## **Japan Geoscience Union Meeting 2011**

(May 22-27 2011 at Makuhari, Chiba, Japan)

©2011. Japan Geoscience Union. All Rights Reserved.



HTT033-P02 Room:Convention Hall Time:May 25 16:15-18:45

## Application of Earth scientific information by the Google Earth

Takahiro Ebi<sup>1\*</sup>, Junji Yamakawa<sup>1</sup>

<sup>1</sup>Grad. Natur. Sci. Tec. Okayama Univ.

The earth scientific information i.e. the spatial information in the earth scientific field is able to visualize by a GIS application. The Google Earth is a GIS application provided by Google, with versatile and high performance visualization and manipulation capability for geographic information. The Earth scientific information also have a geographic information scheme, so the Google Earth has some potential to support the education and research field of the Earth science.

In this report, estimated the horizontal distribution of the Distortion Index, DI,(Liebau, 1980) and indicated the result to the Google Earth, then the research field was northwest of Okayama city, Okayama prefecture, Japan. As the way to estimate, used Kriging and IDW of the spatial interpolation by the R-Language. In the process, the most careful point was to use the data of the same datum and projection.

The merit of the Google Earth is the 3-dimensional representation of the information, so be able to consider comparing with terrain etc and support to understanding the specification of the data for the Earth scientific research and education field.

Keywords: Earth scientific information, GIS, Google Earth, Kriging, R-Language