SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM (B2)
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ANALYSIS OF GNSS NAVIGATION PRECISION IN SPACECRAFT

Abstract

GNSS have offered high precision navigation for near-Earth users, but the precision is reduced when GNSS are used in spacecraft. The influences of spacecraft orbits to GNSS satellite availability, ionosphere and troposphere delay, object kinetic characteristics ,and the influences to navigation precision are intensively studied. Then the error correction models of spacecraft GNSS navigation is presented, which are validated by simulation and test data. keywords: spacecraft navigation; GNSS; error correction