

Present status of next lunar landing mission SELENE-2 (2)

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Japan Aerospace Exploration Agency (JAXA) considers a moon lander SELENE-2 as one of SELENE (Kaguya) follow-on missions. Mission definition of the SELENE-2 was completed in 2007 and Phase-A study has started. Concept design of the spacecraft is now undergoing. We report our up-dated mission status and development of candidate instruments onboard.

The mission status goes nowhere fast since previous report of this meeting. We are planning to take the System Requirements Review board (SRR), which is defined to be an interim review board of the phase-A study, until the second quarter of the fiscal year 2012.

For these years of Phase-A study, we have promoted technological development of the candidate instruments. Since then, our system study checked the feasibility and re-investigated configuration of the candidate instruments. As a result, some instruments were required to be major modification of the basic design and the specification for the severe limitation of the weight budget and the large change in temperature on the Moon.

In order to select the landing site candidates which maximizes the scientific return from the project, "SELENE-2 Landing Site Research Board" was organized in March, 2010 as one of the sub-teams of the SELENE-2 pre-project team. After vital discussion, the research board released an evaluation paper in Yu-seijin, the journal of the Japanese Society of Planetary Science (JSPS) this March.

In the near future, further selection board of the instruments will be held before the SRR. As of now, SELENE-2 mission team is elaborating a realistic proposal from the viewpoints of both technological readiness and severe financial condition.

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