

## **Observation Plan of Magnetospheres of Outer Planets with the EXCEED Mission**

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The Sprint-A/EXCEED mission is an earth-orbiting Extreme Ultraviolet (EUV) spectroscopic mission and the first mission of the ISAS/JAXA Small scientific satellite series. The EUV spectroscopy is a favorable to observe tenuous gases and plasmas around the planets in the solar system (Mercury, Venus, Mars, Jupiter, and Saturn). One of the main observation targets is the Jovian magnetosphere which has a rotation dominant magnetosphere due to its strong magnetic field, fast rotation, and an internal plasma source. Observation of the Jovian magnetosphere with the EUV spectrometer enables us to measure the spatial distribution of heavy ion densities, electron temperature, and composition in the inner magnetosphere (Io plasma torus) and investigate plasma heating and transport processes in the magnetized rotating plasma.