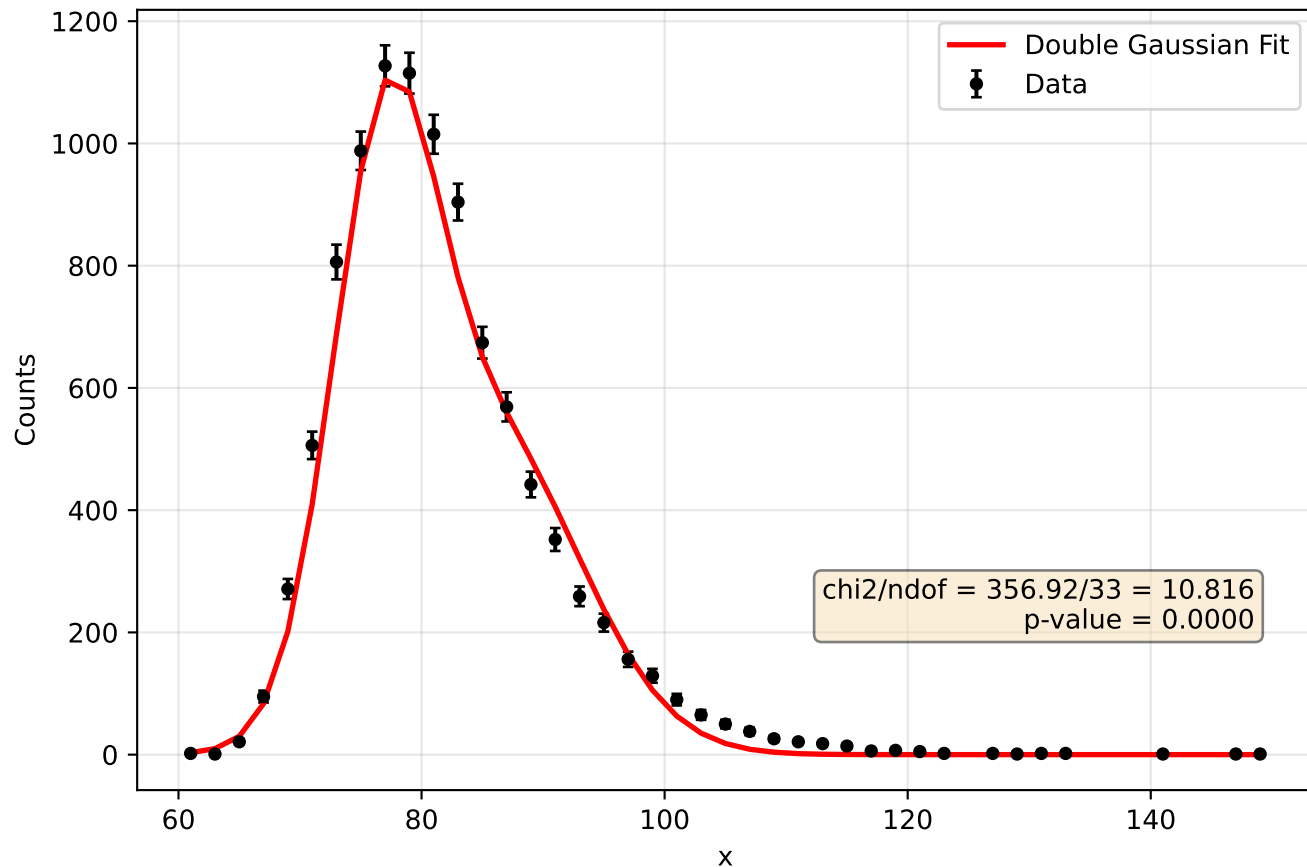
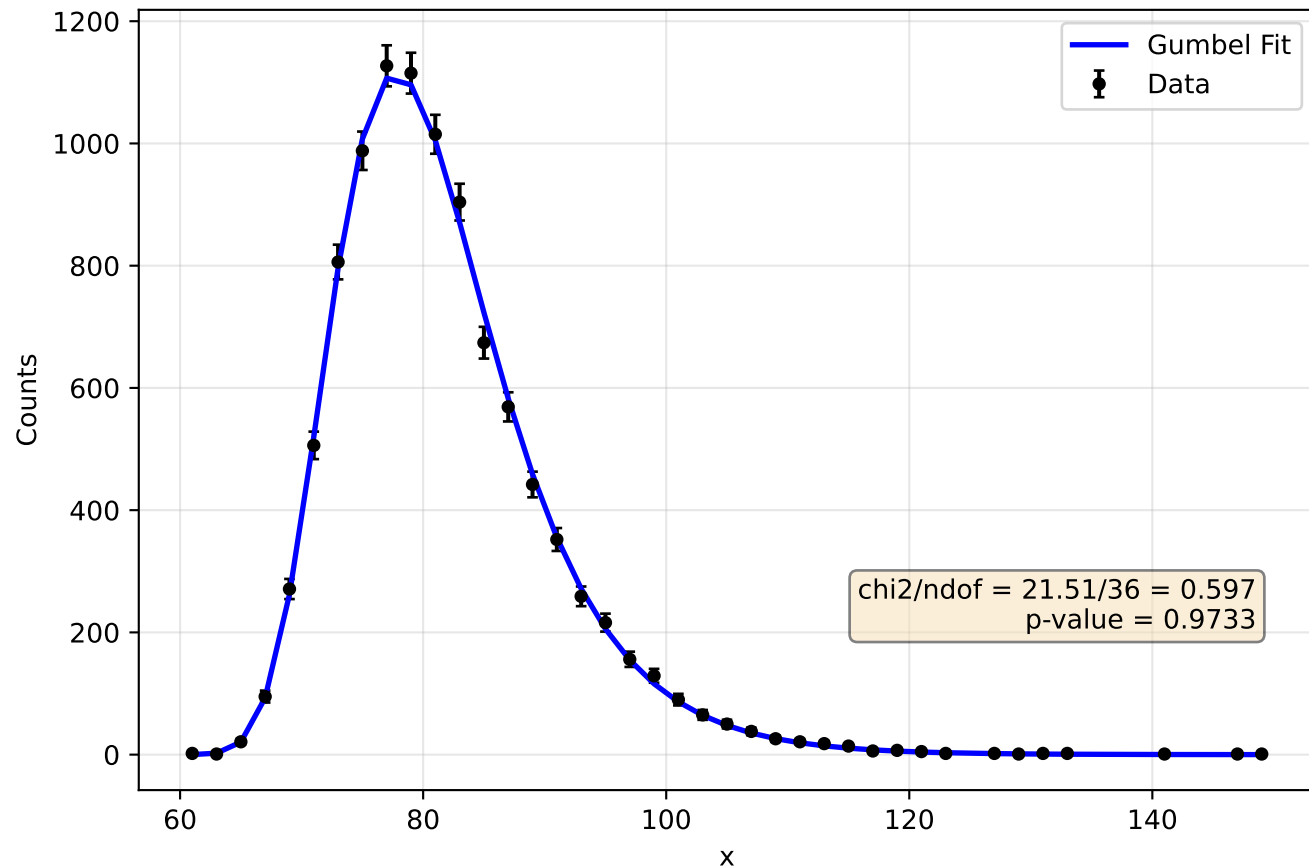


Double Gaussian Fit



Gumbel Fit



Double Gaussian:
 $\text{Chi2/ndof} = 356.92/33 = 10.816$
 $\text{p-value} = 0.000000$
 $\text{NLL} = -53843.46$

Gumbel:
 $\text{Chi2/ndof} = 21.51/36 = 0.597$
 $\text{p-value} = 0.973269$
 $\text{NLL} = -54336.47$

Likelihood Ratio Test:
 $-2\text{delt_lnL} = -986.02$
 $\text{delt_k} = 3$
 $\text{p_lrt} = 1.000000$

Gumbel model best fits the data based on reduced chi and p-value near 1 and the p_lrt being significantly greater than 0.05 Double gaussian has a significant chi2 reduce and p-value of 0 which demonstrates a poor fit