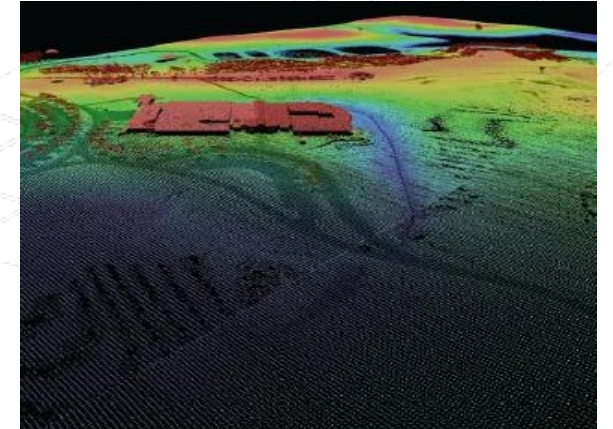
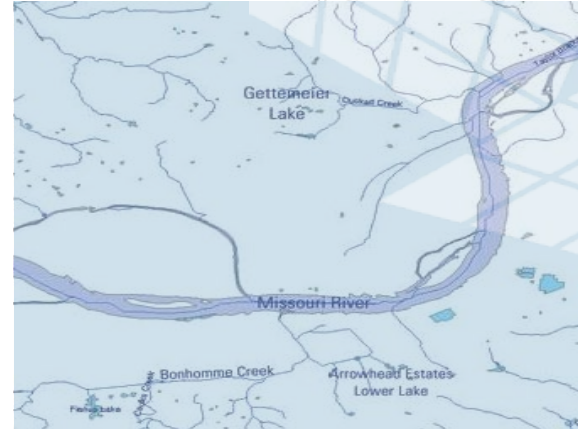
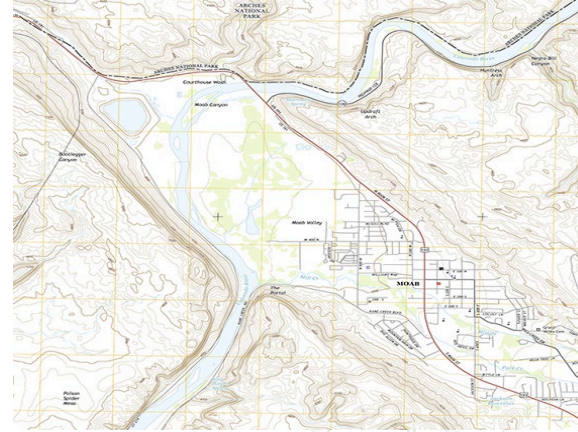




