Design of the Method for 4-way Doppler Measurements using SELENE Relay Satellite

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Four-way Doppler measurements toward SELENE Main Orbiter above the lunar far side will be executed using Relay Satellite Transponder (RSAT) to obtain the gravity field maps above the lunar far side. The signal acquiring process for each Doppler frequency tracking will be carried out for the on-boarded receivers with phase-locked loops. The observed Doppler data will be calibrated with the estimated orbital and attitude status. We repot the design results of these four-way Doppler measurements system.