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Author: Mr. Inkyu Kim

Korea Aerospace Research Institute (KARI), Korea, Republic of, timber@kari.re.kr

THE FEASIBILITY STUDY OF LUNAR ORBITER RADIOMETRIC ERROR ANALYSIS

Abstract

We will develop the lunar orbiter to operate the space exploration. The space exploration orbiter need navigation data to calculate the orbit position in the space. These data are consisted of the doppler and range components. When we build the deep space ground station, it is important to define the rang and doppler measurment error in the ground. These are sending the FDS(Flight Dynamics System) which operates orbit determination, orbit prediction and maneuver planning, to calculate the orbit position accurately. Many paper are introduced to the radiometric techniques. This paper describes the doppler and ranging measurment estimation. and discuss error variation according to the ground receiver performance. These are receiver signal-to-noise ratio, receiver system temperature and integration time.