

Development of X-ray spectrometer onboard MUSES-C and SELENE missions

Tatsuaki Okada[1], Yukio Yamamoto[2], Kei Shirai[3], Tomoki Matsuda[2], Manabu Kato[2], XRS Team Okada Tatsuaki

[1] Div. Planet Sci., ISAS, [2] ISAS, [3] Earth and Planetary Sci., Nagoya Univ

We present the current status of the XRS instrument onboard MUSES-C and SELENE missions. The XRS is based on cooled charge-coupled device as x-ray detector and will map major elemental composition of planetary surface. As for MUSES-C, performance of the protomodel has been examined in mechanical, thermal, and electrical properties and the flight model design is almost fixed by using the results. For SELENE mission, PIN diodes is also evaluated. Development of x-ray window and experiments for qualification and calibration of the CCD are performed, as well as the numerical studies are for observation sequences and data analyses.