Analysis of Cuts: Pt 6- 8 GeV

Note: asymmetry without cuts is always less than 1

Table: How asymmetry cuts affect data quality

Asymmetry Cut	# Pions1	S/T at 1 σ	S/T at 2 σ	p-val
asym < 1	2825 +/- 92	0.75	0.68	0.007
asym < 0.9	2825 +/- 91	0.75	0.68	0.007
asym < 0.8	2804 +/- 86	0.76	0.69	0.005
asym < 0.7	2608 +/- 80	0.79	0.72	0.046
asym < 0.6	2343 +/- 75	0.81	0.75	0.052

Analysis of Cuts: Pt 8-10 GeV

Note: asymmetry without cuts is always less than 1

Table: How asymmetry cuts affect data quality

Asymmetry Cut	# Pions1	S/T at 1 σ	S/T at 2 σ	p-val
asym $<$ 1	3300 +/- 95	0.81	0.74	0.698
asym $<$ 0.9	3300 +/- 95	0.81	0.74	0.698
asym $<$ 0.8	3158 +/- 91	0.83	0.77	0.446
asym $<$ 0.7	2641 +/- 80	0.84	0.79	0.714
asym $<$ 0.6	2132 +/- 70	0.84	0.79	0.791

Analysis of Cuts: Pt 10-12 GeV

Note: asymmetry without cuts is always less than 1

Table: How asymmetry cuts affect data quality

Asymmetry Cut	# Pions1	S/T at 1 σ	S/T at 2 σ	p-val
asym < 1	5056 +/- 112	0.86	0.82	0.013
asym < 0.9	5056 +/- 112	0.86	0.82	0.013
asym < 0.8	4459 +/- 100	0.88	0.84	0.036
asym < 0.7	3779 +/- 88	0.89	0.86	0.046
asym < 0.6	3139 +/- 78	0.90	0.87	0.494

Analysis of Cuts: Pt 12-14 GeV

Note: asymmetry without cuts is always less than 1

Table: How asymmetry cuts affect data quality

Asymmetry Cut	# Pions1	S/T at 1 σ	S/T at 2 σ	p-val
asym < 1	3219 +/- 99	0.85	0.80	0.686
asym < 0.9	3206 +/- 98	0.85	0.80	0.649
asym < 0.8	2716 +/- 83	0.89	0.85	0.723
asym < 0.7	2183 +/- 69	0.91	0.88	0.283
asym < 0.6	1712 +/- 59	0.93	0.90	0.158

Analysis of Cuts: Pt 14-16 GeV

Note: asymmetry without cuts is always less than 1

Table: How asymmetry cuts affect data quality

Asymmetry Cut	# Pions1	S/T at 1 σ	S/T at 2 σ	p-val
asym $<$ 1	1025 +/- 81	0.75	0.68	0.418
asym $<$ 0.9	989 +/- 75	0.75	0.68	0.266
asym $<$ 0.8	798 +/- 59	0.82	0.77	0.434
asym $<$ 0.7	518 +/- 46	0.78	0.72	0.573
asym $<$ 0.6	388 +/- 37	0.80	0.75	0.822