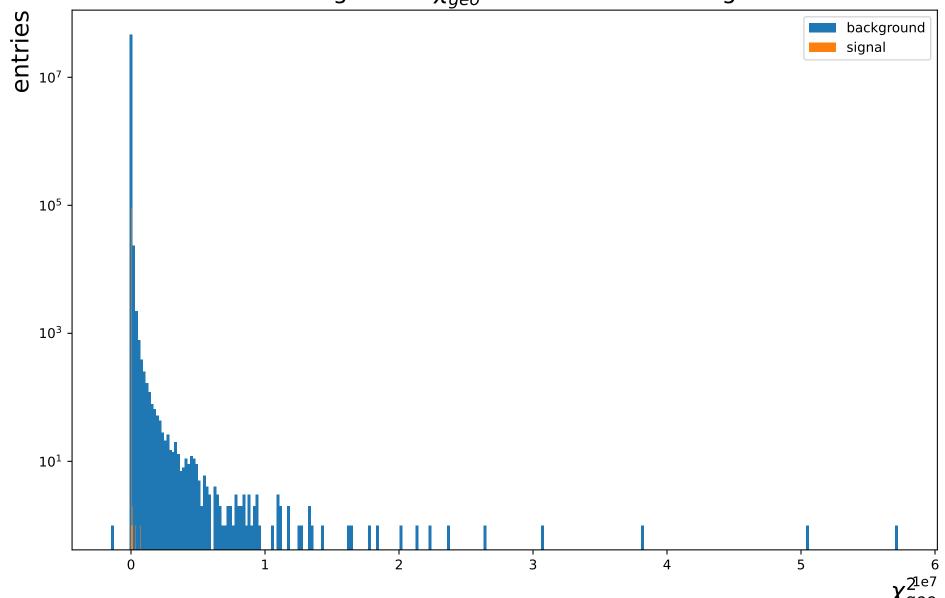
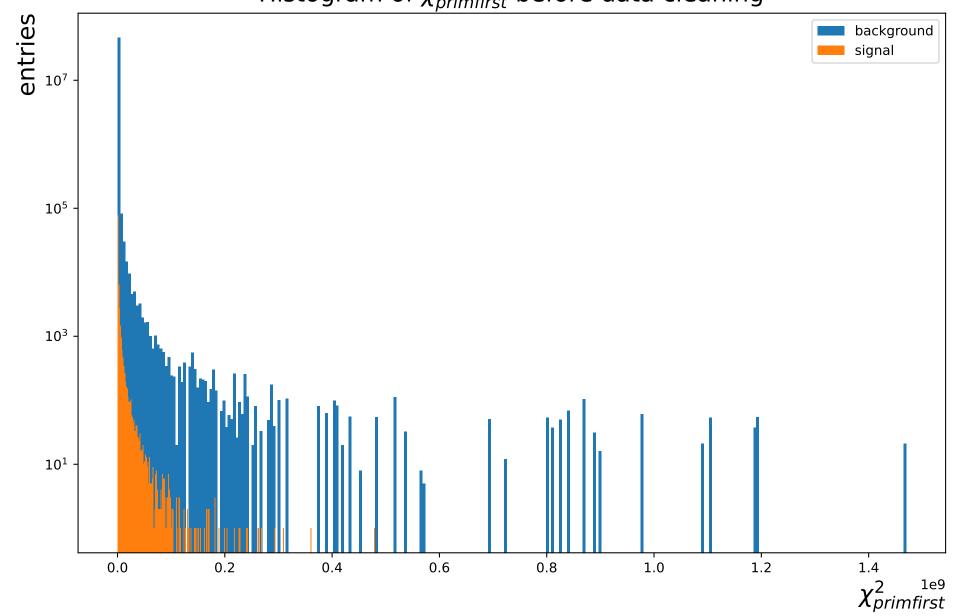
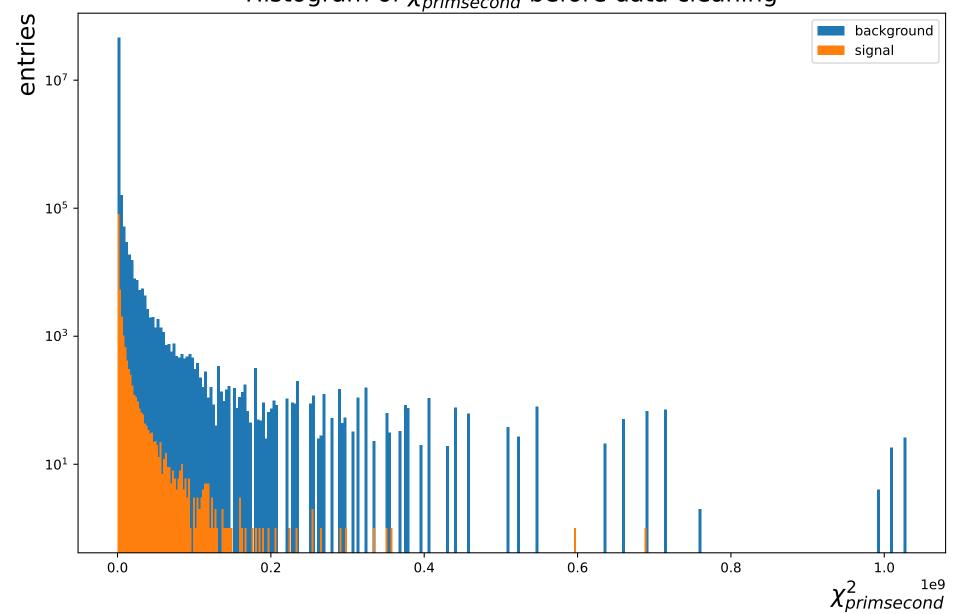
Histogram of  $\chi^2_{geo}$  before data cleaning



