Current implementation status of WISE-CAPS, browsing, sharing and analyzing system of lunar and planetary data

TERAZONO, Junya¹, NAKAMURA, Ryosuke², Shinsuke Kodama², Naotaka Yamamoto², DEMURA, Hirohide¹, HIRATA, Naru¹, OGAWA, Yoshiko¹, Tomoetsu Sugawara¹

¹The University of Aizu, ²The Institute of Advanced Industrial Science and Technology

We are now developing data browsing, sharing and analyzing platform for lunar and planetary exploration data. This system is called "WISE-CAPS", Web-based Integrated Secure Environment for Collaborative Analysis of Planetary Science.

The WISE-CAPS aims for efficient analysis of vast amount of data obtained by lunar and planetary exploration, particularly one for image data, and sharing among registered researchers. The final processing, analyzing the data, is our goal for this implementation.

System is fully web-based, Web-GIS, therefore users do not need to prepare any special software other than browser to use WISE-CAPS. The base of system is map (image based) and it is also the reason that this system is entirely based on maps. However, WISE-CAPS has several unique functions such as data addition by users (uploading of data which are created by users) and its sharing to other users, including selection of users. Furthermore, as this system is constructed fully upon open-source software and is open platform and protocol compliant, the linkage with other systems and vendor-independent re-construction, modification and enhancement can be made easily with low budget. Extension of functions by users are in our sight for future implementation.

We have made large improvements for WISE-CAPS since last year and now the system has become more user-friendly and powerful. We will address the improvement points and future directions for more improvement.

Keywords: Web-GIS, lunar exploration, planetary exploration, web