

Kerbal Space Program - Bug #24995

Terrain flickering

03/05/2020 09:39 PM - Alexoff

Status:	Confirmed	Start date:	03/05/2020
Severity:	Low	% Done:	10%
Assignee:			
Category:	Camera		
Target version:			
Version:	1.9.1	Language:	English (US)
Platform:	Windows	Mod Related:	No
Expansion:	Core Game		

Description

There is some annoying terrain texture flickering. I watched it on Kerbin, Mun and Minmus at least. It can happen during low altitude flight or rover moving. Or without any reason.

Here my video with Minmus flickering: <https://www.youtube.com/watch?v=6bcHLJe198k>

Yes, I have some mods, but I think it's only core game bug. For example, you can see this bug in this video of russian KSP streamer - <https://www.youtube.com/watch?v=HvyK8ow6Sdg> (5:48-6:10).

History

#1 - 03/05/2020 10:08 PM - Sidney.Christian

- Status changed from New to Confirmed

- % Done changed from 0 to 10

#3 - 03/11/2020 02:45 AM - Anth12

Yeah saw this from the release of 1.9.0

#4 - 04/19/2020 09:17 PM - blackrack

Hello, I don't know what is your current progress on this issue, but I have cobbled together a fix for it in my mod scatterer.

It involves modifying the screenSpaceShadows shader:

1) When the ratio of farClipPlane/nearClipPlane is high, I found that precision suffers when reconstructing position from depth using the ray method, instead I use the inverse projection method which usually has lower precision but in this case is actually better, you can do this by using the shadow subshader tagged "PCF_SOFT_FORCE_INV_PROJECTION_IN_PS".

2) I add a bias to the shadow receiver based on depth, I found that precision is good near the camera but degrades further away, this seems to fix all issues for me.

Here are the lines that matter:

<https://github.com/LGhassen/Scatterer/blob/master/scatterer/Shaders/scattererShaders/Assets/Shaders/Shadows/FixedScreenSpaceShadows.shader#L93-L109>

<https://github.com/LGhassen/Scatterer/blob/master/scatterer/Shaders/scattererShaders/Assets/Shaders/Shadows/FixedScreenSpaceShadows.cginc#L197-L198>

Hope this is of use.

#5 - 07/10/2020 02:29 AM - Crazy1

I believe this issue is fixed in KSP v1.10. I checked Mun and Minmus where I clearly saw it before and it looks good.

#6 - 07/10/2020 07:05 AM - Alexoff

Krazy1 wrote:

I believe this issue is fixed in KSP v1.10. I checked Mun and Minmus where I clearly saw it before and it looks good.

Checked this bug last week - it's still in game, nobody fixed it.

#7 - 01/07/2021 05:14 AM - Guard13007

For players stumbling across this, the following has worked for some users:

Launching the game with -force-d3d11

OR

Changing the following settings.cfg lines:

```
SHADOWS_FLIGHT_PROJECTION = 0  
SHADOWS_KSC_PROJECTION = 0  
SHADOWS_TRACKING_PROJECTION = 0  
SHADOWS_EDITORS_PROJECTION = 0  
SHADOWS_MAIN_PROJECTION = 0  
SHADOWS_DEFAULT_PROJECTION = 0
```

To:

```
SHADOWS_FLIGHT_PROJECTION = 1  
SHADOWS_KSC_PROJECTION = 1  
SHADOWS_TRACKING_PROJECTION = 1  
SHADOWS_EDITORS_PROJECTION = 1  
SHADOWS_MAIN_PROJECTION = 1  
SHADOWS_DEFAULT_PROJECTION = 1
```

#8 - 01/14/2021 01:47 PM - jukkamuhonen@hotmail.com

This should still be fixed. 1.11 have it.

#9 - 05/12/2021 04:52 PM - YarTheBug

I had terrain/shadow flickering issue pop up in 1.11.2.3077. I was originally running maxed settings in 4k and slowly lowering them to try and resolve it.

Following Guard13007's advice fixed it for me, and I'm slowly increasing settings without issue so far.

Thanks!