Kerbal Space Program - Bug #13517

AN / DN markers disappear from current orbital path if orbit encounters target's SOI

01/04/2017 02:24 AM - SamHall

Status:	New	**Start date:**	01/04/2017
Severity:	High	**% Done:**	0%
Assignee:			
Category:	Controls and UI		
Target version:			
Version:	1.2.2	**Language:**	English (US)
Platform:	Windows	**Mod Related:**	No
Expansion:			

Description

Steps to reproduce:

1. launch/cheat into Kerbin orbit. Orbit's inclination should NOT be zero, because we want some ascending and descending nodes to work with here. 2-5 degrees of tilt should be enough.

2. set the Mun as target. Observe the position of the green triangular Ascending Node and Descending Node markers on your current orbital path.

3. Start burning for a Mun encounter. Keep observing the AN / DN markers closely as you are doing this. Watch where they go, and where they are headed.

4. As soon as your projected path encounters the Mun's SOI, both ascending and descending node indicators vanish from your orbital path, along with their dotted lines. Try burning normal and antinormal to get the AN/DN markers back onto the visible arc of your orbit; you can't. As long as your current (blue) orbital path encounters your current target's SOI, ascending and descending nodes will never be displayed on it.

A new set of AN/DN markers is instead displayed on your future, post-encounter (purple) orbital path, but that doesn't help you plan your maneuvers before you get to the Mun. Playing around with changing the CONIC_PATCH_LIMIT number, it looks like Ascending and Descending nodes are only ever displayed on the LAST conic patch in the chain.

I'm attaching a savegame that's set up to illustrate this bug as quickly and clearly as possible; load up test.sfs, switch to map view, and use RCS to give the spacecraft little nudges prograde and retrograde while observing how the AN/DN markers disappear whenever your apoapsis bumps up against the Mun's SOI.

Files

test.sfs	50 KB	01/04/2017	SamHall
screenshot1.png	341 KB	01/04/2017	SamHall
screenshot2.png	363 KB	01/04/2017	SamHall
Animation1.gif	141 KB	01/04/2017	SamHall