

The system design and the status of SELENE

Satoru Nakazawa[1]

[1] JAXA

<http://www.jaxa.jp>

SELENE (SELenological and ENgineering Explorer) is a project of Japan Aerospace Exploration Agency (JAXA)'s for Lunar Science. The mission objective is the global survey of the Moon in order to study its origin and its evolution.

It is planned to be launched on the H-IIA rocket. About 5 days after the launch, SELENE is injected into the elliptical polar orbit of the Moon. After two daughter satellites (Relay satellite and VRAD satellite) are released, the spacecraft descends to the final mapping orbit.

It has 15 instruments. The gravitational field distribution is measured by VRAD and RSAT which are integrated on the daughter satellites. The other instruments are integrated on the main orbiter.

One of the technical issues is Electromagnetic Compatibility (EMC). Some instruments have some requests in addition to MIL standard. The prevention of high voltage discharge is another issue.

Now, system mechanical tests and thermal tests have been completed and the first system electrical tests is being held.