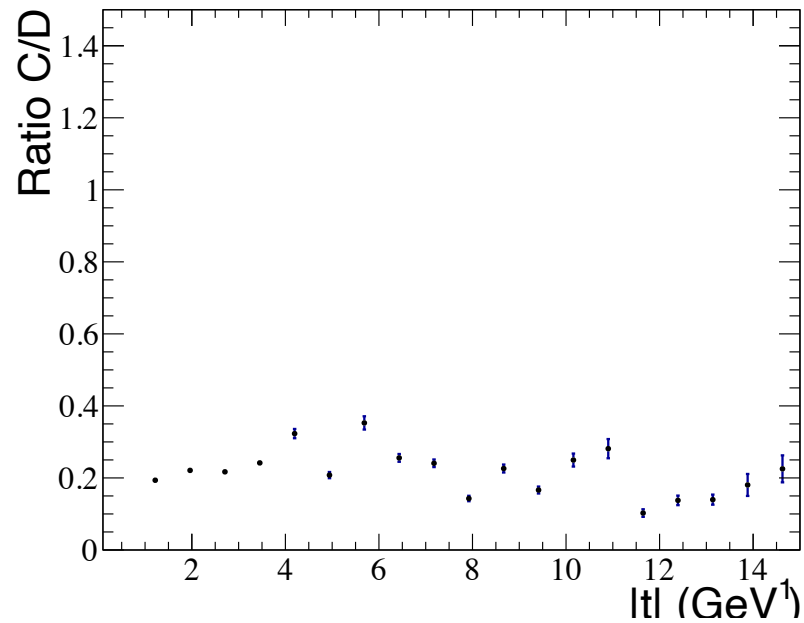
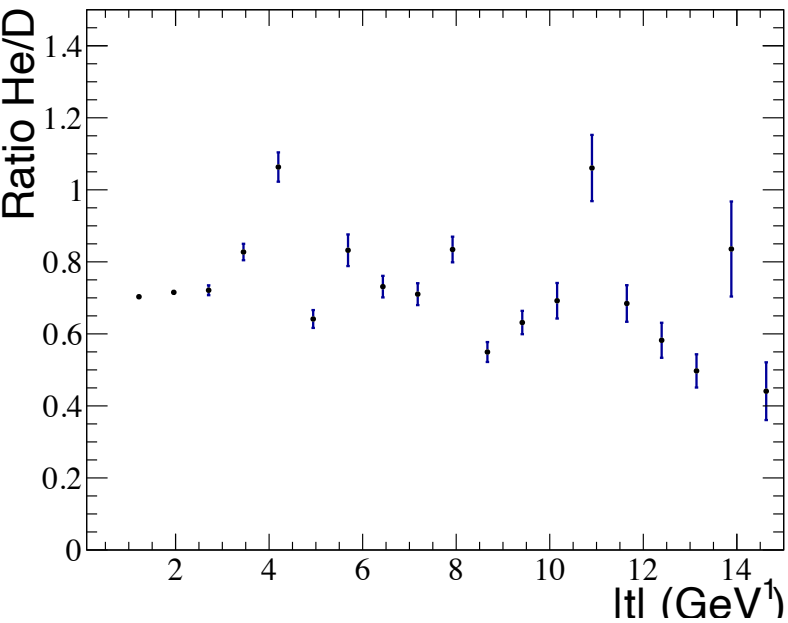
event counts



