



Octree bug in SpatialExplorer 3.5.0 - 3.5.2

Service Bulletin

Release Date: April 13, 2018

Phoenix LiDAR Systems
10131 National Blvd.
Los Angeles, CA 90034

www.phoenixlidar.com
+1.323.577.3366
support@phoenixlidar.com

Disclaimer

Information in this document is provided in connection with Phoenix LiDAR Systems products. No license, expressed or implied, by estoppels or otherwise, to any intellectual property rights is granted by this document. Except as provided in the terms and conditions of sale for such products, Phoenix LiDAR Systems assumes no liability whatsoever, disclaims any express or implied warranty, relating to sale and/or use of products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright or other intellectual property right.

Phoenix LiDAR Systems products are not intended for use in medical, life saving, life sustaining, critical control or safety systems, or in nuclear facility applications. In no event shall Phoenix LiDAR Systems liability exceed the price paid for the product from direct, indirect, special, incidental, or consequential damages resulting from the use of the product, its accompanying software, or its documentation. Phoenix LiDAR Systems makes no warranty or representation, expressed, implied, or statutory, with respect to its products or the contents or use of this documentation and all accompanying software, and specifically disclaims its quality, performance, merchantability, or fitness for any particular purpose. Phoenix LiDAR Systems reserves the right to revise or update its products, software, or documentation without obligation to notify any individual or entity. Backup collected data periodically to avoid any potential data loss. Phoenix LiDAR Systems disclaims any responsibility of all sorts of data loss or recovery.

Introduction

This Service Bulletin (SB) is being issued to alert customers whose rovers are on SpatialRover firmware 3.5.0 - 3.5.2 to increase the Minimum Point Distance in SpatialExplorer.

If your rover has not been upgraded to SpatialRover version 3.5.0 or above, please disregard this service bulletin.

Background

Recently, Phoenix LiDAR Systems has investigated in field rover failures during real-time acquisition of LiDAR data in versions 3.5.0 - 3.5.2 of SpatialExplorer. The root cause of the problem was identified as an error in the creation/deletion of the octree generated to display points during LiDAR acquisition.

The purpose of this document is to demonstrate how to temporarily adjust the octree spacing in SpatialExplorer 3.5.0 - 3.5.2. The issue has been fixed and is currently in testing. We will be releasing an updated version of SpatialExplorer in the upcoming week.

Pre-Procedure

- If connecting via ethernet, make sure that you have configured the ethernet adapter on your workstation to be able to communicate with rover. Any computer with a properly configured ethernet adapter can be used to establish a direct connection to the rover using an ethernet cable. Field computers configured by Phoenix LiDAR Systems will default to an alternative IP configuration of 192.168.200.20 when no IP address is obtained through DHCP on the primary ethernet port within 3 minutes. This will allow a computer to establish a connection to the rover via ethernet after 3 minutes of connection. Refer to Section 5.5 Wired Ethernet Network Card Setup in the Phoenix LiDAR Systems User Manual for more information.

Recommendation

1. Launch SpatialExplorer from a computer connected to rover and choose your preferred method of establishing a connection (ethernet, Wi-Fi, or ConnectionService). If you are unable to connect to rover, refer to Section 10 Connect to Rover in the Phoenix LiDAR Systems User Manual.

