EARTH OBSERVATION SYMPOSIUM (B1)
Future Earth Observation Systems (2)

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DEVELOPMENT OF SUPER LOW ALTITUDE TEST SATELLITE (SLATS)

Abstract

JAXA has been developing the Super Low Altitude Test Satellite "SLATS". The altitude of SLATS orbit is around 200km altitude. Its main mission is to understand the effects of high-density atomic oxygen on the satellite and to verify the possibility of orbit control using an ion engine system. A satellite in a super low altitude enables higher resolution optical Earth observation and lower electric power active sensing using a SAR or a LIDAR than those in conventional low earth orbits. The flight performance of SLATS will be reflected in the future practical satellites that orbits the earth at a super low altitude. In this paper, the development status of SLATS and future plan are introduced.