

Kerbal Space Program - Bug #13414

Synchronous orbits given with reverse orbit direction.

12/12/2016 08:31 AM - Ruedii

Status:	New	Start date:	12/12/2016
Severity:	Very Low	% Done:	0%
Assignee:			
Category:			
Target version:			
Version:	1.2.2	Language:	English (US)
Platform:	Linux	Mod Related:	No
Expansion:			

Description

Currently the orbit generator for satellite contracts specifies a synchronous orbit by altitude. Unfortunately, it is giving some with orbits over 90 inclination (i.e. reverse orbits). By definition a synchronous orbit should spin with the planet, meaning between 0 and 90 degrees.

Expected behavior:

Synchronous orbits generated by contract generator should be roughly synchronous.

Actually behavior:

Some go the opposite direction of planet spin, and thus aren't synchronous.

Attached screen-shot of one such contract.

History

#1 - 03/12/2017 12:38 PM - gfrodo

Well, sun-synchronous orbits (not planet synchronous) have a slightly retrograde polar orbit, due to fancy physics effects, which are not simulated in KSP. As a result, the orbital plane rotates once a year.

On the subject: I got in my career game a contract for a satellite in retrograde sun orbit (178° inclination), while I'm still only flying to Mun and Minmus. I think on my hard difficult settings it is nearly impossible to get enough funds and science to build an over 20000m/s rocket for that payload, but I still accepted it for fun and just to try it. Maybe I will file a separate bug report for this contract.

#2 - 01/04/2018 04:46 AM - Ruedii

It should simply be considered not to be synchronous.

Files

screenshot8.png	402 KB	12/12/2016	Ruedii
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