9 May 2018

Patrick Emmett
USGS, MS 666
1400 Independence Road
Rolla, MO 65401

Dear Patrick,

This letter accompanies the redelivered QL1 data of the USGS Payette, Idaho 3DEP LiDAR project delivery lot six, in response to the LiDAR quality assessment report conducted by the USGS National Geospatial Technical Operations Center. In addition to the errors indicated within the quality assessment report, a few additional edits have been made to improve the overall quality of the dataset and are discussed within this report.

The USGS 3DEP Payette LiDAR acquisition occurred between September 9th, 2017 and October 14th, 2017. This dataset is projected in UTM Zone 11 North, the horizontal datum is NAD83 (2011), and the vertical datum is NAVD88, Geoid12B. Horizontal and vertical units are in meters.

Please feel free to reach out to myself or the team at Quantum Spatial if you have any questions or concerns regarding this LiDAR data delivery.

Sincerely,

Joel Burroughs, Project Manager

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(859) 550-2944

Metadata

- Vertical accuracy reported within all metadata xmls have been delineated with a separate <qvertpa></qvertpa> tag for each type of accuracy reported. A description along with the numerical value of the accuracy reported is present within the <vertaccv> </vertaccv> tag.
- The abscissa and ordinate resolution has been changed for all raster metadata to reflect the pixel size.
- Within the project and classified las metadata xml, purpose and supplinf has been moved above LiDAR information.

Hydroflattened DEMs

- The water body identified in tiles bh_45116a21 and bh_45116a22 was not flattened to a consistent elevation, with the water feature in each tile representing a variance of 0.17 meters with the adjacent tile. This has been corrected with an elevation of 2181.08 applied to the entire water feature.
- The identified data gaps were corrected in tiles bh_44116F72 and bh_44116G51. Additional gaps were identified in tiles bh_44116f74 and bh_45116a31 in the quarter quads and tile bh_45116b2 of the full quads and have subsequently been edited to eliminate these gaps.

Hydroenforced DEMs

- The missed culvert line identified in tile he_44116h21 has been added.
- The sink identified in tile he_45116a21 has not been hydroflattened as it is below the 2 acre size threshold required for flattening. A filling routine has been applied to the enforced model giving the lake its flattened appearance.
- The voids identified in tiles he_44116f74, he_44116G51 and additional voids that correspond with the hydroflattened DEMs have been corrected.
- The apparent spikes in the deep culvert cuts have not been modified as the z values of each cut flow downhill in a connected set of cells.