

## 月周回衛星かぐや (SELENE): 概要と科学目標

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### Overview and Science Targets of Lunar Orbiter Kaguya (SELENE)

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Lunar orbiting satellite Kaguya(SELENE) has completed after final integration tests of thermal-vacuum and electromagnetic compatibility in the end of February 2007. The satellite was carried to launch site of JAXA TNSC (Tanegashima Space Center) for 2007 summer launch. The SELENE project has started in 1999 FY as a joint mission of ISAS and NASDA, merged into a space agency JAXA in October 2003. New data center SOAC (SELENE Operation and data Analysis Center) has been installed in JAXA Sagamihara campus. Key questions on lunar science are What's origin of the Moon ?, How does the Moon have evolved ?, and What history does the lunar environment have passed ?.

Science topics to be studied by using 14 science instruments are surface composition of chemistry and mineralogy, evolution tectonics of surface including subsurface to 5 km depth, gravity field of whole moon and magnetic field distribution for the study on origin and evolution of the Moon. Lunar environment will be also investigated in observing charged and neutral particles impinged on the surface. High definition TV cameras onboard Kaguya are also employed for public outreach.

かぐや (SELENE) は、本年8月16日種子島宇宙センターから H-IIA13 号機で打ち上げられる。1999年にプロジェクトが始まって以来8年になる。かぐやは打ち上げられてから地球を2周した後月へ向かい、打上げ後20日で月軌道に投入される。かぐやの科学目的は、月の起源と進化の解明を目指す月の科学、月周辺の磁場・プラズマ・高エネルギー粒子環境を明らかにする月での科学、地球プラズマ圏観測を行う月からの科学である。