$$\gamma p \rightarrow \rho^0 p \rightarrow \pi^+ \pi^- p$$

current dataset, before target change to D2 yesterday

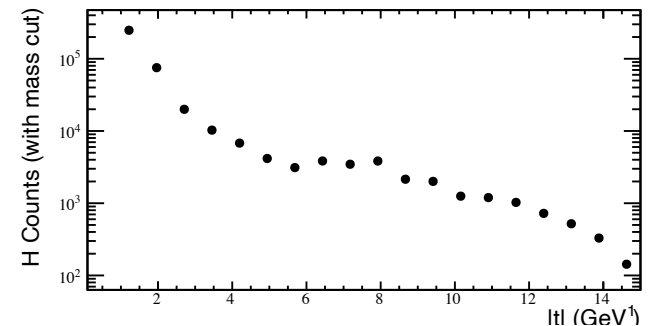
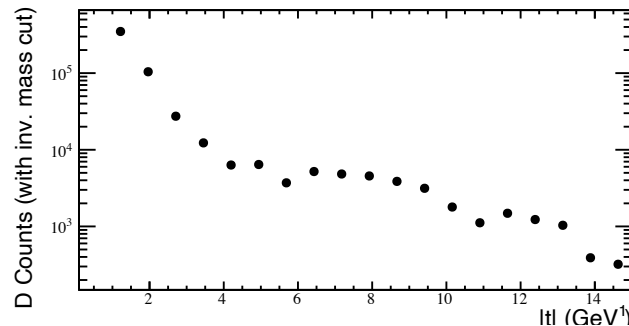
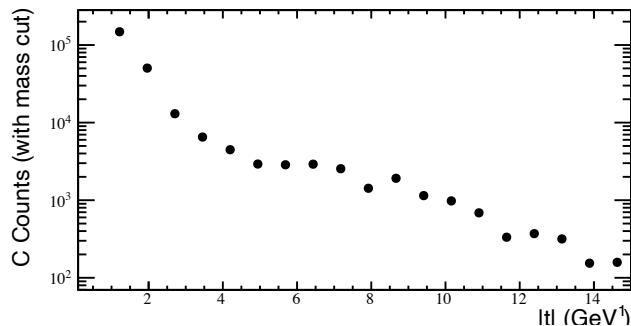
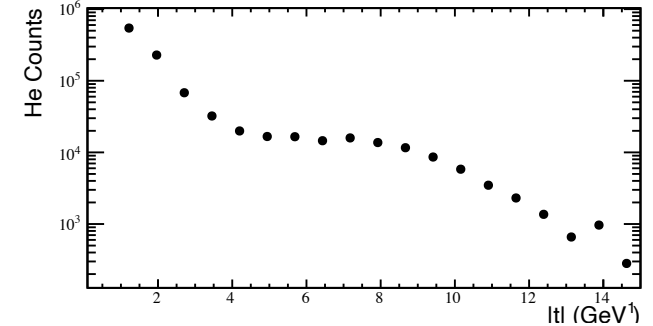
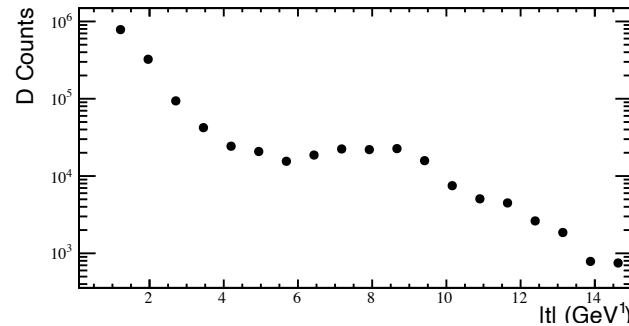
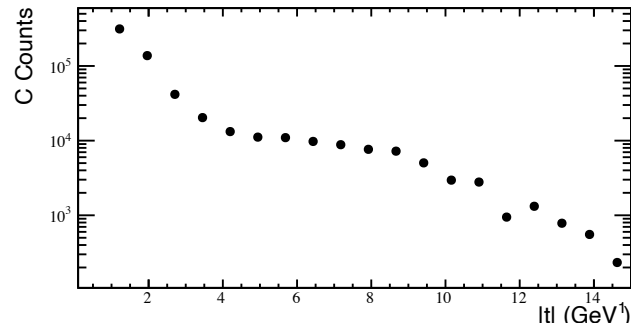
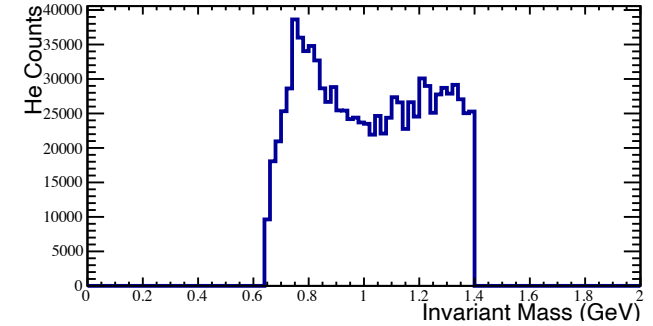
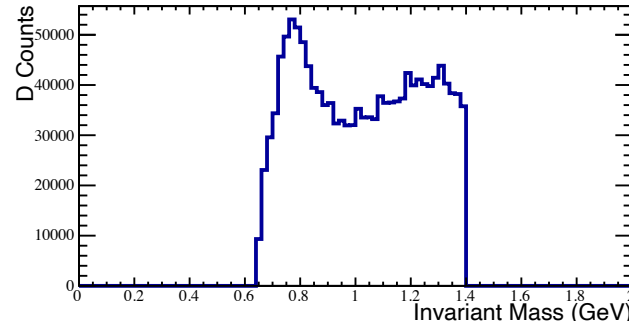
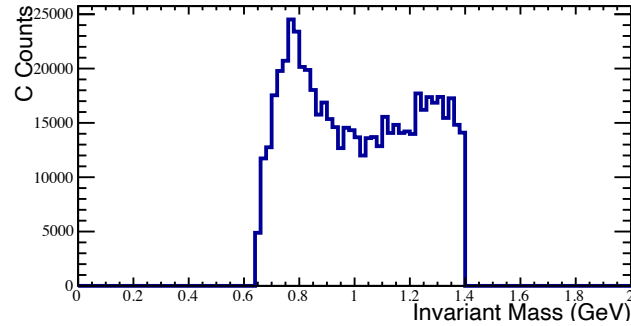
event ratios between different targets



