Development of the calibration system for x-ray spectrometer with x-ray CCD for planetary exploration

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We develop the calibration system for CCD-based x-ray spectrometer (XRS). This system is composed of five parts: control, electric, measurement, cooling, and analytic. Control and electric parts are now being developed. As the result CCD is driven and the signal from CCD is acquired on the personal computer. On one side, the analytic part is being developed with the data from XRS onboard S310-28 sounding rocket. We used the data before flight. The analysis by single event extraction was enable to give the x-ray peak of Iron-55 which is the source set at the rocket for energy calibration of the CCD. As future subjects, we need to develop the measurement part and the cooling part. Also the analytic way is required to improve with the method made use of the data except for the single event.