Discussion of the charts

Generally using a 5120 buffer gave a better compression however it also had the longest compression times, in most cases about a 400% increase in compression times when compared to a buffer of size 1024. There seems to be a correlation between the buffer size and the compression time. This is most likely due to the linear search used in the implementation of LZ77. Another interesting thing that happens when you look at the graphs is that the higher the buffer the lower the frequency of each offset value and length.

Well looking at the mean and standard deviations it’s apparent that when the buffer size is increased that the mean and standard deviations also increase. This is most likely due to the fact that the buffer can now reach a grater difference in values during its search