$$\gamma p \rightarrow \rho^0 p \rightarrow \pi^+ \pi^- p$$

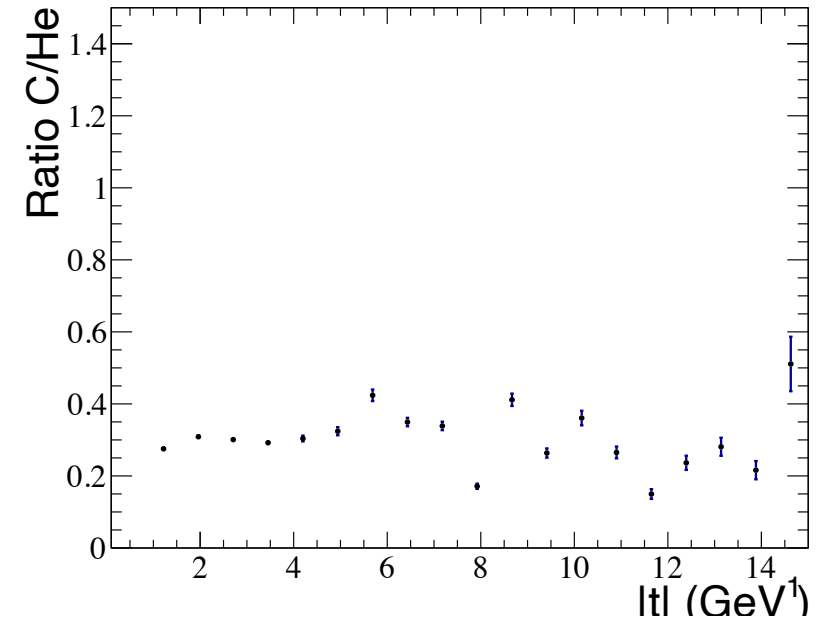
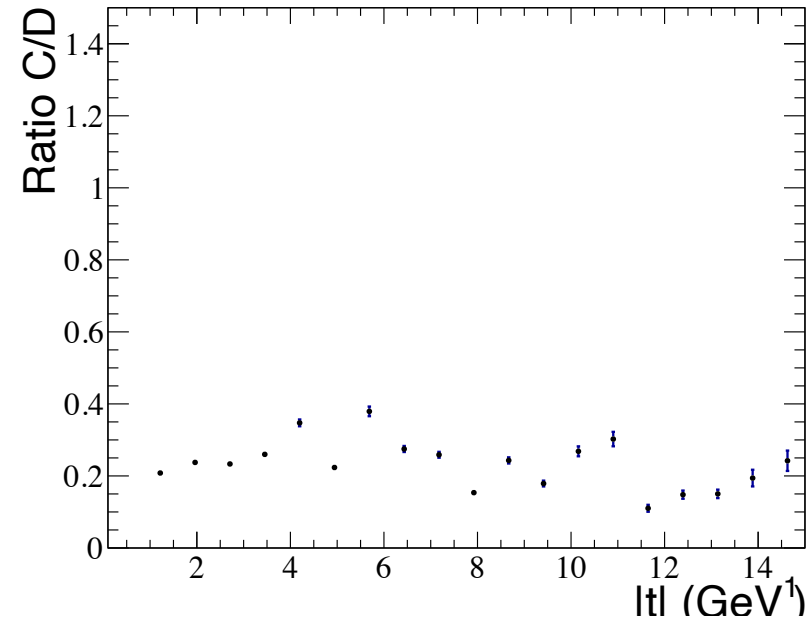
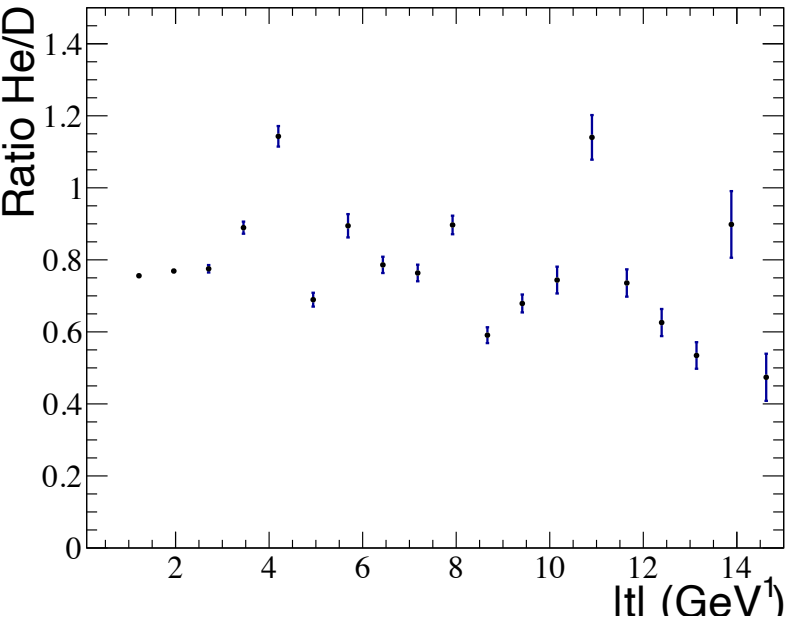
entire dataset, if we stick with deuterium until end of run

