

Otago - Balclutha LiDAR Index Tiles (2020)

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| Title | Otago - Balclutha LiDAR Index Tiles (2020) |
| Creator | LINZ - Land Information New Zealand |
| Date | 2020-01-16 |
| Description | <p>This layer contains the Index Tiles for LiDAR data for Balclutha, Kaitangata and Kaka Point, as well as the surrounding Clutha Delta, Otago in 2020. - The DEM is available as layer [Otago - Balclutha LiDAR 1m DEM (2020)](https://data.linz.govt.nz/layer/104763). - The DSM is available as layer [Otago - Balclutha LiDAR 1m DSM (2020)](https://data.linz.govt.nz/layer/104764). - The LAS point cloud and vendor project reports are available from [OpenTopography](http://opentopo.sdsc.edu/datasets). LiDAR was captured for Otago Regional Council by Landpro from 16 to 18 January 2020. These datasets were generated by Landpro. 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 2.03 pulses/square metre. Vertical Accuracy Specification is +/- 0.12m (95%) Horizontal Accuracy Specification is +/- 0.57m (95%) Vertical datum is NZVD2016</p> |
| Source | <p>Data Acquisition: Airborne Laser Scanner (ALS) data was acquired from a fixed wing aircraft on between 16th and 18th January 2020 using Landpro's Leica ALS60 LiDAR system. Survey Specification: - Scanner: Leica ALS60 - Half Scan Angle: ±13 degrees - Laser Pulse Rate: 131kHz - Laser Pulse Mode: Multipulse - Laser Return: 1st, 2nd, 3rd... 4th and last - File Format: GeoTIFF, LAS 1.4, ESRI Shapefile - Horizontal Datum: NZGD2000 - Vertical Datum: NZVD2016 - Map Projection: NZTM2000 - Vertical Accuracy Specification: ±0.12m (95% Confidence Interval) - Horizontal Accuracy Specification: ±0.57m (95% Confidence Interval) Airborne Laser Scanner (ALS) data was acquired from a fixed wing aircraft on between 16th and 18th January 2020 using Landpro's Leica ALS60 LiDAR system. Classification of the point cloud followed the classification scheme below; 1 - Unclassified 2 - Ground 3 - Low Vegetation 4 - Medium Vegetation 5 - High Vegetation 6 - Building 9 - Water 17 - Bridge Rail (10) points were reclassified by LINZ as Bridges (17) per survey reference before providing the classified point cloud data to Open Topography. Data Processing: A "1st run" automatic classification was carried out on the raw LiDAR points using TerraSolid's TerraScan software to separate the LiDAR points into ground hits and non-ground hits. This results in a greater than 90% correct classification. After this, a manual classification was done over the required area to edit the points with gross classification errors that may have occurred in the automatic classification process. Ground class has been classified to ICSM Level 2. Data Validation: The check points of the lidar survey had been compared with the LiDAR ground surface for vertical accuracy resulting in 0.026m RMS. The positional accuracy of the LiDAR data has been checked by plotting the Landpro Ltd. check points and displaying the LiDAR by intensity. The LiDAR was in position. Please see survey report for more data validation details. 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</p> |
| Type | vector |
| Language | eng |
| Subject | New Zealand |
| Subject | elevation |