Room: 101B

Three-Dimensional Movie of the Magnetosphere by Using VRML

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Three-dimensional visualization is necessary in order to understand what is obtained in the 3-dimensional global MHD simulation of the solar wind and earth's magnetosphere interaction. Moreover, the 3-dimensional movie is very attractive to understand the time evolution. For example, movement and rotation of coordinate axes are a method for better understanding of configurations of 3-dimensional magnetic field lines. Here we have developed a method to produce the 3-dimensional animation movie by using VRML (Virtual Reality Modeling Language), which has drastically changed the situation of 3-dimensional image processing and has freed 3-dimensional visualization from the special computer and the special software. Though the speed of the 3-dimensional image processing (rotation, scaling, etc.) depends on the ability of the computer, VRML viewers such as Cosmo Player make possible the image processing and 3-dimensional movie for everyone by using browsers such as recent Netscape and Internet Explorer.