

## Current status of the SPRINT-A/EXCEED mission under development

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The first satellite SPRINT-A of the SPRINT series, which is the JAXA's small satellite project, is now under development. The first electric and mechanical test using the flight model of the SPRINT-A satellite is now performed for the satellite to be launched in the next year. The mission payload, EXCEED, has the main telescope of the extreme ultraviolet imaging spectrometer (EUV), the camera guiding field-of-view (FOV) for feedback to the satellite attitude control system, and the mission data processor (MDP). The payload electronics are connected to satellite bus system with the space wire network. The objectives of the EXCEED mission are mainly two science topics: one is the atmospheric escape from the terrestrial planet by interaction with the solar wind plasma, the other is the plasma transfer mechanism in the Jupiter magnetosphere with the object of the extreme ultraviolet emissions from the Io torus and the Jupiter's aurora. The current status is reported in this presentation.

Keywords: Small scientific satellite, SPRINT satellite series, Atmospheric escape, Jupiter Io torus