

Research of characteristic velocity consumption required to maintain and replenish satellite constellations at the circular orbits

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The article deals with the consumption estimation of a summary characteristic velocity required to replenish the satellite constellations at the circular and near-circular orbits. Both plane and spatial cases of the reboost maneuvers that are quite different in longitude of the ascending node are considered. The results of the investigation may be effective to minimize power and time consumption while satellite constellations designing and forming.

Keywords: constellation, maneuvers, phasing.

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