

Data Interpretation

Once we obtain the data from observations, we can plot it in a suitable manner. Then we can perform suitable operations on a computer using some Python libraries to find some further information. But, our task does not end here.

It is also required that we should interpret the data and make some astronomical conclusions. Likewise, in case of Variable Stars, the raw data we obtain consists of magnitude of the particular star taken at different times. This raw data can be plotted in some format like Histogram to make it clearer. Calculations can be performed to say calculate the time period. After this, based on the Histogram, we should be able to tell what type of Variable Star it is. For this we can even train an ML Algorithm which can classify millions of stars within minutes. Also, from further analysis, we can determine the Astrophysics of the Star like its stellar structure or its current phase in its lifetime.

Thus, we can see that it's essential to make some Astronomical conclusions in order to completely utilize the information and to determine the complete Astrophysics of the object under study.