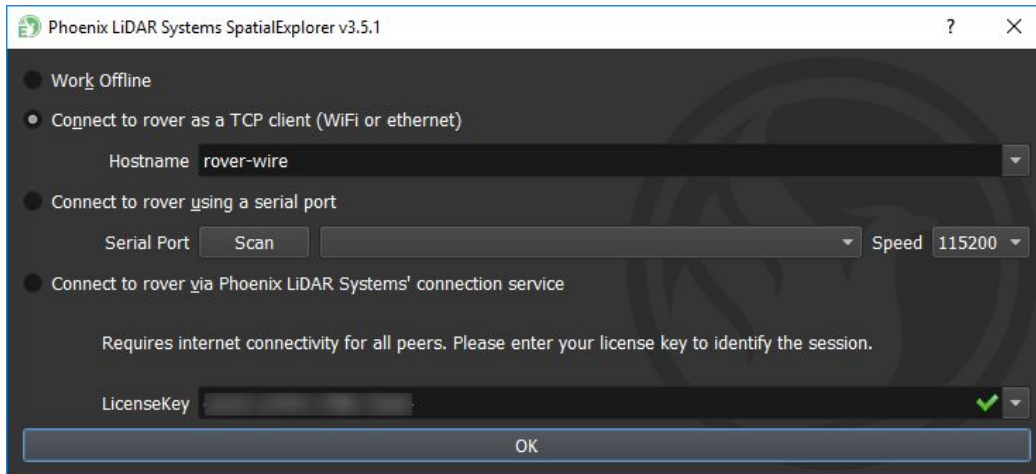


Figure 1: Connect to rover via SpatialExplorer

2. Once connected to rover, navigate to Settings → Rover.

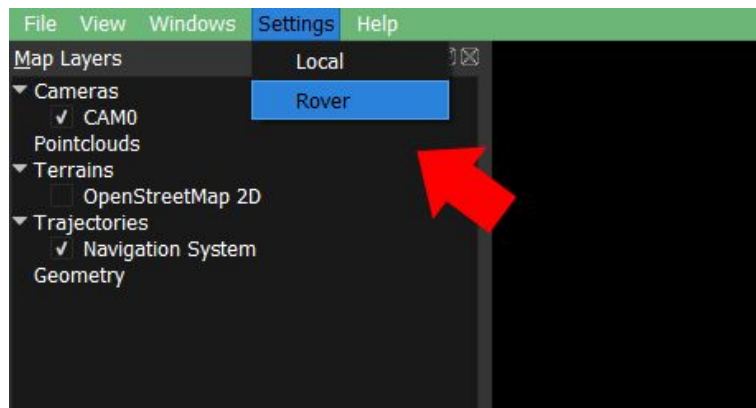


Figure 2: Navigate to Rover Settings in SpatialExplorer

3. Click the **General** tab to view the general options/parameters related to rover.

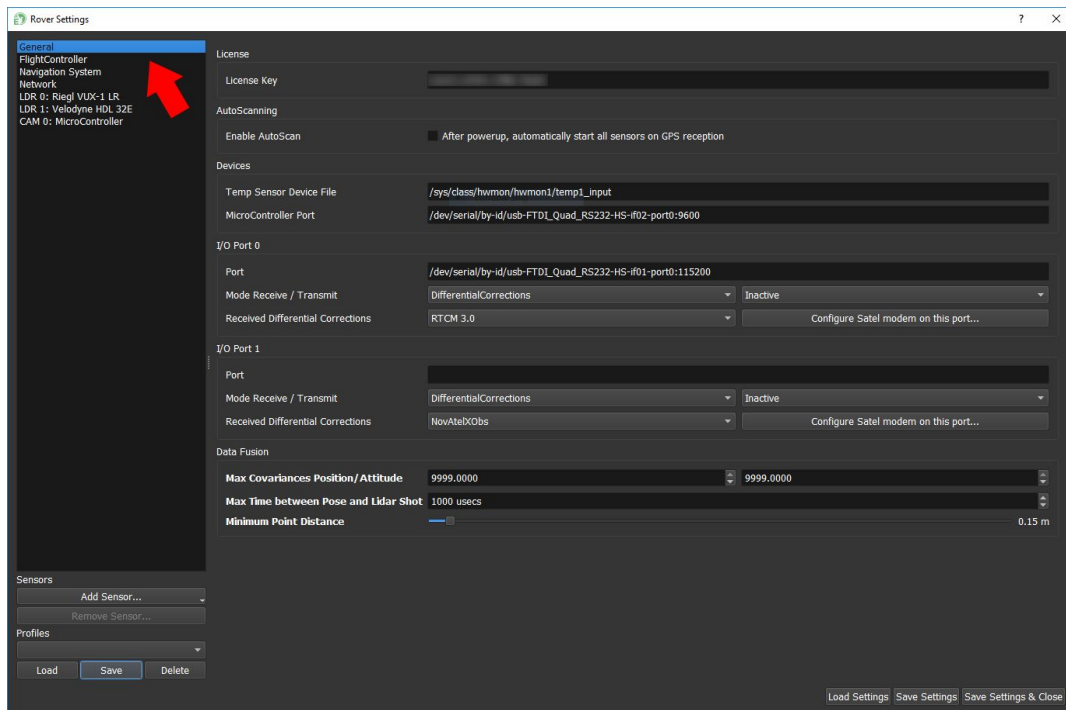


Figure 3: General Rover Settings in SpatialExplorer

4. Locate the “Minimum Point Distance” option. If this option is set to anything less than 1.00 m, you will need to change it. Otherwise, there is no need to alter this parameter.