GPSC Technical Exchange



Josh Nimetz

USGS | National Geospatial Technical Operations Center

Virtual Web Conference

May 9, 2023



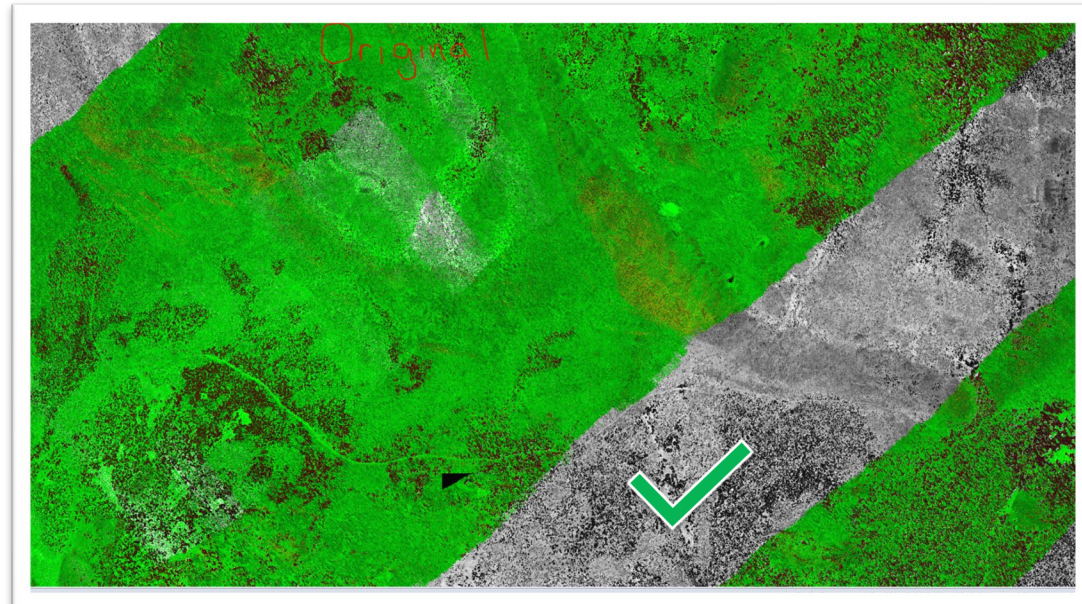
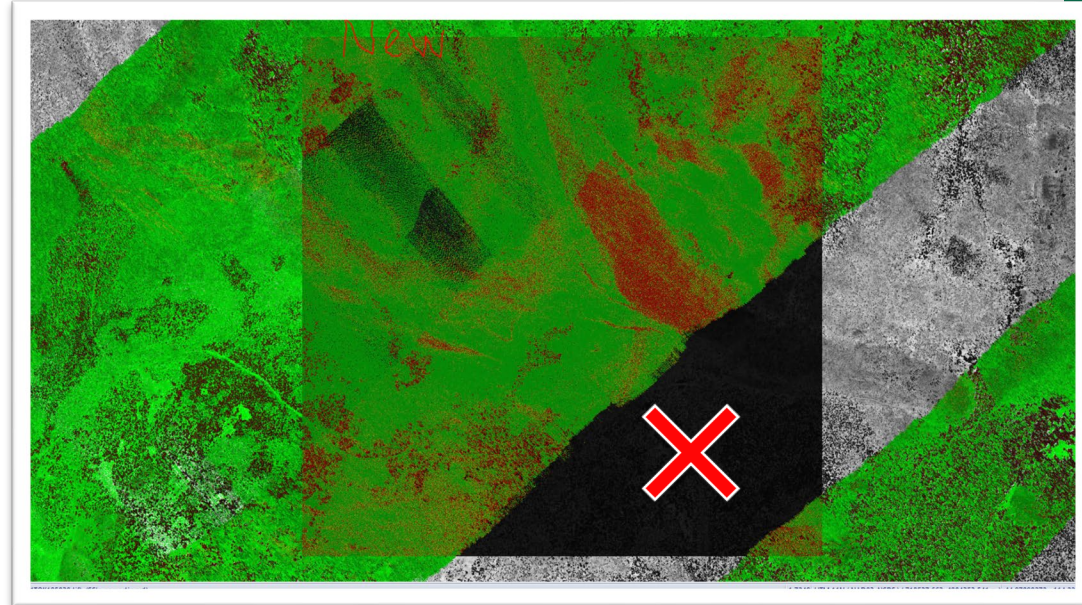
+ Topics for discussion

2

- Numerous pending LBS revisions
 - [Lidar Base Specification Revision Status | U.S. Geological Survey \(usgs.gov\)](#)
- Intensity-interpretable Swath Separation Imagery
- Work Unit buffers
- Inter/intraswath polygons
- ASPRS Positional Accuracy Standards update
 - VVA check points
- Access to TEM materials – slides, recordings, etc.
 - https://rockyweb.usgs.gov/outgoing/3DEP_TEM/

