

Lidar data quality through analysis of inter swath accuracy: A USGS-ASPRS Effort

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ABSTRACT:

The American Society for Photogrammetry and Remote Sensing's Lidar Cal/Val (calibration/validation) Working Group (WG) led by the US Geological Survey (USGS) to establish "Guidelines on Geometric Accuracy and Quality of Lidar Data" has made excellent progress via regular teleconferences and meetings. The WG has identified three point-to-plane distance measures as Data Quality Measures (DQMs) for assessing the inter-swath relative accuracy of lidar data. The use of these measurements, along with analysis with respect to the medial axis, defined as the center-line of swath overlap region provides insights into the quality of calibration and data collection. It is expected that these analyses will be used to specify the quality of lidar data. The goal of this article is to communicate these developments to the geospatial community and invite them to participate in the process.