

Kerbal Space Program - Bug #28327

Double precision patched conics bug

07/21/2021 03:17 AM - linuxgurugamer

Status:	Confirmed	Start date:	07/20/2021
Severity:	Low	% Done:	10%
Assignee:			
Category:	Gameplay		
Target version:			
Version:	1.11.0	Language:	English (US)
Platform:	Windows	Mod Related:	No
Expansion:	Core Game		

Description

I've seen this, and have had several streamers mention it to me:

Use the patched conics to create a maneuver to go to another planet.

Then do the burn exactly as specified.

all of a sudden, it's as if the burn wasn't long enough, the orbit doesn't reach the planet/moon/etc

This came in 1.11

History

#1 - 07/21/2021 03:20 AM - linuxgurugamer

It's still happening in 1.12

It's happened to me, but of course, when I tried to replicate it, I can't right now :-(

If you watch the vod of Terahadra on Twitch, you can see this:

<https://www.twitch.tv/videos/1092767386>, about 1:10 hour in, and watch for about 5 minutes

#2 - 07/21/2021 02:57 PM - jukkamuhonen@hotmail.com

It isn't a bug, it showed intercept with mun after many many orbits later. He would have figured it out if he hovered mouse on intercept icon when creating maneuver node, it would have shown time for that intercept after maybe 10 days. He should have checked ejection angle before making burn, it was totally off.

#3 - 07/21/2021 07:37 PM - just_jim

- Status changed from New to Confirmed

- % Done changed from 0 to 10

#6 - 07/31/2021 01:30 AM - StopIteration

Yeah, I'm not certain that specific example is a bug (though if jukkamuhonen is correct it's still a failure of the game to effectively communicate what's going on), but if you are observing these symptoms in gameplay, they could also be related to [#25227](#) where the patched conics fails to report an encounter, which I can still reproduce in 1.12 (though it seems I can no longer update the version for that issue).

#7 - 07/31/2021 06:41 AM - kamine

Not a bug.

The trajectory is predicted assuming your burn is a "instant kick", which is actually not. During a 30s burn in LKO, your craft travelled more than 70km and velocity changed more than 300m/s due to kerbin gravity. These will affect your trajectory.

Also in the video, your planned trajectory is just touching the very edge of mun's influence sphere (so the returning trajectory is not affected too much to hit the kerbin), so it's very likely a small error in burning will make you totally miss the mun. In that case, you should correct your trajectory ASAP, instead of time warp.