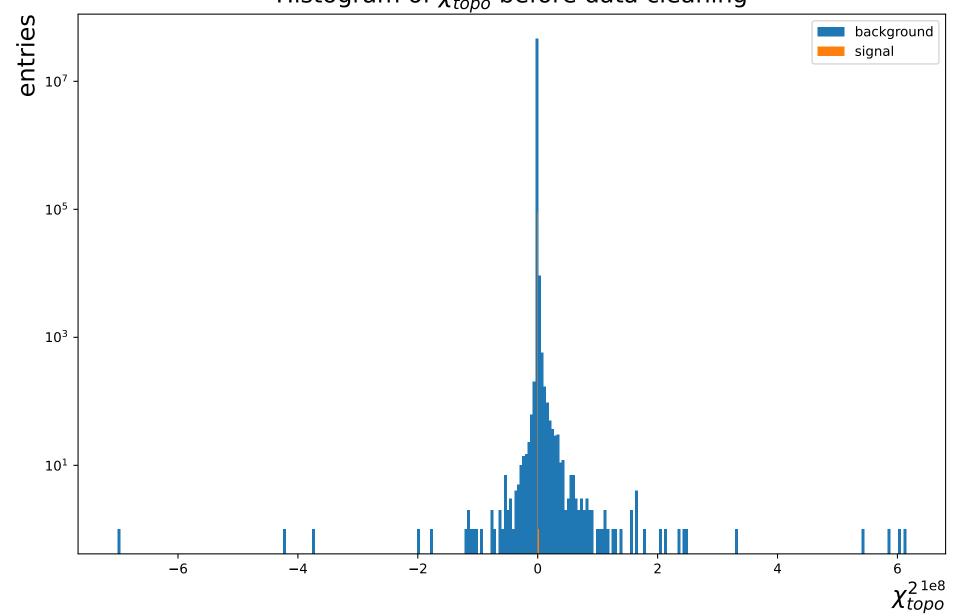
Histogram of  $\chi^2_{primfirst}$  before data cleaning