event counts



$$\gamma p \rightarrow \rho^0 p \rightarrow \pi^+ \pi^- p$$

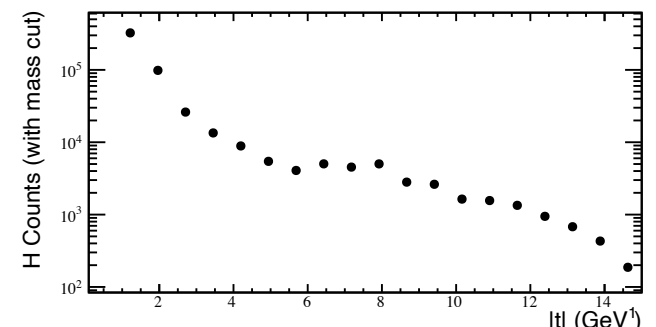
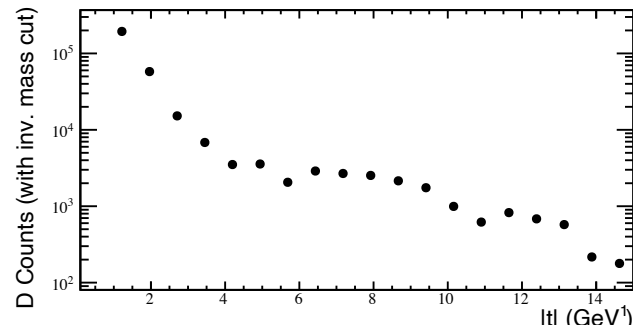
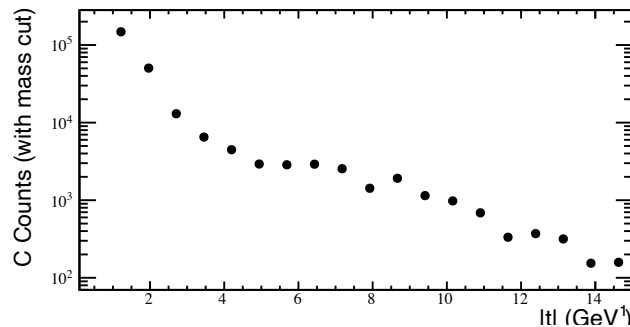
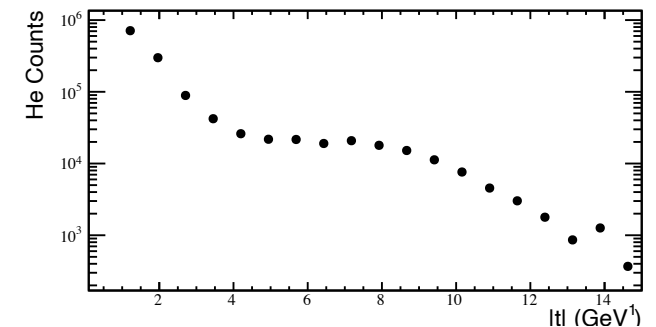
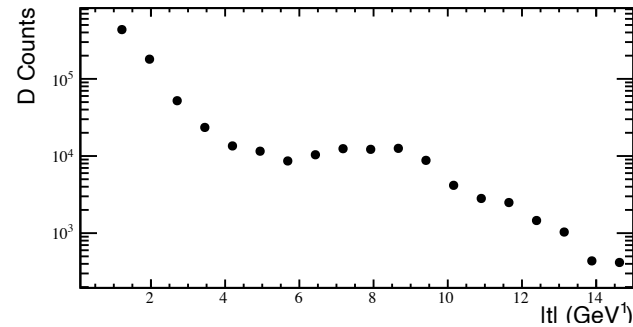
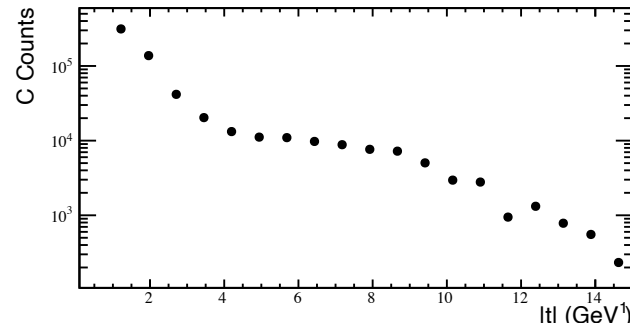
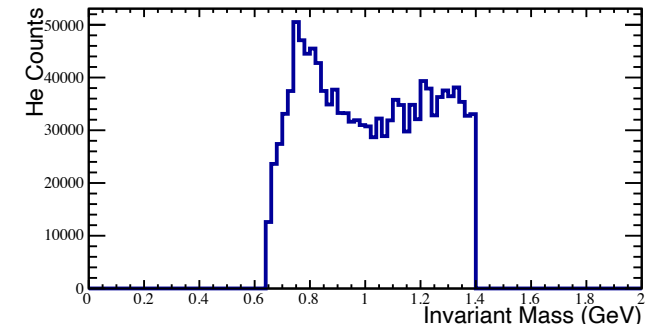
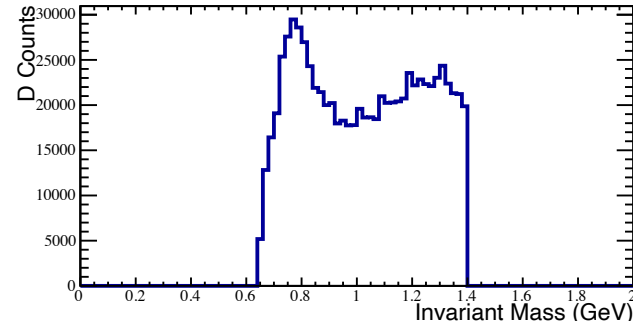
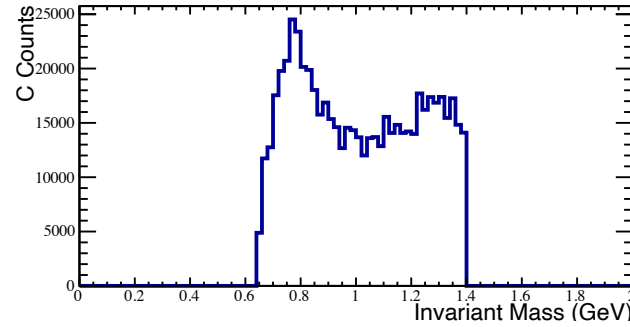
entire dataset, if we stick with deuterium until end of run
event ratios between different targets



$$\gamma p \rightarrow \rho^0 p \rightarrow \pi^+ \pi^- p$$

entire dataset, if we change target to He-4 on Friday

event counts



$$\gamma p \rightarrow \rho^0 p \rightarrow \pi^+ \pi^- p$$

entire dataset, if we change target to He-4 on Friday
event ratios between different targets

