

Wellington LiDAR 1m DSM (2013)

Title

Wellington LiDAR 1m DSM (2013)

Creator

LINZ - Land Information New Zealand

Date

2013-01-01

Date

2013-12-31

Description

This layer contains the DSM for LiDAR data from the Wellington region captured in 2013. The DEM is available as layer [Wellington LiDAR 1m DEM (2013)] (<http://data.linz.govt.nz/layer/3621>). The index tiles are available as layer [Wellington LiDAR Index Tiles (2013)] (<http://data.linz.govt.nz/layer/3591>). The LAS point cloud is available from [OpenTopography] (<http://opentopo.sdsc.edu/datasets>). Lidar was captured for Greater Wellington Regional Council by Aerial Surveys in 2013. The datasets were generated by Landcare Research. The survey area includes Wellington, Porirua, Lower Hutt, Upper Hutt, Wairarapa, and Kapiti. 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 1km x 1km tile layout Data was collected at >1 pulse/square metre pulse density. Attributes include: -Elevation -Intensity values - Return number -Adjusted GPS time -Classification Vertical datum is NZVD2016

Source

Data Acquisition: Airborne Laser Scanner (ALS) data was acquired from a fixed wing aircraft in 2013 using Aerial Surveys' Optech ALTM 3100EA LiDAR system. Project Scope: Acquisition and delivery of Raw LiDAR Point Cloud Data over the entire Wellington region extending to 100m offshore Acquisition of urban specification (high resolution) LiDAR data: Ground model of +/-0.1 to 0.15m in z (1 sigma) with a resolution of 1.3 points per square metre. Post processing of the LiDAR data with data being delivered in separate flight lines using newly acquired ground control. Survey Specification: Scanner: Optech ALTM 3100EA Flying height: 1000m AMGL Scan Angle: +/- 18.8 degrees Scan Frequency: 53Hz Pulse Rate 100kHz Swath Overlap: 50% Points Per Sqm: 1.73 Data processing: The positional data collected from each flight by the POS-AV510 GPS/IMU system was processed using the Applanix POSMMS application. The ground control survey was carried out by the registered surveyors C&R Surveyors. All product deliverables supplied by Aerial Surveys in terms of NZTM map projection and Wellington 1953 Vertical Datum. The data was converted from NZGD2000 ellipsoidal heights into the local height system using the LINZ NZGeiod09 and Wellington 1953 offset. The point cloud data was classified by Landcare Research per the modified ASPRS classification scheme below, using an automated (Level 1) classification process: 1 - Unassigned 2 - Ground 4 - Vegetation 9 - Water Re-processing: In 2016 the data was reprocessed by Landcare Research for LINZ relative to the NZVD2016 vertical datum, and the DEM and DSM supplied as 1:1000 nominal scale (2500 720m high x 480m wide subtiles per full NZ Topo50 sheet). The deliverables to LINZ were: 1m gridded bare earth

| digital elevation model (DEM) 1m gridded digital surface model (DSM) Classified point cloud

Coverage

| -41.617878696 174.610394659 -40.6320140297 176.351419432

Identifier

| <https://data.linz.govt.nz/layer/53592-wellington-lidar-1m-dsm-2013/>

Type

| grid

Language

| eng

Subject

| New Zealand

Subject

| LAND-Topography

Subject

| LAND-Cover

Subject

| elevation

Subject

| imageryBaseMapsEarthCover