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Website: www.aero.iitb.ac.in/satlab

Readme file for sgp.py

Attitude Determination and Control Subsystem

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sgp.py takes following input from getorbitdata.py and given postion and velocity of satellite in ECI frame in m and m/s.

Input:MeanMo - Mean motion in revolution per day
Eccen - Eccentricity
Incl_deg - Inclination in degrees
MeanAnamoly_deg - Mean Anamoly in degrees
ArgP - Argument of perigee in degrees
RAAN_deg - Right ascension of ascending node in degrees
DMeanMotion - First time derivation of mean motion divided by 2
DDMeanMotion - Second time derivation of mean motion divided by 6
BStar - BSTAR drag term
Output: Postion and velocity of satellite in ECI frame in m and m/s.

References: