The current status of EUV spectroscope, EXCEED on board the SPRINT-A

EXCEED is the Extreme ultraviolet spectroscope on board the Japanese small scientific satellite, SPRINT-A. The mission will carry out spectroscopic and imaging observation of EUV (50-150 nm) emissions from tenuous plasmas around the planets (such as Venus, Mars, Mercury, and Jupiter) from the Earth orbit at the altitude of around 1000 km. It is essential for EUV observation to put on an observing site outside the Earth’s atmosphere in order to avoid the absorption. In addition, because the emissions from the targets are very faint, the effective area should be as large as possible and needs long observation period. Since EXCEED is developed mainly for the planetary science, we can use the observation window as long as possible on the geometrical point of view. In this presentation, the specification and performance of the instrument according to the FM final calibration, and possible observation scenario are discussed.

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