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A MULTIFORM DATA SYNCRETIZED DISPLAY SYSTEM BASED ON VIRTOOLS

Abstract

Experiments in aerospace and aeronautical industry are extremely expensive and complex. A multiform data syncretized display system based on Virtools is introduced in this paper, which helps to reduce the cost and gives guidance for aerospace vehicles experiments. The system merged virtual experimental model and preliminary experiment result to simulate a large scale and complex aerospace vehicle experiment, as well as the experimental environment and surroundings. The entire experimental process can thus be integrally displayed. By comparing the large scale and complex aerospace vehicle experiment result to the simulation result of the merged model, the virtual experimental model is modified and improved which will give more accurate prediction of the experiment. By using the improved model, less experimental cases are needed for future work, thus time is saved and cost is reduced.