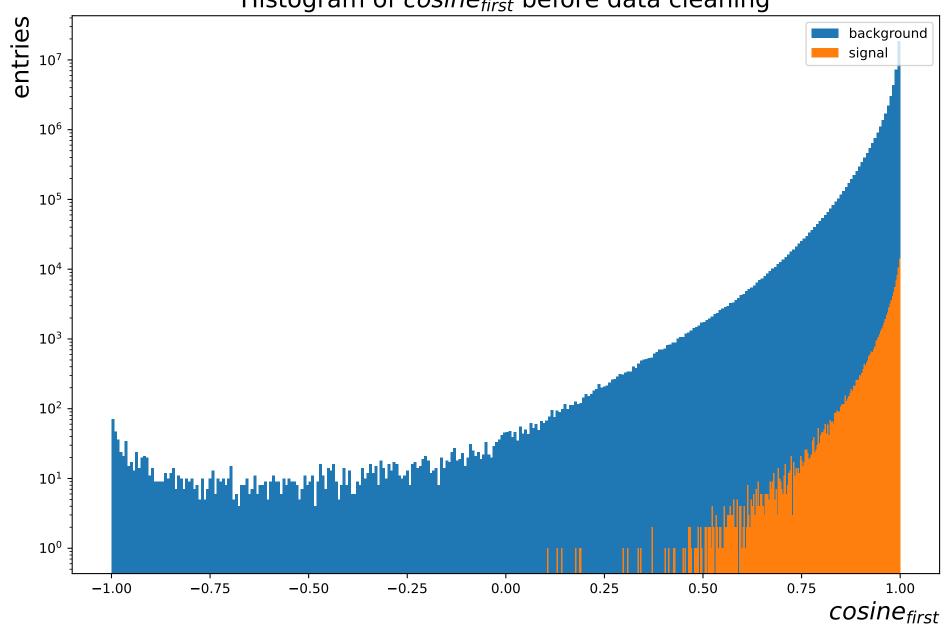
Histogram of  $\chi^2_{primsecond}$  before data cleaning



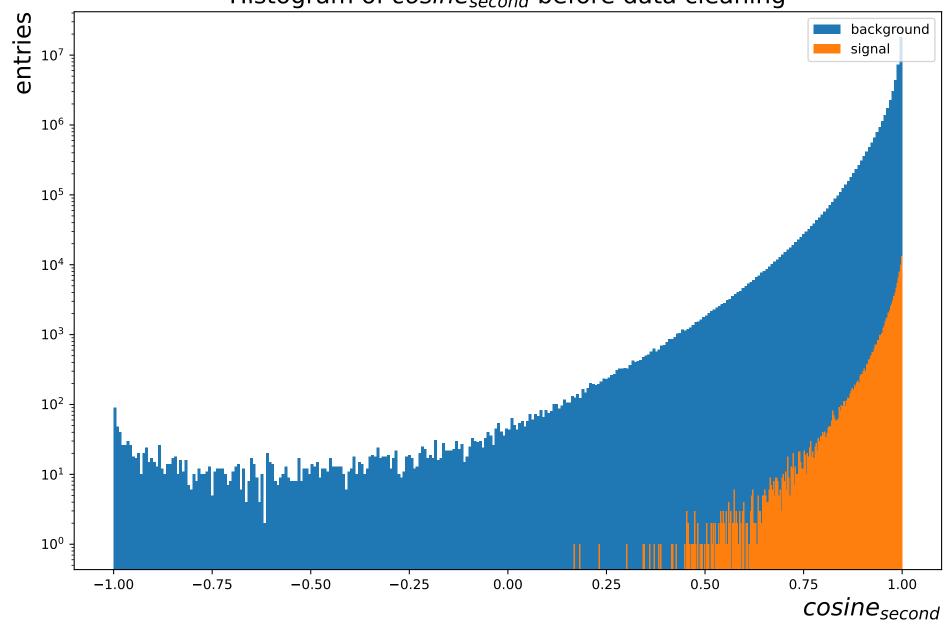
Histogram of  $\chi^2_{topo}$  before data cleaning



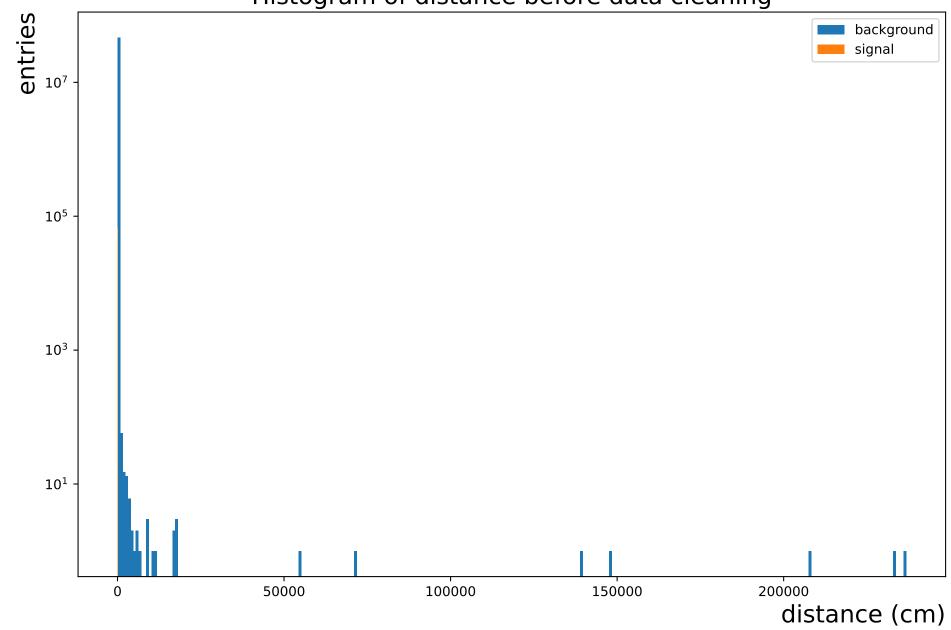
Histogram of cosine first before data cleaning



