

Bay of Plenty LiDAR 1m DSM (2018-2019)

Title	Bay of Plenty LiDAR 1m DSM (2018-2019)
Creator	Toitū Te Whenua Land Information New Zealand
Date	2018-12-07
Description	<p>This layer contains the DSM for LiDAR data for Bay of Plenty captured between 2018 and 2019. - The DEM is available as layer [Bay of Plenty LiDAR 1m DEM (2018-2019)](https://data.linz.govt.nz/layer/104736). - The index tiles are available as layer [Bay of Plenty LiDAR Index Tiles (2018-2019)] (https://data.linz.govt.nz/layer/104742). - The LAS point cloud and vendor project reports are available from [OpenTopography](https://portal.opentopography.org/datasets?loc=New%20Zealand). LiDAR was captured for BOPLASS Limited by AAM New Zealand from 7 December 2018 to 13 April 2019. These datasets were generated by AAM New Zealand and their subcontractors. Data management and distribution is by Toitū Te Whenua 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 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 on between 7th December 2018 to 13th April 2019 using AAM New Zealand's Optech Orion M300 LiDAR system and Riegl LMS Q780 LiDAR system. Please refer to survey reports for survey specifications. Airborne Laser Scanner (ALS) data was acquired from a fixed wing aircraft between 29th August to 28th September 2018 using AAM New Zealand's Optech Orion M300 LiDAR system and Riegl LMS Q780 LiDAR system. Classification of the point cloud followed the classification scheme below; 1 - Unclassified 2 - Ground 7 - Low Noise Points 9 - Water 18 - High points Data Processing: Reduction of the LiDAR data proceeded without any problems. Laser strikes were classified into default, ground, water and Low/high points using a single algorithm across the project area. Manual editing of the data classification was undertaken to further improve the quality of the ground class. Ground class has been classified to ICSM Level 2. Grid models were derived using a point to TIN and TIN to Raster process, using Linear interpolation. Hydro flattening was undertaken in area that met the size criteria for hydro flattening as per the LINZ DEM build specification New Zealand National Aerial LiDAR Base Specifications v1.1 - being non-tidal water bodies with surface area greater than 10,000 sq m, and non-tidal water courses greater than 30m nominal width. Data Validation: GNSS base station support was sourced from GeoNET CORS. Ground control was surveyed by Sounds Surveying to allow an assessment of the accuracy of the LiDAR data, and to assist in control for the imagery. No flights exceeding 6 hours, therefore the GNSS data has not been included. All base stations used were existing LINZ geodetic marks that are part of the GeoNET CORS system. The deliverables to LINZ were: 1m gridded bare earth digital elevation model (DEM) 1m gridded digital surface model (DSM) Classified point cloud</p>
Coverage	-38.4681680367 175.85313446 -37.3872421875 177.303548758
Identifier	https://data.linz.govt.nz/layer/104741-bay-of-plenty-lidar-1m-dsm-2018-2019/
Type	grid
Language	eng
Subject	

New Zealand

Subject

elevation