

Manawatu - Whanganui LiDAR 1m Index Tiles (2015-2016)

Title	Manawatu - Whanganui LiDAR 1m Index Tiles (2015-2016)
Creator	LINZ - Land Information New Zealand
Date	2015-12-27
Description	<p>This layer contains the Index Tiles for LiDAR data from the Manawatu - Whanganui Region captured between 2015 and 2016. - The DEM is available as layer [Manawatu - Whanganui LiDAR 1m DEM (2015-2016)](https://data.linz.govt.nz/layer/102475-manawatu-whanganui-lidar-1m-dem-2015/). - The DSM is available as layer [Manawatu - Whanganui LiDAR 1m DSM (2015-2016)](https://data.linz.govt.nz/layer/102476-manawatu-whanganui-lidar-1m-dsm-2015/). - The LAS point cloud and vendor project reports are available from [OpenTopography] (https://portal.opentopography.org/datasets?loc=New%20Zealand). This is a reprocessed dataset of the Manawatu-Whanganui 2015 LiDAR Project. It was re-supplied by Aerial Surveys for Land Information New Zealand, and includes peripheral data not part of the original survey obtained by Horizons (Manawatu-Wanganui) Regional Council. The survey area includes Bulls, Ohura, parts of Fielding and Marton. These datasets were generated by Aerial Surveys and their subcontractors. Data management and distribution is by Land Information New Zealand. Data comprises: - DEM: tif or asc tiles in NZTM2000 projection, tiled into a 1:1,000 tile layout - DSM: tif or asc tiles in NZTM2000 projection, tiled into a 1:1,000 tile layout - Point cloud: las tiles in NZTM2000 projection, tiled into a 1:1,000 tile layout Pulse density specification is at a minimum of 2 pulses/square metre. Vertical datum is NZVD2016.</p>
Source	<p>Data Acquisition: Airborne Laser Scanner (ALS) data was acquired from a fixed wing aircraft on between 27 December 2015 and 17 December 2016, using Aerial Surveys OptechOrion H300 LiDAR system. Survey Specification: • Scanner: Optech Orion H300 • Points Per M2: 2 or greater For details about flying height, scan angle, scan frequency, pulse rate and swath overlap please refer to the survey report. Data Processing: The LiDAR sensor positioning and orientation (POS) was determined using the collected GPS/IMU datasets and Applanix POSpac software. For Benchmark and Base Station information, please refer to the survey report. The POS data was combined with the LiDAR range files and used to generate LiDAR point clouds in NZTM and ellipsoidal heights. This process was undertaken using Optech LMS LiDAR processing software. The data was checked for completeness of coverage. The relative fit of data in the overlap between strips was also checked. The height accuracy of the ground classified LiDAR points was checked using open land-cover survey check site data collected by Sounds Surveying Ltd. This was done by calculating height differences statistics between a TIN of the LiDAR ground points and the checkpoints. The positional accuracy of the LiDAR data has been checked by overlaying Sounds Surveying Ltd surveyed data over the LiDAR data displayed coded by intensity. The data was found to fit well in position. All product deliverables supplied in terms of NZTM map projection and NZVD2016 height datum. Classification of the point cloud followed the classification scheme below: 2 - Ground 14 - Above Ground Re-processing: This data was reprocessed by Aerial Surveys for LINZ relative to the NZVD2016 vertical datum, and supplied as 1:1000 nominal scale (2500 720m high x 480m wide subtiles per full NZ Topo50 sheet). Lakes and large rivers were hydroflattened in the Bare Earth Digital Elevation Model. The deliverables to LINZ were: 1m gridded bare earth digital elevation model (DEM) 1m gridded digital surface model (DSM) Classified point cloud Reprocessed Classified Point Cloud Data was reclassified by LINZ and is hosted by Open Topography: the Above_Ground (14) points were reclassified as Unassigned classification (1).</p>
Coverage	-40.7379145915 174.756187957 -38.8143694482 176.057824049
Identifier	https://data.linz.govt.nz/layer/102477-manawatu-whanganui-lidar-1m-index-tiles-2015-2016/
Type	

vector

Language

eng

Subject

New Zealand

Subject

elevation