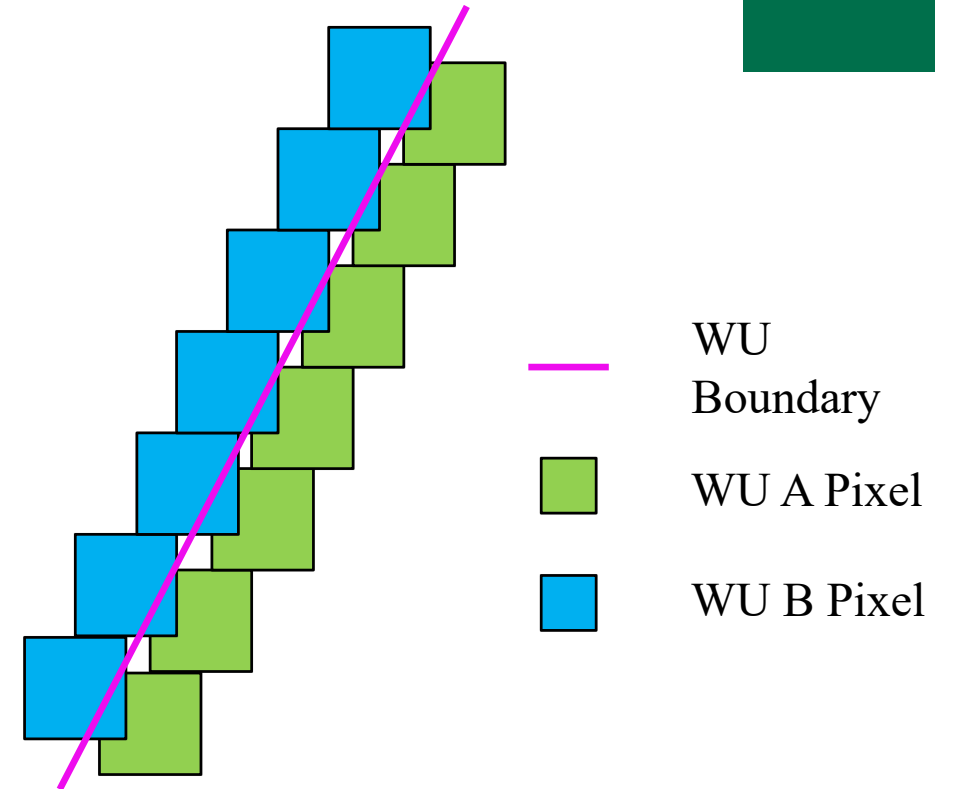
+ Swath Separation Imagery - Intensity

- Contractors, USGS, and data users rely on SSIs to understand interswath goodness of fit
- Intensity data *that is interpretable* needed to interpret landcover, terrain, and patterns
- SSIs should be thought of as enhanced intensity images
- Discussed in previous TEMs (



+ Work Unit Buffers

- USGS *considering* 100-pixel buffer for *all* work units
- Needed to ensure no gaps in DEM coverage between work units
- Please reach out to GPSC COR (Walter) with any concerns you have regarding 100-pixel buffers between all work units



+ Data Internal Precision Update

- Proposal forthcoming to modify language in the Lidar Base Specification related to smooth surface and interswath precision
- Meanwhile, USGS does not require delivery of “polygon shapefile delineating the sample areas checked...”
- Contractors expected to provide write-up and any ancillary information used to ensure compliance with smooth surface precision and interswath precision requirements
- For now, USGS relies on SSIs for interswath and spot-checking point cloud for smooth surface precision validation

Lidar Base Spec – positional accuracy validation

<https://www.usgs.gov/ngp-standards-and-specifications/lidar-base-specification-data-processing-and-handling-requirements#positional-accuracy-validation>

+ ASPRS Positional Accuracy Standards Update

■ VVA Check Points

- Removal of pass/fail threshold for VVA assessment
- ASPRS currently planning to move forward with **30 VVA check points** for all project AOIs
- ASPRS proposing no aggregate statistics for VVA, only residuals/deltas to be reported



+ Thank you!

