

Development report of the microsatellite "MAEBASHI-SAT" for planetary exploration

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Since it is dangerous to land a mother ship directly in the exploration of an unknown planet, preliminary surveys using small satellites such as CubeSat are effective. By rotating two wings with two sails with different reflectivities of sunlight, we aim to control the influence of solar radiation pressure and land pinpoint the area where we want to land. Currently, an automatic satellite tracking function using an equatorial mount equipped with an amateur radio band antenna is installed on campus, enabling telecommunication with the satellite. In this presentation, we report the method and mission outline for the development of MAEBASHI-SAT posture system at present.

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