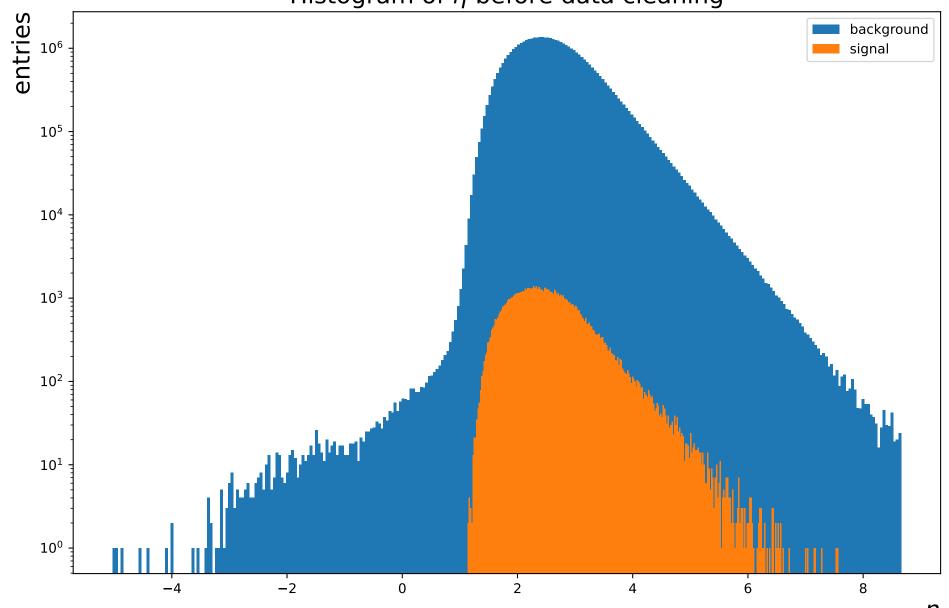
Histogram of cosine second before data cleaning



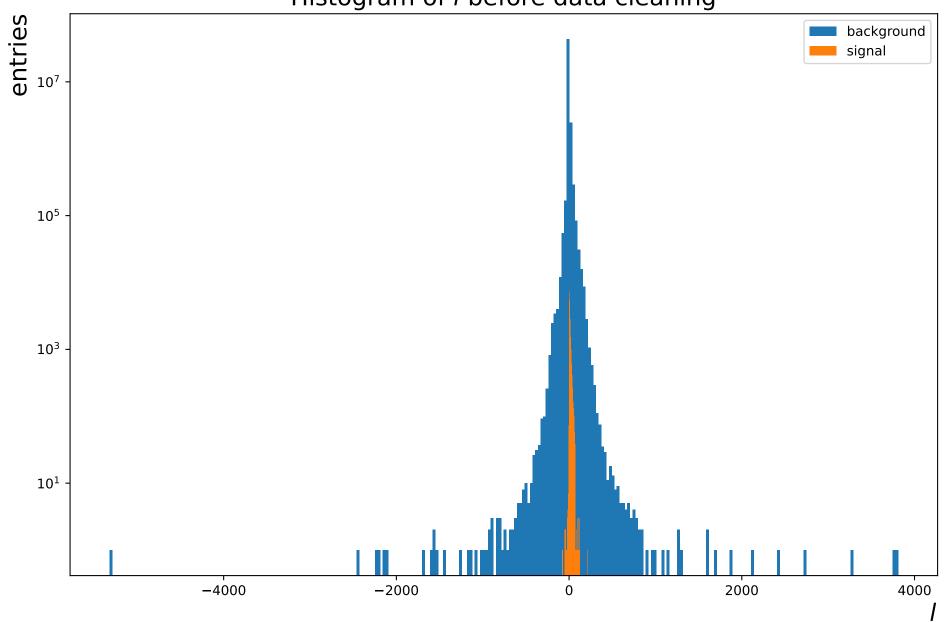
Histogram of cosine<sub>topo</sub> before data cleaning entries background 10<sup>7</sup> signal  $10^{6}$  $10^{5}$  $10^{4}$  $10^{3}$ 10<sup>2</sup>  $10^1$ 10<sup>0</sup> 0.50 0.75 1.00 -0.75 0.25 -1.00-0.50-0.250.00  $cosine_{topo}$  Histogram of distance before data cleaning



