

MGI015-P03

Room: Convention Hall

Time: May 24 17:15-18:45

Visualization of the observation data obtained in JAMSTEC research vessels on web browser

Yasuko Yamagishi^{1*}, Seiji Tsuboi², Hideaki Saito², Shuhei Kinoshita³

¹IFREE, JAMSTEC, ²DrCMES, JAMSTEC, ³Fujitsu Co. Ltd.

Japan Agency for Marine-Earth Science and Technology (JAMSTEC) has several research vessels and several dozens research cruises using the vessels are carried out every year. A huge amount of the observation data obtained by various equipments, e.g. gravimeters and magnetometers, mounted on the vessels, has been accumulated, which should be available for everyone. JAMSTEC has been constructing database systems to provide the observation data through the Internet and customized user-friendly User Interface (UI) for the systems. The visualization is a very useful way to understand the research results. The preview system of the data linked with the database system by easy-visualization will be powerful tool to research and acquire the appropriate data. In this study we have been developing the easy-visualization system of the data stored into the database systems on the web platform toward the providing the preview system directly connected to the online database systems. In our previous study, we developed a converter for the data into Keyhole Markup Language (KML), called KML generator, to visualize the various observation data on Google Earth. By using this KML generator, the data placed on the network will be visualized on the web browser exploiting Google Earth API. The selected data is converted into KML by selecting various parameters thorough the web Graphical UI (GUI), after that, the data range and/or the color of the visual image will be smoothly changed by interactive operation. In the future, this preview system will be embedded into the database systems to quickly provide the suitable data for the User.

Keywords: visualization, database, research vessel, observation data, Google Earth, API