Kerbal Space Program - Bug #498

Lighting inconsistencies on Mun surface texture with light emitting parts.

03/25/2013 11:39 PM - Qumefox

Status:	Closed	**Start date:**	03/25/2013
Severity:	Normal	**% Done:**	100%
Assignee:			
Category:	Camera		
Target version:			
Version:	0.19.1	**Language:**	English (US)
Platform:	Win32	**Mod Related:**	No
Expansion:			

Description

What happens:
Vast variations of the effectiveness of light sources on the Mun surface depending on location. I've encountered large swatches of area where the lights on the particular rover I was in had zero effect on the terrain. Night landings in one of these areas would be extremely difficult, especially if you were expecting to be able to see the ground with spotlights.

How to reproduce:
Drive a rover with a light source attached across the surface of Mun.

Notes:

- Happens on both the sunlit, and dark side of Mun, but is most noticeable on the dark side.
- Only terrain itself is effected, Not scatter or debris/other vessels.
- Mk.2 Rover in the attached persistence file is parked on one of these 'dark zones'
- The second screenshot was taken a few seconds and approximately 100m away from the first one.

Mods in use:

- Kerbal Engineer Redux 0.6.0.2

screenshot50.png

History

#1 - 03/26/2013 09:25 PM - Qumefox

Upon more experimenting, the above behavior happens with with terrain detail set to medium. With terrain detail set to low, the problem is exacerbated, with the 'dark zones' being much larger. Though on the converse, areas that actually register lighting effects are much brighter.
On high terrain detail there are little to no 'dark zones' though, and while there is a slight variation in the brightness of lighting on the terrain, it's not extremely noticeable.

The following screenshots were taken at the same location. (last two were a few meters away from the first.. rolled downhill some before I could get the brakes back on) The first is at low terrain detail, the second set at default, and the last at high.

screenshot65.png
screenshot66.png
screenshot69.png
My guess as to what's happening, is that on the various terrain detail levels, the height map of the terrain is different from the actual terrain. So in the 'dark zones' the game actually thinks the light sources are below the actual terrain, thus don't get rendered.

This last screenshot was taken on low detail in one of the 'bright' patches, and IMHO, is probably how the overkill 4x spots on this rover should actually look everywhere on the Mun surface.

screenshot64.png

#2 - 04/05/2013 05:58 AM - Mr_Orion

- Status changed from New to Confirmed

- % Done changed from 0 to 10

#3 - 04/22/2013 02:20 PM - Qumefox

The images I linked orginally are hosted at my house and i'm apparently having DNS issues. if I can't get it fixed in the next few days, i'll rehost images on imgur or something and relink them.. This report is kind of useless without them.

#4 - 07/27/2015 06:04 PM - Squelch

- Platform Win32 added

- Platform deleted (Windows)

#5 - 07/17/2016 09:33 AM - TriggerAu

- Status changed from Confirmed to Needs Clarification

- % Done changed from 10 to 0

#6 - 08/07/2016 11:33 AM - 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 occuring 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

Files

persistent.sfs	429 KB	03/25/2013	Qumefox