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<abstract>The 2006 OSIP digital LiDAR data was collected during the months of March and May (leaf-off conditions). The LiDAR DEM covers the entire land area of the northern tier of Ohio (approximately 23,442 square miles. The LiDAR DEM is delivered in county sets, consisting of 5,000' x 5,000' size tiles. Where the State borders other states (land only), the entire border of the State is buffered by at least 1,000-feet. Along the Lake Erie Shoreline ortho coverage is buffered beyond the shoreline a minimum distance of 2,500-feet. Adjacent flight lines overlap by an average of 30 percent. LiDAR was collected with Leica ALS50 digital LiDAR Systems. The file naming convention is as follows: Nxxxxyyy = 5,000' x 5,000' LiDAR Tiles located in the Ohio State Plane Coordinate System (North Zone). Sxxxxyyy = 5,000' x 5,000' LiDAR Tiles located in the Ohio State Plane Coordinate System (South Zone). Please note that xxxx and yyy represent the easting and northing coordinates (respectively) in state plane feet, The naming convention for each LiDAR tile is based upon (the bottom most-left pixel). The LiDAR DEM was provided in ESRI GRID, Raster and LAS Formats, with only the LAS Format containing the above ground LiDAR features. Ownership of the data products resides with the State of Ohio. Orthophotography and ancillary data products produced through this contract are public domain data.

LiDAR was acquired Statewide to provide a solid and very accurate base to use during the image rectification process. This same LiDAR can be supplemented with 3D breaklines to generate 2-foot and/or 4/5-foot contours. The average post spacing between LiDAR points is 7-feet. The flying altitude was 7,300-feet AMT, with the targeted flying speed at 170 knots.</abstract>

<purpose>The State of Ohio has a goal to develop and maintain a seamless statewide base map, referred to as OSIP (Ohio Statewide Imagery Program). OSIP is an initiative partnered through several State Agencies (i.e. ODOT, ODNR) through OGRIP. Data from this project forms the foundation of the Statewide base map, and was developed primarily to support multi-use applications, including homeland security, emergency management, economic development, and the business of government.</purpose>

<supplinf>The delivery of the LiDAR DEM will be based upon the 5,000' x 5,000' ortho tile layout, with the same naming convention used for both the imagery and LiDAR. Each LiDAR tile will be delivered in ArcGRID (ASCII), Raster and LAS Formats.</supplinf>

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<pubdate>20070101</pubdate>

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<cntinfo>

<cntpos>Project Administrator</cntpos>

<cntaddr>

<addrtype>mailing and physical address</addrtype>

<address>77 South High Street - Room 1990</address>

<city>Columbus</city>

<state>Ohio</state>

<postal>43215</postal>

<country>USA</country>

</cntaddr>

<cntvoice>614.466.4747</cntvoice>

<cntfax>614.728.5297</cntfax>

<cntemail>gis.support@oit.ohio.gov</cntemail>

<hours>8:00 am - 5:00 pm</hours>

<cntorgp>

<cntorg>State of Ohio, through the Office of Information Technology, Investment and Governance Division, for the Office of Information Technology, Services Delivery Division and the Ohio Geographically Referenced Information Program (OGRIP)</cntorg>

<cntper>Jeff Smith</cntper>

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<address>409 East Monument Avenue</address>

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</cntaddr>

<cntvoice>937.531.1323</cntvoice>

<cntperp>

<cntper>Brian Stevens</cntper>

<cntorg>Woolpert Inc.</cntorg>

</cntperp>

<cntpos>Project Manager</cntpos>

<cntfax>937.461.0743</cntfax>

<cntemail>brian.stevens@woolpert.com</cntemail>

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<cntorg>OGRIP</cntorg>

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<logic>Compliance with the accuracy standard was validated by the collection of photo identifiable GPS ground control points during the acquisition of LiDAR. The following checks were performed.

- The LiDAR DEM data was checked against the project ground control. The technical staff confirmed the accuracy of the points during initial processing. Airborne GPS was also utilized during processing.

</logic>

<complete>The following methods are used to assure LiDAR accuracy.

- Use of IMU and ground control network utilizing GPS techniques.

- Use of airborne GPS in conjunction with the imagery and LiDAR acquisition.

- The following software is used for validation of the surface modeling

- LiDAR DEM Data - Terrascan, TerraModeler, Leica

- MicroStation

- ESRI - ArcInfo

- ERDAS Imagine

- Woolpert Proprietary software</complete>

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<horizpar>The LiDAR DEM, meeting NMAS.</horizpar>

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<vertaccr>The LiDAR DEM was acquired to meet +/- 1-foot vertical accuracy (RMSE of 0.5-foot - 95% confidence level). This is suitable for rectification of digital orthophotography and for the creation of 2- and 5-foot contours (with the addition of 3D compiled breaklines).</vertaccr>

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<srccontr>The aerial LiDAR DEM acquisition for the State of Ohio was flown to support the creation of digital orthophotography with a 0.5-foot and 1-foot pixel resolution, as well as 1"=1,000 scale CIR Imagery. LiDAR acquisition was flown at an approximate altitude of 7,300-feet AMT, with approximately 34,000 line miles of acquisition. The LiDAR DEM was collected using the Leica ALS50 digital LiDAR system. Woolpert, with the assistance of Horizons, Inc. acquired all LiDAR DEM Data.</srccontr>

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<pubdate>20060626</pubdate>

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