

## Kerbal Space Program - Bug #5305

### Craft exploding while passing over southpole

08/08/2015 10:54 AM - rudi1291

<b>Status:</b> Duplicate	<b>Start date:</b> 08/08/2015
<b>Severity:</b> Low	<b>% Done:</b> 100%
<b>Assignee:</b>	
<b>Category:</b> Physics	
<b>Target version:</b>	
<b>Version:</b> 1.0.4	<b>Language:</b> English (US)
<b>Platform:</b> Any	<b>Mod Related:</b> No
<b>Expansion:</b>	
<b>Description</b>	
KSP Version: v1.0.4.0 Ubuntu Gnome 64bit (Linux version), confirmed for windows What Happens: Crafts passing over the south pole (at every body) explode (when active) Mods / Add-Ons: Stock problem, but easier to test with Mechjeb or Hyperedit	
Steps to Replicate:	
1) Build a simple craft (one part might be enough)	
2) Launch into polar orbit	
3) Adjust your orbit to pass <b>exactly</b> over south pole (and i mean exactly - inclination must be 90 or 270 degree or it wont happen)	
4) Wait until the craft passes over the south pole (does not happen during normal timewarp though)	
5) (Optional) Turn on "Ignore Max Temp" in cheat menu to see massive overheating	
Result: Boom (due to overheating)	
Fixes/Workarounds:	
- Don't use accurate polar orbits (the stock scanner is still happy if you're a bit off)	
Other Notes/Pictures/Log Files:	
- Image after craft exploding: <a href="http://i.imgur.com/UO7QmsFI.jpg">http://i.imgur.com/UO7QmsFI.jpg</a>	
- Image with "Ignore Max Temp": <a href="http://i.imgur.com/1aqh939.jpg">http://i.imgur.com/1aqh939.jpg</a>	
- Original thread (forum): <a href="http://forum.kerbalspaceprogram.com/threads/129800-Craft-exploding-while-passing-over-poles?p=2126521#post2126521">http://forum.kerbalspaceprogram.com/threads/129800-Craft-exploding-while-passing-over-poles?p=2126521#post2126521</a>	
From original thread:	
I tested this in a stock install with just HyperEdit installed. It still happens. What i found so far: Only happens to active vessel Only happens if not timewarping (may happen in physwarp) Happens at any altitude (as long as you stay inside the SOI) Happens on bodies with or without atmosphere Happens to all vessels in active vessel's physics bubble when active vessel goes boom	
<b>Related issues:</b>	
Is duplicate of Kerbal Space Program - Bug #5181: Certain part combinations o...	<b>Closed</b> <b>06/25/2015</b>

### History

#### #1 - 08/08/2015 11:39 AM - rudi1291

- File screenshot2.png added

- File screenshot1.png added

- File Player.log added

Here the "full stock" pics and game log:

(took me some time to figure out how to get that, finally used the moon as reference)

I tried two times, both at 90 degree inclination: first time it didn't happen. made a 1dV correction burn and it happened... you need to be really accurate

**#2 - 08/08/2015 12:59 PM - Squelch**

- Status changed from New to Duplicate

- % Done changed from 0 to 100

Thanks for your report.

I can confirm the observation, but only when the orbit is hand edited or tools such as HyperEdit are used. The orbital inclination must be exact as you have noted, but any attempts to "fly" an exact inclination will fail and hence not display this behaviour. By way of further example, setting a rover to 0lat, 0lon (North Pole) via a manual edit or HyperEdit leads to adverse effects. Attempting to drive a rover to these coordinates cannot be achieved.

There does appear to be a problem with an exactly orthogonal inclination which may need investigating. However, the chances of this happening during normal, non edited, gameplay are extremely low, but it must be accepted as possible.

I do feel that this issue is an extension of the ongoing investigations into the thermal runaway problem. This issue does appear to exhibit the same world orientation behaviour, so I'll mark this as a duplicate of [#5181](#). Please could you post your findings there so we can collate everything together?

**#3 - 08/08/2015 01:00 PM - Squelch**

- Is duplicate of Bug #5181: Certain part combinations overheat depending on global orientation. added

**#4 - 08/11/2015 12:30 AM - featherwinglove**

Got burned like this, update on [#5181](#) pending.

**Files**

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screenshot1.png	1010 KB	08/08/2015	rudi1291
screenshot2.png	933 KB	08/08/2015	rudi1291
Player.log	558 KB	08/08/2015	rudi1291