

R011-07

C会場 : 11/7 AM2 (10:45-12:30)

10:45~11:00

オープンデータを利用した地球惑星科学可視化データベースの運用

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Operation of the Earth and Planetary Science Visualization Database Using Open Data

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A database of the earth and planetary science visualization, Dagik Earth, has been developed and operated by a group of scientists, educators and engineers since 2007 [1]. Software for the three-dimensional presentation of the global science data has been developed and provided for the educational and/or scientific use with free of charge. The software projects the visualizations of global science data on a spherical screen with a PC projector. The visualizations are also used to make hand-made globes. Sheet of the visualization is stucked on a plastic ball to make an "analog" globe. More than 150 types of the earth and planetary science data and social data has been visualized by the Dagik Earth project. Types of the copy right of the science data are various, though most of them are open data. The authors of the visualizations are also various. While the usage of the visualizations and software of Dagik Earth is limited for scientific and/or educational activities, there are some demands to use the Dagik Earth products for the other purposes. Dagik Earth's openness whether to allow commercial use has been discussed. Creations of new visualization are important to fill the demands from classrooms and science museums because there are large gaps between the state-of-art science data and fields of education. Open data and systems to find the open data is crucial for these creations. Maintenances of the visualization is another issue. The visualizations are expected to update in every three years or so because young learners tend to consider data from five years and more ago as old data. Dagik Earth uses databases that retain data for long period and recent data. Dagik Earth is trying to connect recent scientific output with educations in schools and museums. It is based on and benefits from open science data. Lessons learned during its 15 years operation and its future plan will be discussed in the presentation.

[1] Dagik Earth, <https://www.dagik.net>