The current situation of implementation of WISE-CAPS: browsing, sharing and analyzing environment for lunar and planetary science

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We are now developing information environment called WISE-CAPS (Web-based Integrated Secure Environment for Collaborative Analysis of Planetary Science). The system will have capability for data browsing, sharing and analyzing for lunar and planetary data through the web browsers. The environment is based on Web-GIS with additional softwares, and these are fully open-source based. The WISE-CAPS aims for fully web-based environment which can conduct all operation for scientific analysis on the web browsers, different from conventional data analysis in lunar and planetary science. The goal of this system is non-local data transfer (uploading and downloading) and full operation of scientific data manipulation in servers, including data analysis, post-analysis data browsing and sharing. This system shares similar concept with cloud computing which is popular in current computing platform, and we set the destination for WISE-CAPS development to include specific needs and requirements often occurs through data analysis and evaluation in lunar and planetary science.

In this lecture, we will report current situation of implementation of WISE-CAPS centered on newly implemented items since the last year. We are now bringing new features such as Web API and in-page programming environment in WISE-CAPS. Also, we are tackling improvements on existing functions of WISE-CAPS. Also, enhancements of the system is underway to make system more robust and powerful. The latest achievement will be reported in this lecture.

Also, we will address the future direction of such cloud-based analysis environment.

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