

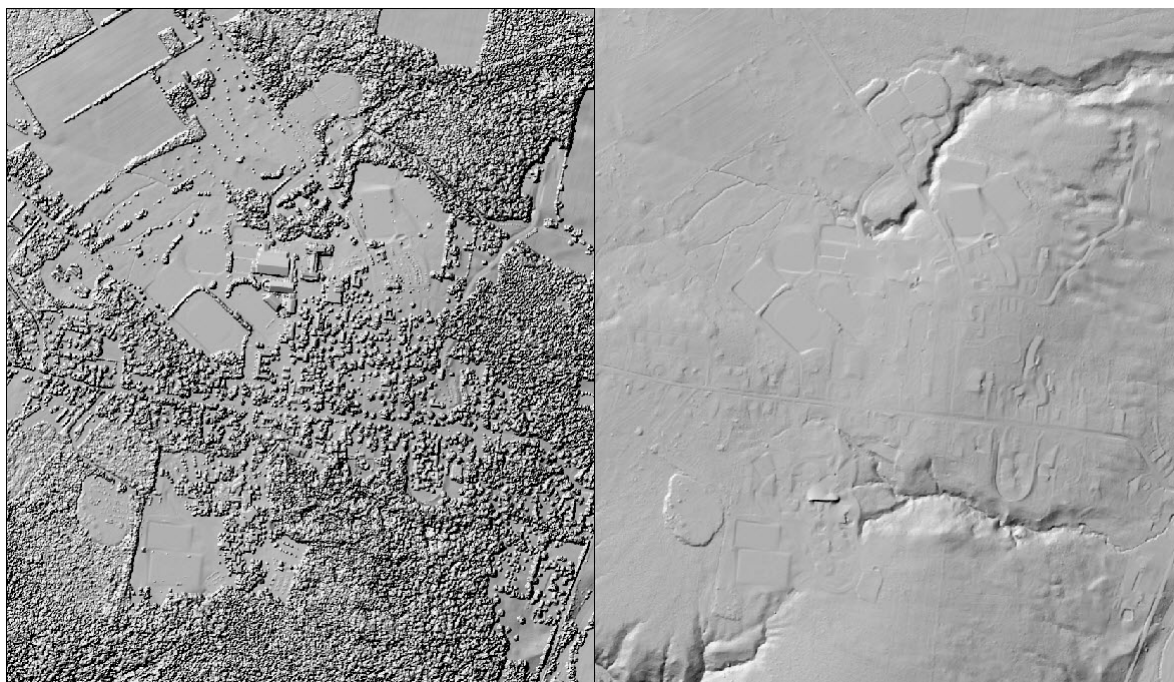
Workshop B3b: Working with LiDAR (.las) Data in ArcGIS

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Workshop participants learned to process LiDAR (.las) data using ArcGIS 10.1 to produce digital surface models (DSM), digital terrain models (DTM) and intensity images from data covering the local area. LiDAR sources were discussed as well.

Using raw (.las) LiDAR data from the Oneida County Planning Office in conjunction with ESRI's ArcGIS 10.1 software participants processed the data using the LiDAR first returns to create a Digital Surface Model (DSM) and corresponding hillshade of the Hamilton College campus area. Using the classified "bare earth" returns a Digital Terrain Model (DTM) and corresponding hillshade of the same area was also created. Using the Intensity attribute an intensity image, which resembles a B&W orthophoto, was also created. Intensity images can be very useful in land cover classification.



Hillshades derived from LiDAR first returns (left) and "bare earth" returns (right) of the Hamilton College campus area.



Intensity image derived from first return LiDAR data. Cell size is 2 meters and the intensity values are the mean of values in the BLOB intensity attribute recorded in the multipoint file. Raster created using point to raster tool from the multi-point file.