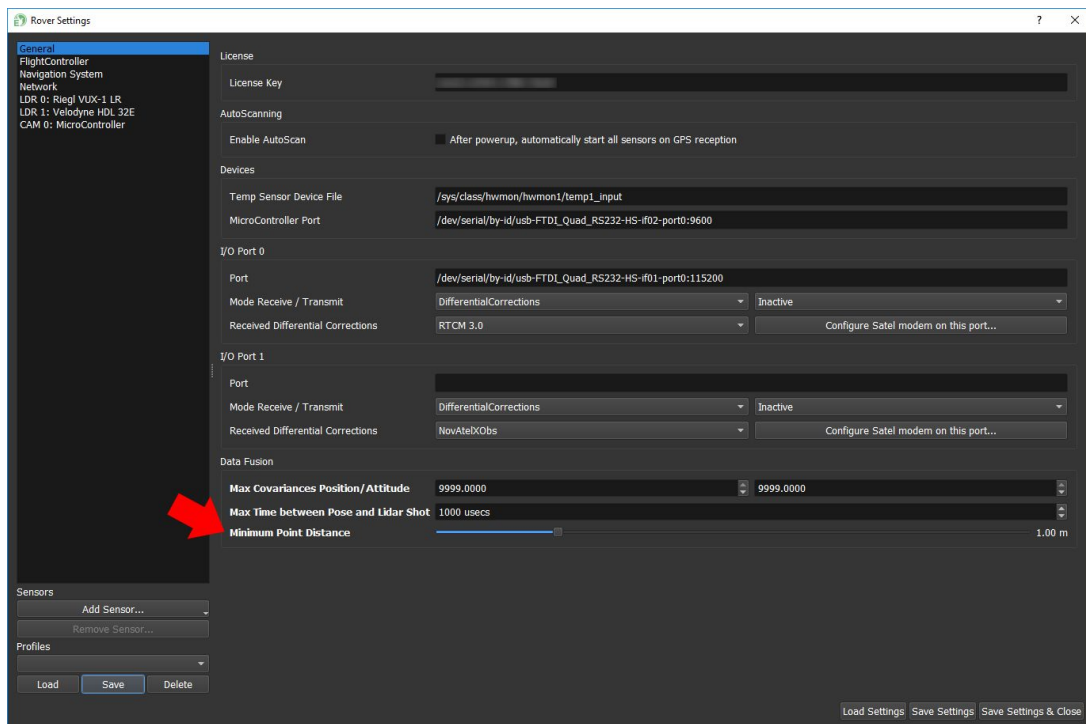


Figure 4: Locating Minimum Point Distance in SpatialExplorer

5. If your “Minimum Point Distance” is set to any value less than 1.00 m, move the slider to the right to increase it to a minimum value of 1.00 m.

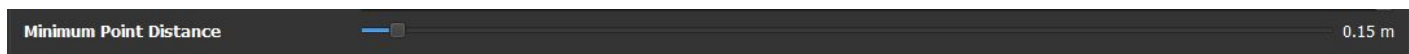


Figure 5: Minimum Point Distance set to value less than 1.00



Figure 6: Setting Minimum Point Distance parameter to 1.00 m

6. Once the Minimum Point Distance has been set to 1.00 m or greater, click the “Save Settings & Close” button. This will ensure that the value has been saved and applied.

