

# Kerbal Space Program - Bug #6004

## Umbra panels

11/29/2015 10:40 PM - Tempist

<b>Status:</b> Duplicate	<b>Start date:</b> 11/29/2015
<b>Severity:</b> Low	<b>% Done:</b> 100%
<b>Assignee:</b>	
<b>Category:</b> Parts	
<b>Target version:</b>	
<b>Version:</b> 1.0.5	<b>Language:</b> English (US)
<b>Platform:</b> Any	<b>Mod Related:</b> No
<b>Expansion:</b>	
<b>Description</b> OX-4L 1x6 Photovoltaic Panels are able to charge in total Minmus darkness, as if planet terrain never existed. Prior to coming in under 1500m batteries were draining under full Ion Engine (IX-6315) load.	
<b>Related issues:</b> Is duplicate of Kerbal Space Program - Bug #1129: Solar Panels Work on darksi... <b>Closed</b> <b>07/25/2013</b>	

### History

#### #1 - 11/30/2015 08:09 AM - Squelch

- Status changed from New to Need More Info

I am unable to reproduce here. Please could you attempt to reproduce in a mod free game?

#### #2 - 12/03/2015 03:55 AM - Tempist

- File quicksave.sfs added

- File Ion Scanner.craft added

Quicksave and craft file added. Game is only currently running SciAlert Mod, Timer mod and docking port mod. All parts are stock.

Craft is a bit damaged from performing missions, but the bug persists. Craft is currently located in complete darkness on Minmus, however if you check several OX-4L 1x6 Solar Panels you'll see they're listing 'DIRECT SUNLIGHT' values and performing a charge.

Also note one is not generating a charge due to it being blocked by a landing leg which it is above.

#### #3 - 12/04/2015 12:33 AM - Alchemist

Another report on this?

<http://bugs.kerbalspaceprogram.com/issues/1129>

What's wrong with the vector math behind planet shadow detection by panels?

#### #4 - 12/06/2015 03:32 AM - Squelch

- Is duplicate of Bug #1129: Solar Panels Work on darkside at low altitudes added

#### #5 - 12/06/2015 03:32 AM - Squelch

- Status changed from Need More Info to Duplicate

- % Done changed from 0 to 100

Thank you for uploading the save. Please understand that mods, any mods, can introduce behaviour that is different to stock. However, removing references to the mods and loading your save does indeed show that the panels are receiving sunlight. This only seems to occur when the vessel is very close to, or touching the terrain, and is also dependent on latitude and longitude. This craft is approximately 20 degrees from the terminator, and moving it even by a degree will change it to fully occluded.

Alchemist wrote:

Another report on this?

[#1129](#)

Yes, thank you.

I shall mark this as a duplicate, and update an internal issue. Please direct further findings to the original issue [#1129](#)

**Files**

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2015-11-29_00001.jpg	102 KB	11/29/2015	Tempist
2015-11-29_00002.jpg	90.6 KB	11/29/2015	Tempist
quicksave.sfs	2.48 MB	12/03/2015	Tempist
Ion Scanner.craft	165 KB	12/03/2015	Tempist