

## Kerbal Space Program - Bug #1736

### Maneuver nodes cannot be placed far from periapsis on escape (hyperbolic) orbits

11/10/2013 10:21 PM - triffid\_hunter

<b>Status:</b> Closed	<b>Start date:</b> 11/10/2013
<b>Severity:</b> Low	<b>% Done:</b> 100%
<b>Assignee:</b>	
<b>Category:</b> Gameplay	
<b>Target version:</b>	
<b>Version:</b> 0.22	<b>Language:</b> English (US)
<b>Platform:</b> Linux	<b>Mod Related:</b> No
<b>Expansion:</b>	

#### Description

- 1) achieve escape orbit
- 2) attempt to place maneuver node near Sol switch- either entry or exit.

expected: can create maneuver node at any point on orbit  
result: cannot place maneuver node far from periapsis

- 3) create maneuver node at periapsis
- 4) attempt to drag maneuver node out to Sol switch

expected: maneuver node can be dragged to any point  
result: node can be created near periapsis, however maneuver node turns brown then gets deleted when dragged to where the orbit line's curve becomes almost straight

hypothesis: maneuver nodes are being defined by True Anomaly which becomes extremely exponential, then undefined along the hyperbolic asymptotes

fix: maneuver nodes should be defined according to Time until/since Periapsis for parabolic & hyperbolic orbits

possibly related: [#1676](#) and [#831](#)

#### History

##### #1 - 11/20/2015 12:17 PM - sal\_vager

Not a fix but a workaround in case anyone looks here.

If you change focus to the planet or moon who's sphere of influence you're trying to place a node it'll work properly again.

##### #2 - 07/17/2016 09:40 AM - TriggerAu

- Status changed from *New* to *Needs Clarification*

##### #3 - 08/08/2016 12:40 PM - TriggerAu

- Status changed from *Needs Clarification* to *Closed*

- % Done changed from 0 to 100

Closing this report out for now. If you find it is still occurring in the latest version of KSP please open a new report (and this one can be linked to it.) For best results, the wiki contains really useful info for when creating a report <http://bugs.kerbalspaceprogram.com/projects/ksp/wiki>.

You can also ask questions about the bug cleanup in the forum here:

<http://forum.kerbalspaceprogram.com/index.php?/topic/143980-time-to-clean-up-the-bug-tracker/> and tag @TriggerAu to get my attention