Visualization of Scientific Data in a 3D Environment

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This work covers various aspects of visualization of scientific data, creating visualization add-on to program as well as process of creating actual visualization. It covers the entire process from selecting appropriate tools for creation, through designing plug-in, to selection of few specific examples and showing techniques how they were made.

Besides practical examples, our work shows us very brief introduction to graphics, visualization techniques and components required to create visualizations of the Milky Way. Readers gain knowledge not only of designing visualization software, but also of creating of real example. Process of creating authentic visualization is becoming eye-catching for spectator simultaneously.

This plug-in is made in MaxScript. It is script language in software package the 3D studio Max. It has various functions. At first you can load huge amount of data from a star catalogue. Then you can visualize and manipulate with data or with its parameters like color, shape etc. It´s really speeds up entire process of creating visualization in 3Ds Max and changing it to your imagination.