

## Kerbal Space Program - Bug #624

### Lighting effects do not function properly during eclipses.

05/14/2013 12:19 AM - Ruedii

<b>Status:</b>	Confirmed	<b>Start date:</b>	05/14/2013
<b>Severity:</b>	Unworthy	<b>% Done:</b>	10%
<b>Assignee:</b>			
<b>Category:</b>	Camera		
<b>Target version:</b>			
<b>Version:</b>	0.19.1	<b>Language:</b>	English (US)
<b>Platform:</b>	Linux, OSX, Windows	<b>Mod Related:</b>	No
<b>Expansion:</b>			

#### Description

This is probably one of the most trivial bugs in the game, but it is important to document so that it can be fixed sometime next time there is work done on the lighting engine, and shadow casting engine.

Attached are a pair of screen shots taken during a full eclipse of the Kerbal Sun by Kerbin. Notably, the ground is not darkened from the shadow of Kerbin.

This primarily has to do with the distance from Kerbin to the Mun, where the screenshots were taken. Eclipses do cast shadows when you pass on the night side of a planet while in a closer orbit.

Notably this does have a VERY minor effect on gameplay with solar panels. However, considering that an eclipse doesn't last long enough for this to really matter too much, it is only a minor issue.

I detected this issue on Linux, but it may exist on other platforms.

#### History

##### #1 - 05/16/2013 12:13 AM - Ruedii

- File *screenshot37.png* added

I have some more screenshots of Laythe with the sun blocked by Jool. Again, perfectly bright out. This instance would have much more significant impact on gameplay with solar powered space probes, as this eclipse lasts well over an hour, enough that it should drain the battery on most solar powered items, leaving them inoperable until the eclipse is over.

I will later run a test to check if solar panels are in fact producing energy when this occurs. If this is the case, I will note so, and open a feature request to move solar panel lighting from the lighting engine, and onto a separate ray-cast based engine.

##### #2 - 05/23/2013 10:26 AM - Anonymous

- Status changed from *New* to *Confirmed*

- % Done changed from *0* to *10*

##### #3 - 11/07/2013 05:52 AM - Ruedii

It seems that solar panels properly get blocked during eclipses, but the shadows do not properly cast over the landscape.

Maybe this could be fixed prioritizing shadows by the size of the object in question combined with distance and if they are blocking a light source from hitting another object.

##### #4 - 07/17/2016 09:24 AM - TriggerAu

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

- % Done changed from *10* to *0*

##### #5 - 07/17/2016 07:48 PM - Claw

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

- % Done changed from *0* to *10*

- Platform *OSX, Windows* added

Yep, still true in 1.1.X.

## Files

---

screenshot19.png	347 KB	05/14/2013	Ruedii
screenshot20.png	717 KB	05/14/2013	Ruedii
screenshot37.png	317 KB	05/16/2013	Ruedii