


Introduction to Probability, Statistics and Data Handling	
AGH UST ESA LAB 2	Non-normal data, censored and uncensored data

1. The Probability Plots procedure plots the data in a single numeric column on graphs that are specifically scaled so that, if the data come from a particular distribution, the observations will fall approximately along a straight line. The procedure includes plots for the uniform, normal, lognormal, Weibull, smallest extreme value, logistic, and exponential distributions. For the details visit [here](#). Try to know about all sort of distributions and add details for them in the lab report.
2. The Distribution Fitting (Uncensored Data) procedure fits any of 46 probability distributions to a column of numeric data. The data are assumed to be uncensored, i.e., the data represent random samples from the selected distribution. If requested, many distributions may be fit and ordered by the stat software for their ability to match the data. Goodness-of-fit tests are performed to determine which distributions adequately model the observed values. Visit the link [here](#) and we can discuss during the lab which distributions to include in report.
3. The *Distribution Fitting (Arbitrarily Censored Data)* procedure analyzes data in which one or more observations are not known exactly. In particular, observations may be:
  1. **Left-censored:** known only to be less than a stated value.
  2. **Right-censored:** known only to be greater than a stated value.
  3. **Interval censored:** known only to fall within a stated interval.

The procedure calculates summary statistics, fits distributions, creates graphs, and calculates a non-parametric estimate of the survival function. The [link](#) mentions the details which could be helpful in preparation of the lab report.