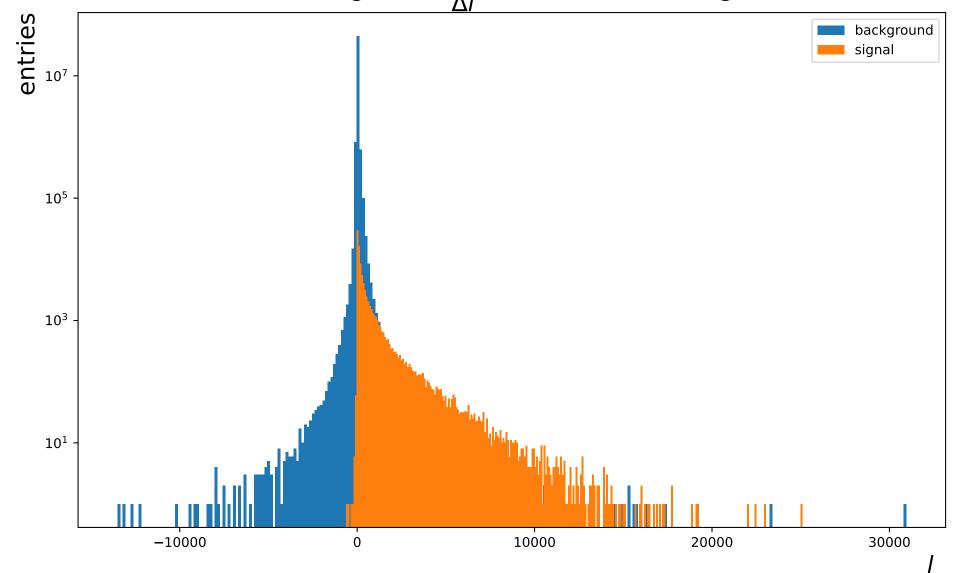
Histogram of  $\eta$  before data cleaning