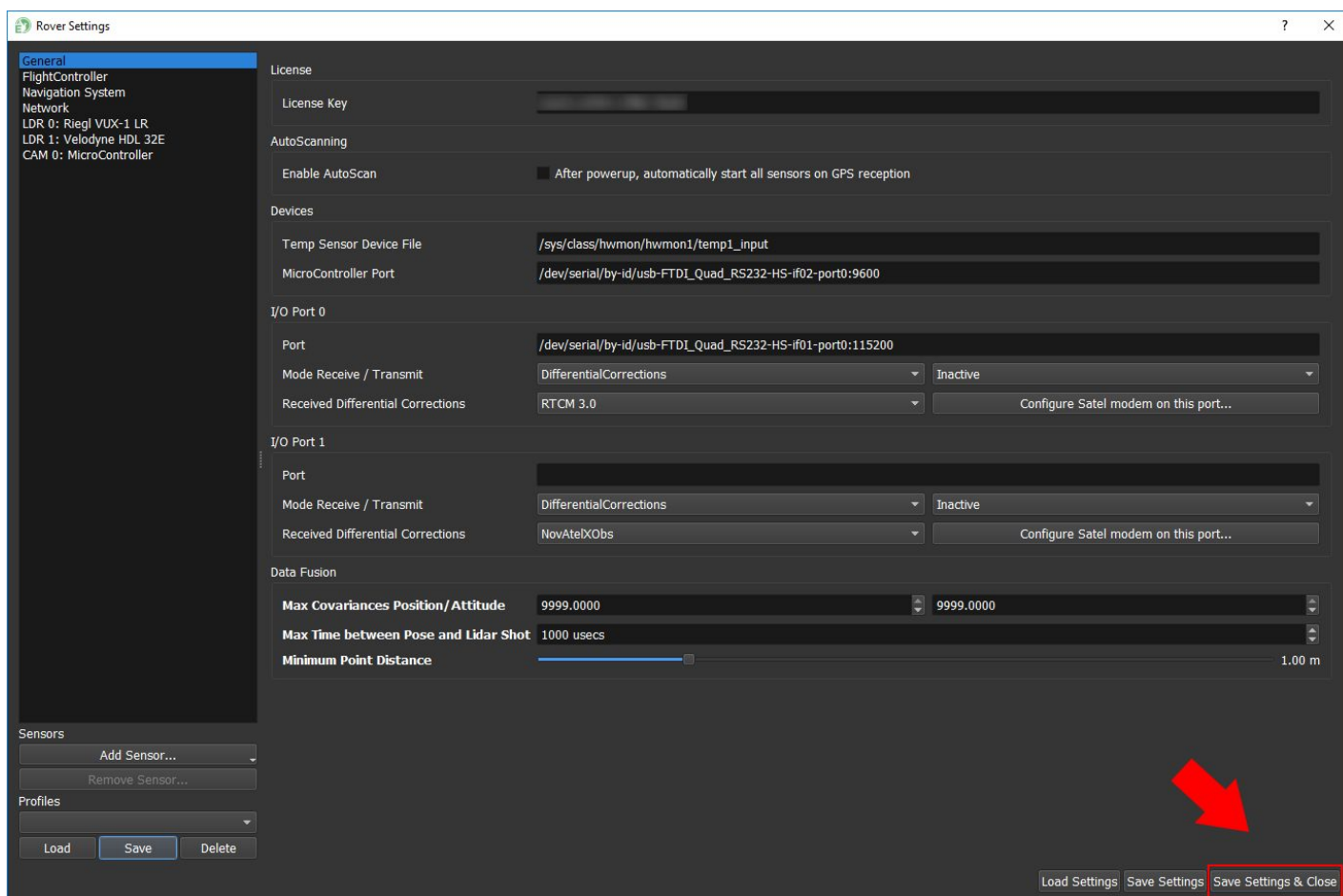


Figure 7: Save Settings & Close to apply change to Minimum Point Distance

This content is subject to change.

If you have any questions about this document, please contact Phoenix LiDAR Systems by sending a message to support@phoenixlidar.com.

Copyright © 2018 Phoenix LiDAR Systems
All Rights Reserved.