

Kerbal Space Program - Bug #22826

1.7.1 Surface Science Modules Move Relative to Each Other Over Time

06/09/2019 01:02 AM - Geschosskopf

Status:	New	Start date:	06/09/2019
Severity:	Low	% Done:	0%
Assignee:			
Category:	Gameplay		
Target version:			
Version:	1.7.1	Language:	English (US)
Platform:	Windows	Mod Related:	No
Expansion:	Breaking Ground		


Description

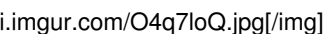
PROBLEM: The deployable surface science modules are just as vulnerable to moving along non-level ground due to time warp, the Kraken, and the underlying Unity ground friction issues as everything else. The difference is, the deployable surface science modules have to be within a very short distance of each other to be connected. Thus, it doesn't take long before your deployable surface science set-up ceases to work because the various modules slide too far away from each other. And should this result in the power or communications modules (at least) sliding too far from the control module, the game spams your message buffer with many messages per second as noted in bug report [#22757](#), <https://bugs.kerbalspaceprogram.com/issues/22757>

REPLICATION: Establish a deployable surface science set-up on non-level ground on Mun (you don't have to look far for such a place). Make sure the surface set-up has both adequate power and a communications dish, and that there are relay satellites such that the science set-up should ALWAYS have a link back to Kerbin. Then timewarp at high rate until your message buffer starts getting spammed with messages saying the set-up can't transmit because it either doesn't have power or can't communicate. This will usually happen within 2 weeks.

POSSIBLE SOLUTION: Because the underlying cause comes from Unity, there's no hope of preventing modules sliding relative to each other. And physically fixing them together would cause all the usual Kraken problems with physically connected surface bases so would probably be no better than the current situation. Thus, the only solution to modules sliding relative to each other is to make the connectivity distance only apply when the modules are initially placed. After that, let them slide where they will but allow them to remain connected for functional purposes. And, of course, fix the message spam noted in [#22757](#).

An Example: Here's a surface science set-up I put on sloping ground in the Munar Lowlands (about the smoothest terrain on Mun). All modules were originally within kissing distance and neatly arranged. After a couple of weeks, however, the communications dish slid too far away from the rest of the module, so the whole set-up lost communications despite there always being a relay within LOS.

This pic shows there's a relay overhead: 

This pic shows there's a communications dish but the set-up has no link: 

This pic shows the set-up's dish has slid too far away from the rest: 

History

#1 - 06/09/2019 04:50 PM - Geschosskopf

- File Sliding Comms 01.jpg added
- File Sliding Comms 02.jpg added
- File Sliding Comms 03.jpg added

Files

File Name	Size	Date	Author
Sliding Comms 01.jpg	267 KB	06/09/2019	Geschosskopf
Sliding Comms 02.jpg	62.3 KB	06/09/2019	Geschosskopf
Sliding Comms 03.jpg	253 KB	06/09/2019	Geschosskopf