Characterization of detectors for SELENE Spectral Profiler (LISM SP)

Shinsuke Kodama[1], Yasuhiro Hirahara[1], Yasushi Yamaguchi[1], LISM Working Group Haruyama Jun-ichi

[1] Earth and Planetary Sci., Nagoya Univ

We analyzed the characteristics of three detectors (VIS, NIR1, NIR2) with which SELENE Spectral Profiler (LISM SP) is equiped. Numerical fittings were made for the precise calibration of dark current in the operational condition of temperature and exposure time. The result showed the difference in temperature-dark current relation and exposure time-dark current relations between VIS and NIR 1/2 detectors. For the VIS detector, the dark current generally increases as temperature and/or exposure time increases. On the other hand, dark current for some pixels on NIR 1/2 detectors decreases as temperature/exposure time increases.