

Sun Model

Model prepared by: Pratham team (Srinath Dama).

QA by: Sanket Chirame

Date: 20/5/2018

1. The definition of equinox and launchdate moved to constants file.
2. Changed the dimensions of numpy arrays such that the sun vector is 1*3 array. Thus the final output data file is N*4 array.
3. Changed .seconds to .total_seconds() method which calculates total number of seconds.
4. Changed angle between Ecliptic plane and earth's equatorial plane to 23.45 degrees.
(Ref. Curtis, Howard D. *Orbital mechanics for engineering students*.
Butterworth-Heinemann, 2013. Appendix A)
5. Added the line to normalize the sun vector