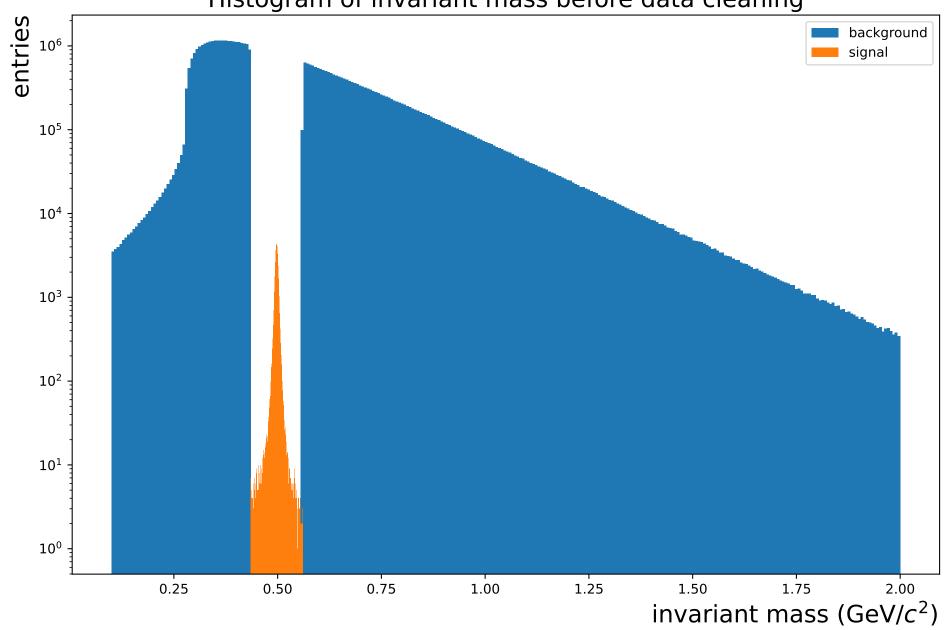
Histogram of I before data cleaning



Histogram of  $\frac{I}{\Lambda I}$  before data cleaning

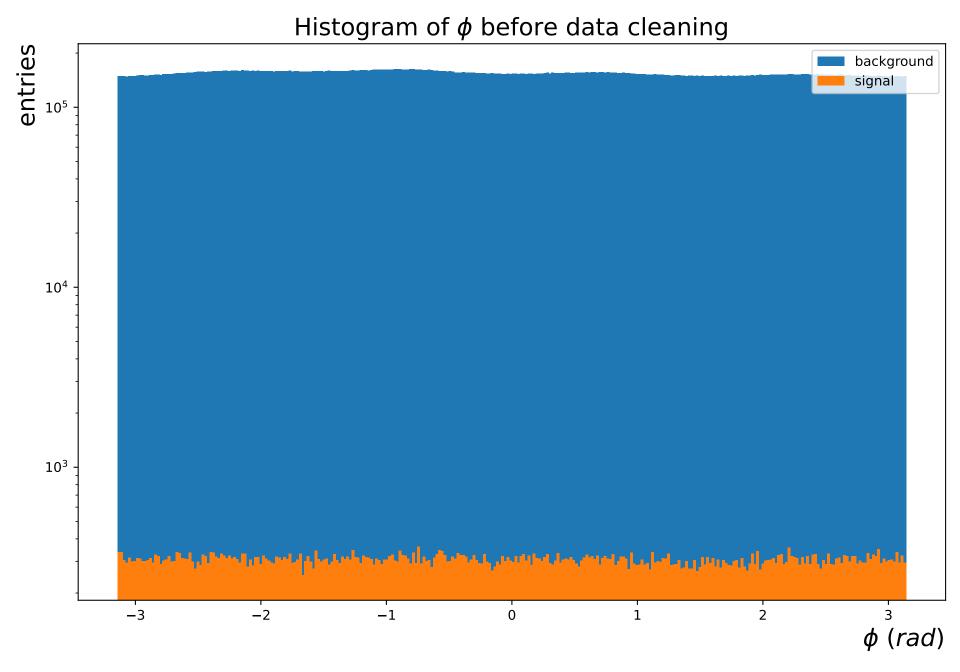


Histogram of invariant mass before data cleaning

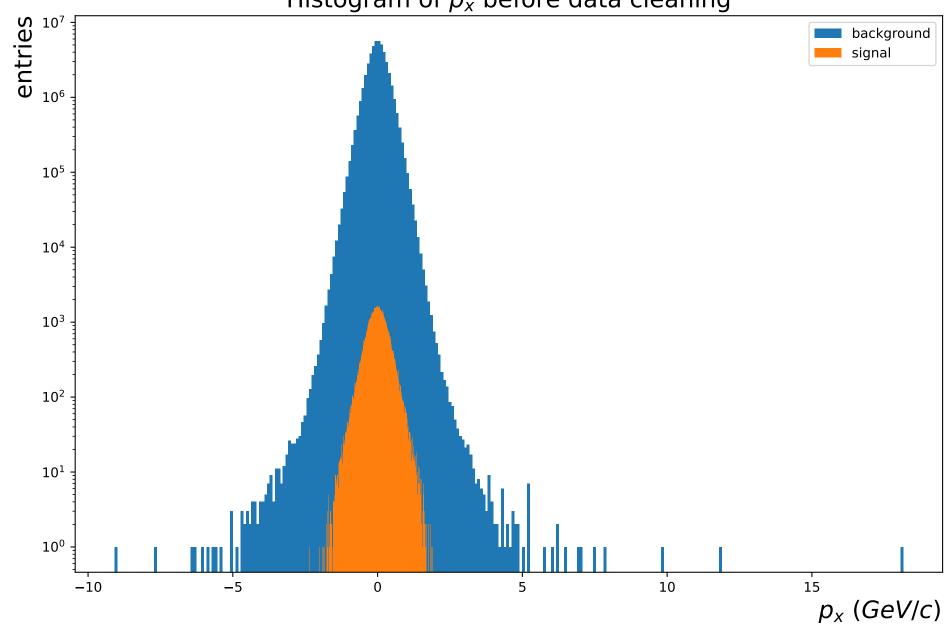


Histogram of p before data cleaning entries 10<sup>7</sup> background signal 10<sup>6</sup> -10<sup>5</sup>  $10^{4}$ 10<sup>3</sup> 10<sup>2</sup>  $10^1$ 10<sup>0</sup> = 175 25 . 75 100 125 150 50 p(GeV/c)

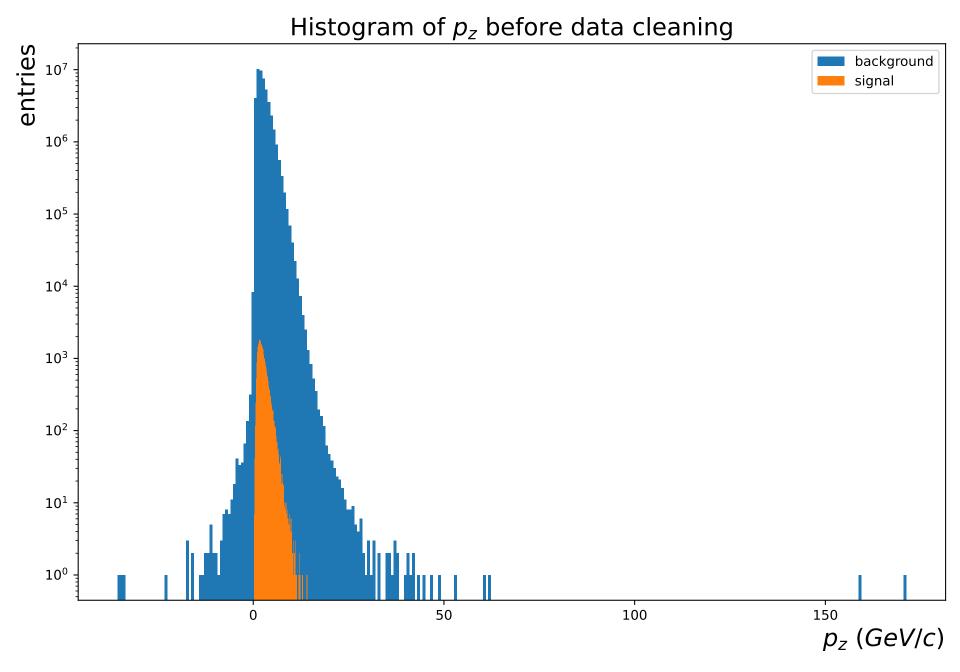
Histogram of pT before data cleaning entries background 10<sup>7</sup> signal 10<sup>6</sup> -10<sup>5</sup>  $10^{4}$ 10<sup>3</sup> 10<sup>2</sup>  $10^1$ 10<sup>0</sup> -25 30 5 15 20 35 40 Ó 10 pT (GeV/c)



Histogram of  $p_x$  before data cleaning



Histogram of  $p_y$  before data cleaning entries background 10<sup>7</sup> signal 10<sup>6</sup> -10<sup>5</sup>  $10^{4}$ 10<sup>3</sup> 10<sup>2</sup>  $10^1$ 10<sup>0</sup>  $p_y$  (GeV/c) 20 30 Ó -10 10



Histogram of rapidity before data cleaning entries background 10<sup>6</sup> signal  $10^{5}$  $10^{4}$ 10<sup>3</sup> 10<sup>2</sup> 10<sup>1</sup> 10<sup>0</sup> \_ \_2 0 2 3 rapidity

Histogram of x before data cleaning entries background signal 10<sup>5</sup> -10<sup>3</sup> -10<sup>1</sup> --1000 1000 2000 -5000 -4000 -3000 -2000 *x* (*cm*)

Histogram of y before data cleaning background signal 10<sup>5</sup> -10<sup>3</sup> -10<sup>1</sup> ò 2500 5000 -12500 -10000 **-7500** -5000 **-**2500

Histogram of z before data cleaning background signal 10<sup>5</sup> -10<sup>3</sup> -10<sup>1</sup> --10000 5000 -20000 -15000 -5000 z (cm)