

West Coast LiDAR Index Tiles (2020-2022)

Title	West Coast LiDAR Index Tiles (2020-2022)
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Date	2020-05-16
Description	<p>This layer contains the index tiles for LiDAR data in the West Coast Region, captured between 2020 and 2022. - The DEM is available as layer [West Coast LiDAR 1m DEM (2020-2022)] (https://data.linz.govt.nz/layer/110163). - The DSM is available as layer [West Coast LiDAR 1m DSM (2020-2022)](https://data.linz.govt.nz/layer/110164). - The LAS point cloud and vendor project reports are available from [OpenTopography](https://portal.opentopography.org/datasets?loc=New%20Zealand). LiDAR was captured for West Coast Regional Council by Aerial Surveys between 16 May 2020 and 14 February 2022. 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 4 pulses/square metre. Vertical Accuracy Specification is +/- 0.2m (95%) Horizontal Accuracy Specification is +/- 1.0m (95%) Vertical datum is NZVD2016.</p>
Source	<p>Data Acquisition: Airborne Laser Scanner (ALS) data was acquired from a fixed wing aircraft between 16 May 2020 and 14 February 2022 using Aerial Surveys Optech Galaxy PRIME LiDAR system. Survey Specifications: □ Scanner: Optech Galaxy PRIME □ Flying Height: 2,925 m AMGL □ Scan Angle: ±52.0 degrees □ Scan Frequency: 45 Hz □ Pulse Rate: 400 kHz □ Swath Overlap: 55% □ Swath Points Per M2: 4 Data Processing: The LiDAR sensor positioning and orientation (POS) was determined using the collected GPS/IMU datasets and Applanix POSpac software. Base Station Positions: PP-RTX 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. LiDAR is relative to the control check points. Please refer to the survey report for accuracy statistics. 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. The point cloud data was then classified with TerraSolid LiDAR processing software into ground and above ground returns using automated routines tailored to the project land cover and terrain. All product deliverables supplied in terms of NZTM map projection and NZVD2016 vertical datum. Classification of the point cloud follows the classification scheme below: 1 - Unclassified 2 - Ground 3 - Low Vegetation 4 - Medium Vegetation 5 - High Vegetation 6 - Buildings 7 - Low Noise 9 - Water 18 - High Noise Lakes and large rivers were hydroflattened in the Bare Earth Digital Elevation Model. Spikes and tile edge artefacts were fixed and bridges removed by LINZ in the following tiles: - DEM_BR21_2020_1000_2326 - DEM_BR21_2020_1000_2439 - DEM_BS20_2020_1000_0220 - DEM_BS20_2020_1000_0347 - DEM_BS20_2020_1000_0348 The deliverables to LINZ were: 1m gridded bare earth digital elevation model (DEM) 1m gridded digital surface model (DSM) Classified point cloud The dataset has been published prior to the completion of a full quality check. If any issues or problems are found with this dataset, please provide feedback to LINZ at customersupport@linz.govt.nz.</p>
Type	vector
Language	eng

Subject

New Zealand

Subject

elevation