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# **Loader Plotter Documentation**

***Release 1.0***

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This is a auto-generated documentation of the Loader-Plotter produced. The main objective of this loader is to grab the Data from ArrayFire format files and a designated folder. With that and the class requirements, it loads the data to *Numpy* arrays so that it can Plot Surface, Plot 3D and Construct Movies.

Requirements:

To run this Loader one need to have installed various modules: \* *Numpy* \* *ArrayFire* \* *Matplotlib* \* *ImageIO* \* *DateTime*

**class** `Loader.meshPlot` (*InPath*, *Plot1D=True*, *PlotSlices=False*, *PlotTemporal=False*, *Mov=False*)

Class that contains information about the mesh of the data loaded

**load\_envelope** (*filename*)

Function to load the file in ArrayFire format and convert it to an array of NumPy format.

**load\_parameters** ()

Reads the file with parameters of the simulation and returns a set of data in the following order: dimentions, time step, number of points, vector limits

**plot\_sequence** (*InPath*, *DoMovie*)

Function to plot the set of saved data with the matplotlib plot functions. This makes the output beautiful!!!