

## Kerbal Space Program - Bug #6522

### Message: "Core Overheating", game becomes extremely slow

01/04/2016 06:36 AM - SaturnVF1

<b>Status:</b>	Needs Clarification	<b>Start date:</b>	01/04/2016
<b>Severity:</b>	Normal	<b>% Done:</b>	0%
<b>Assignee:</b>			
<b>Category:</b>	Gameplay		
<b>Target version:</b>			
<b>Version:</b>	1.0.5	<b>Language:</b>	English (US)
<b>Platform:</b>	OSX	<b>Mod Related:</b>	No
<b>Expansion:</b>			

#### Description

When landing a ship that has ISRU parts near another ship, when I get to 2.2 km distance from the other ship (always 2.2) I get the message "Core Overheating - Shutting Down", the gameplay becomes extremely slow, 1-2 fps, and the controls are so slow they're unusable.

This is my first time using ISRU parts in the game. The ship has a Convert-o-Tron 250, a medium ore tank and 4 drills. The ship I'm approaching is on Minmus, is partially crashed, and has similar ISRU parts. The Convert-o-Tron is not running while I'm in flight, its temp is well below maximum and extending my radiators did nothing to prevent it.

F9 takes around 30 seconds to respond and when the game reloads, it plays normally until I hit the same 2.2 km, even if I approach from a different angle. Returning to the Space Center, closing and reopening the game and even restarting my PC produce the same situation. I've been playing KSP for about 3 years on this PC and have not had a similar issue.

Mods installed:  
Kerbal Engineer  
Kerbal Attachment System  
Kerbal Inventory System  
BoulderCo's atmosphere and visual enhancements  
Kerbal Alarm Clock

Thanks

#### History

##### #1 - 01/04/2016 06:37 AM - SaturnVF1

- File *Screen Shot 2016-01-03 at 10.35.10 PM.png* added

##### #2 - 01/04/2016 07:22 AM - SaturnVF1

On further investigation, the issue seems to lie with the other, crashed ship. I landed my ship without issue more than 2.2kms from the crashed ship, then switched to it. Gameplay on the crashed ship was extremely slow as well, sometimes down to 2 seconds per frame, with some cursor beachballing between frames.

##### #3 - 01/09/2016 02:59 PM - bluebottle

- File *screenshot116.png* added

I can confirm this because I suffer from a remarkably similar problem: coming within the physics distance of a Mun base with ISRU and/or drills on it causes the base to instantly overheat to over 10000K (I get the same "core overheating" message first), and then completely annihilate itself. My framerate improves because the base is then gone! The only way to get it to survive is to use the F12 temperature cheat.

The same base has no problem if I switch to it via the tracking station. If I remove the ISRU part **and** the drills with KAS, the base is fine when approaching the physics distance. Deactivating them is not enough - the parts have to be removed from the game world. It seems that parts utilising ModuleCoreHeat have issues when FlightIntegrator performs its "analytic temperature" calculation at the physics-distance instantiation (the same as bringing a vessel out of time-warp, apparently):

```
[LOG 02:14:20.398] [FlightIntegrator]: Vessel 03 - MSEV 1 has been unloaded 133.420000124257, applying analytic temperature 10818.1847637942
```

10000+K is clearly wrong - the base has no overheating issues in any other circumstance.

Edit: Linux 64-bit, v1.0.5.1028

#### #4 - 01/12/2016 01:32 PM - SaturnVF1

I finally got the chance to try this again. I never had an issue with actual part temperatures. The ship on the ground had several parts broken off of it, mostly small drill units. After I terminated those debris parts in the Tracking Center, the game behaved normally when near the ship and everything was fine. I've never known debris parts to cause such a drastic issue.

