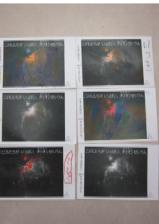
Space Scoop for young children

atomita@center.wakayama-u.ac.jp http://www.wakayama-u.ac.jp/~atomita/ Astronomy Education Meeting in Kagoshima, March 30, 2018, Kagoshima University, Kagoshima, Japan TOMITA, Akihiko









3D map for visually impaired children





I made 15 cm x 15 cm 3D map with height emphasized by five, 250 km x 250 km Kansai area in Japan using numerical data by Geospatial Information Authority of Japan.

Using this 3D map as the mold, plaster replica was prepared for each of all the participants including about a dozen visually impaired children and their brothers and sisters, parents, and staff. Though the 3D printer has become common, it is still expensive and not easy to handle. The plaster replica making is easy and quite inexpensive. The 3D printer work was made in the university, and the plaster work was made by parents and activity staff on site. The Kansai area shows many rows of the north-south direction mountain ridges parallel to each other. This means that a great compression force is acting in the eastwest direction on the plate of this area. We can understand why we have so many earthquakes in this area. The participants understand that planetary geological mechanism contributes to maintaining the Earth environment. Children shouted, "Interesting!" and parents enjoyed understanding the nature of the planet. We already have numerical map data around the world. Children can learn about other countries through their fingertip trip, which can help connect children across the borders of countries and language. We also have numerical map data of other worlds in the solar system. Children regardless of the eyesight can share the "grand tour" of the solar system and can understand each world's nature and history by reading scientifically the surface information