

The orbiting simulation of solar radiation pressure effect for spin stabilized satellites in SELENE

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A solar radiation pressure model for spin stabilized satellites in the SELENE mission is suggested to correct the mean acceleration introduced by a small tip-off or free nutation due to the separations from the main lunar orbiter. This acceleration, can create a velocity variation of 0.4mm/s/day. The shape of the satellites have been assumed to be a regular octagonal pillar. Based on this model and so called "Cannon ball" model, the orbit of the relay satellite of SELENE has been simulated. The results have been compared.