#### #5 - 07/17/2016 09:43 AM - TriggerAu

- Status changed from New to Needs Clarification

#### #6 - 01/21/2017 03:45 PM - gotmachine

I confirm there is an occasional problem involving core heat and landed vessels unpacking. I have this minmus base on a moderately modded install (nothing involving heat/resource) that keep exploding in a similar fashion than the above screenshots when I load it or get out of timewarp. It has 2 drills, one ISRU, two large deployable radiators and a few fuel cells. The issue is a bit random, but I noticed that if I disable all the mentioned core-heat involved parts, it never happen. It seems that the less core-heat part are activated, the less the issue is frequent. Also, it seems to always happen when the deployable radiators are activated.

```
[LOG 16:01:45.508] Packing Minmus Base for orbit
[LOG 16:01:45.510] Packing Minmus rover for orbit
[LOG 16:01:45.511] Packing Minmus hopper for orbit
[LOG 16:01:52.118] [FlightIntegrator]: Vessel Minmus Base has been unloaded 200, applying analytic temperature 3586.72135404292
[LOG 16:01:52.119] [FlightIntegrator]: Vessel Minmus rover Probe has been unloaded 200, applying analytic temperature 147.302264636297
[LOG 16:01:52.120] [FlightIntegrator]: Vessel Minmus rover has been unloaded 200, applying analytic temperature 122.632311050067
[LOG 16:01:52.121] [FlightIntegrator]: Vessel Base extension Debris has been unloaded 200, applying analytic temperature 142.64261738519
[LOG 16:01:52.122] [FlightIntegrator]: Vessel Base extension Debris has been unloaded 200, applying analytic temperature 155.715454498611
[LOG 16:01:52.123] [FlightIntegrator]: Vessel Base extension Debris has been unloaded 200, applying analytic temperature 152.571699935811
[LOG 16:01:52.124] [FlightIntegrator]: Vessel Base extension Debris has been unloaded 200, applying analytic temperature 152.585431273714
[LOG 16:01:52.125] [FlightIntegrator]: Vessel Minmus hopper has been unloaded 200, applying analytic temperature 119.627762051142
[LOG 16:01:52.156] [Minmus Base]: ground contact! - error: 0.000m
[LOG 16:01:52.158] Unpacking Minmus Base
[LOG 16:01:52.161] [Minmus rover]: ground contact! - error: 0.000m
[LOG 16:01:52.162] Unpacking Minmus rover
[LOG 16:01:52.242] [Minmus hopper]: ground contact! - error: 0.000m
[LOG 16:01:52.244] Unpacking Minmus hopper
[LOG 16:01:52.306] longAntenna Exploded!! - blast awesomeness: 0.5
[LOG 16:01:52.310] [longAntenna]: Deactivated
[LOG 16:01:52.317] [Explosion] Combined.
[LOG 16:01:52.317] KKAOSS.small.Rocket.Fuel.Tank Exploded!! - blast awesomeness: 0.5
[LOG 16:01:52.318] [KKAOSS.small.Rocket.Fuel.Tank]: Deactivated
[LOG 16:01:52.322] KKAOSS.Greenhouse.g Exploded!! - blast awesomeness: 0.5
[LOG 16:01:52.339] [KKAOSS.Greenhouse.g]: Deactivated
[LOG 16:01:52.458] [CHATR] Capsule starts the exchange...
[LOG 16:01:52.478] 2 explosions created.
[LOG 16:01:52.514] RLA.rcs.2way Exploded!! - blast awesomeness: 0.5
[LOG 16:01:52.515] [RLA.rcs.2way]: Deactivated
[LOG 16:01:52.520] [Explosion] Combined.
[LOG 16:01:52.520] KKAOSS.adapter.g Exploded!! - blast awesomeness: 0.5
[LOG 16:01:52.536] [ksp.r.largeBatteryPack]: Deactivated
[LOG 16:01:52.539] [ksp.r.largeBatteryPack]: Deactivated
[LOG 16:01:52.542] [KKAOSS.adapter.g]: Deactivated
[LOG 16:01:52.545] [Explosion] Combined.
[LOG 16:01:52.546] KKAOSS.adapter.base.to.Size1.g Exploded!! - blast awesomeness: 0.5
[LOG 16:01:52.566] [KKAOSS.adapter.base.to.Size1.g]: Deactivated
[LOG 16:01:52.660] [Explosion] Combined.
[LOG 16:01:52.661] commDish Exploded!! - blast awesomeness: 0.5
[LOG 16:01:52.662] [commDish]: Deactivated
[LOG 16:01:52.665] [Explosion] Combined.
[LOG 16:01:52.666] KKAOSS.adapter.g Exploded!! - blast awesomeness: 0.5
[LOG 16:01:52.680] [KKAOSS.adapter.g]: Deactivated
[LOG 16:01:52.683] [Explosion] Combined.
[LOG 16:01:52.683] HighGainAntenna5 Exploded!! - blast awesomeness: 0.5
[LOG 16:01:52.684] [HighGainAntenna5]: Deactivated
[LOG 16:01:52.762] 1 explosions created.
[LOG 16:01:52.844] LgRadialSolarPanel Exploded!! - blast awesomeness: 0.5
[LOG 16:01:52.845] [LgRadialSolarPanel]: Deactivated
[LOG 16:01:52.868] 1 explosions created.
[LOG 16:01:52.878] solarpanel-deploying-1x5-2 Exploded!! - blast awesomeness: 0.5
[LOG 16:01:52.879] [solarpanel-deploying-1x5-2]: Deactivated
[LOG 16:01:52.912] 1 explosions created.
[LOG 16:01:53.040] LgRadialSolarPanel Exploded!! - blast awesomeness: 0.5
[LOG 16:01:53.041] [LgRadialSolarPanel]: Deactivated
[LOG 16:01:53.061] 1 explosions created.
[LOG 16:01:53.171] RLA.rcs45 Exploded!! - blast awesomeness: 0.5
[LOG 16:01:53.171] [RLA.rcs45]: Deactivated
[LOG 16:01:53.212] 1 explosions created.
```

[LOG 16:01:53.351] RLA.rcs45 Exploded!! - blast awesomeness: 0.5  
 [LOG 16:01:53.352] [RLA.rcs45]: Deactivated  
 [LOG 16:01:53.390] 1 explosions created.  
 [LOG 16:01:53.409] RLA.rcs.2way Exploded!! - blast awesomeness: 0.5  
 [LOG 16:01:53.410] [RLA.rcs.2way]: Deactivated  
 [LOG 16:01:53.456] 1 explosions created.  
 [LOG 16:01:53.587] LgRadialSolarPanel Exploded!! - blast awesomeness: 0.5  
 [LOG 16:01:53.588] [LgRadialSolarPanel]: Deactivated  
 [LOG 16:01:53.601] 1 explosions created.  
 [LOG 16:01:54.592] LgRadialSolarPanel Exploded!! - blast awesomeness: 0.5  
 [LOG 16:01:54.593] [LgRadialSolarPanel]: Deactivated  
 [LOG 16:01:54.607] 1 explosions created.  
 [LOG 16:01:54.901] solarPanels4 Exploded!! - blast awesomeness: 0.5  
 [LOG 16:01:54.902] [solarPanels4]: Deactivated  
 [LOG 16:01:54.916] 1 explosions created.

**Files**

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Screen Shot 2016-01-03 at 10.35.10 PM.png	2.59 MB	01/04/2016	SaturnVF1
screenshot116.png	1.75 MB	01/09/2016	bluebottle