

Seamless Visualization of Weather Forecast Information with Nested Structure on Digital Globe

*Shintaro Kawahara¹, Ryo Onishi¹, Koji Goto², Fumiaki Araki¹, Keiko Takahashi¹

1. Japan Agency for Marine-Earth Science and Technology, 2. NEC Corporation

Tools for automatically exporting visualization results from the weather simulation data with nested structure are developed as an application example of VDVGE which is a visualization software. Visualization result is exported in data format which suitable for digital globes (Google Earth and Cesium.js) and seamless visualization between each nested level is realized by appropriately region segmentation of the input data set. In order to represent clouds realistically, a visualization method which combined physical quantities computed in the atmospheric simulation model is applied simultaneously. These enable us to sequentially visualize the results obtained by advanced weather forecasting by automatic processing after execution of simulation model completely. As an application of using visualization results, a visual representation of forecast results using mobile devices will be introduced.

Keywords: visualization, simulation, Google Earth