
Orbit Determination and Analysis of Giove-A using SLR Tracking Data.

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Abstract

Using the early available SLR data since its launch, precise orbit determination of the GIOVE-A satellite was undertaken in weekly arcs. A description of the contributing data set, the computation process and the initial results of the orbit quality are presented. From these solutions, the inferred data quality from the individual stations is summarised. Using one estimate of the state vector from these solutions, a spectral analysis of the orbit perturbations due to the Earth's gravity field is shown.