1 Comments

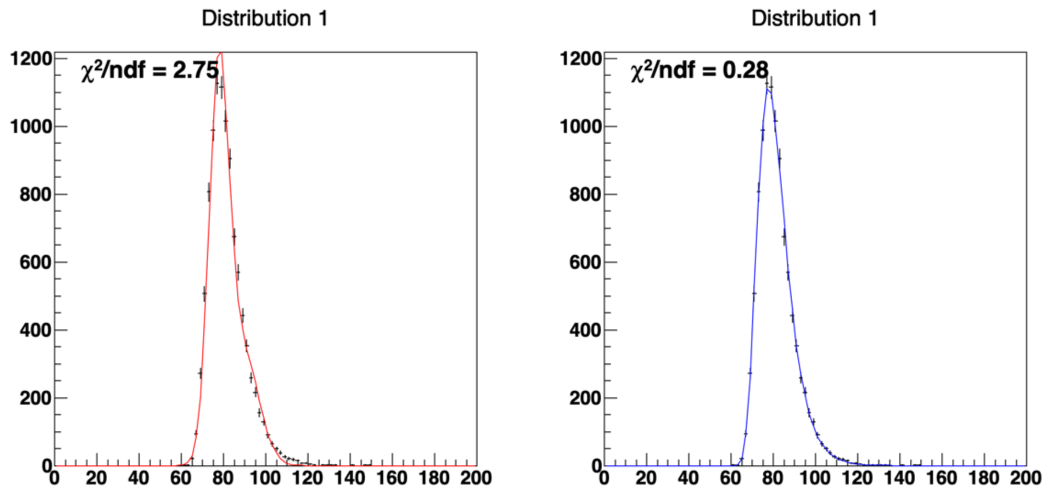

Figure 1:

The output from my script is:

========== Results ========== Two-Gaussian Fit: Chi2 = 258.416 ndf = 94 Chi2/ndf = 2.7491 p-value = 2.83662e-17

Gumbel Fit: Chi2 = 27.3661 ndf = 97 Chi2/ndf = 0.282125 p-value = 1

Preferred model: Gumbel (higher p-value) ================================

While both curves seem to visually fit the data, the Two-Gaussian is a horrible model for the data because its p-value is so low. My Gumbel fit is too good, so errors might have been overestimated. We can tell that something is up since the reduced chi2 is significantly smaller than 1 and the p value is perfectly 1. The issue probably comes from the data and not the fitting since we're working with simulated data and all that