
Analysis of the mutual evolution of the parameters of two synchronous precessing orbits

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The article considers the analysis of the mutual evolution of the two nominally synchronous precessing low-ellipticity orbits. The recommendations about the parameters of the being formed synchronous precessing orbit (SPO) in order to minimize the characteristic speed loss for its maintenance and ensuring the eventual transition into a working orbit are developed. The analysis of the necessary precision of knowledge of the orbit parameters for long-term forecasting and planning SPO correction dates as well as the need for their implementation was performed.

Keywords: orbits synchronization, spatial angle, planes of the orbits, orbit with synchronous recession, TLE.

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