

# Waikato - West Coast and Hauraki Plains LiDAR 1m DSM (2015)

## Metadata

### File Identifier

9bc9a691-b998-8805-6564-f0382b797034

### Language

eng

### Character Set

#### Character Set Code

utf8

### Hierarchy Level

#### Scope Code

dataset

### Hierarchy Level Name

dataset

## Contact

### Responsible Party

#### Organisation Name

LINZ - Land Information New Zealand

#### Position Name

Lidar Coordination Manager

### Contact Info

#### Contact

##### Phone

##### Telephone

##### Voice

04 4600110

##### Address

##### Address

##### Delivery Point

155 The Terrace

##### City

Wellington

##### Postal Code

6145

**Country**

New Zealand

**Electronic Mail Address**

info@linz.govt.nz

**Role****Role Code**

pointOfContact

**Date Stamp****Date**

2017-06-26

**Metadata Standard Name**

ANZLIC Metadata Profile: An Australian/New Zealand Profile of AS/NZS ISO 19115:2005, Geographic information - Metadata

**Metadata Standard Version**

1.1

**Reference System Info****Reference System****Reference System Identifier****Identifier****Code**

2193

**Identification Info****Data Identification****Citation****Citation****Title**

Waikato - West Coast and Hauraki Plains LiDAR 1m DSM (2015)

**Date****Date****Abstract**

This layer contains the DSM for LiDAR data from the Waikato west coast and Hauraki Plains captured in 2015. The DEM is available as layer [Waikato - West Coast and Hauraki Plains LiDAR 1m DEM (2015)] (<http://data.linz.govt.nz/layer/3622>). The index tiles are available as layer [Waikato - West Coast and Hauraki Plains LiDAR Index Tiles (2015)] (<http://data.linz.govt.nz/layer/3624>). The LAS point cloud and vendor project reports are available from [OpenTopography](<http://opentopo.sdsc.edu/datasets>). Lidar was captured for Waikato Regional Council by Aerial Surveys in February and March 2015. The 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 Point density is 2 points/square metre. Vertical datum is NZVD2016.

## Status

Progress Code

completed

## Point Of Contact

Responsible Party

Organisation Name

LINZ - Land Information New Zealand

Position Name

Lidar Coordination Manager

Contact Info

Contact

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Voice

04 4600110

Address

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Delivery Point

155 The Terrace

City

Wellington

Postal Code

6145

Country

New Zealand

Electronic Mail Address

info@linz.govt.nz

Role

Role Code

pointOfContact

## Resource Format

Format

Name

\*.xml

Version

Unknown

## Descriptive Keywords

### Keywords

#### Keyword

New Zealand

#### Type

##### Keyword Type Code

theme

### Thesaurus Name

#### Citation

##### Title

ANZLIC Jurisdictions

##### Date

##### Edition

Version 2.1

##### Edition Date

###### Date

2008-10-29

##### Identifier

###### Identifier

###### Code

<http://asdd.ga.gov.au/asdd/profileinfo/anzlic-jurisdic.xml#anzlic-jurisdic>

##### Cited Responsible Party

###### Responsible Party

###### Organisation Name

ANZLIC the Spatial Information Council

###### Role

###### Role Code

custodian

## Descriptive Keywords

### Keywords

#### Keyword

LAND-Topography

#### Keyword

LAND-Cover

#### Type

##### Keyword Type Code

theme

### Thesaurus Name

Citation

Title

ANZLIC Search Words

Date

Edition

Version 2.1

Edition Date

Date

2008-05-16

Identifier

Identifier

Code

<http://asdd.ga.gov.au/asdd/profileinfo/anzlic-theme.xml#anzlic-theme>

Cited Responsible Party

Responsible Party

Organisation Name

ANZLIC the Spatial Information Council

Role

Role Code

custodian

Resource Constraints

Security Constraints

Classification

Classification Code

unclassified

Resource Constraints

Legal Constraints

Use Limitation

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Access Constraints

Restriction Code

copyright

Resource Constraints

Legal Constraints

Use Limitation

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#### Access Constraints

Restriction Code  
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##### Legal Constraints

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#### Spatial Representation Type Code

grid

#### Representative Fraction

Denominator

Integer

1000

#### Language

eng

#### Character Set

Character Set Code

utf8

Topic Category Code

elevation

Topic Category Code

imageryBaseMapsEarthCover

Extent

EX\_ Extent

Geographic Element

EX\_ Geographic Description

Identifier

Authority

Citation

Title

ANZMet Lite Country codelist

Date

Edition

Version 1.0

Edition Date

Date

2009-03-31

Identifier

Identifier

Code

<http://asdd.ga.gov.au/asdd/profileinfo/anzlic-country.xml#Country>

Cited Responsible Party

Responsible Party

Organisation Name

ANZLIC the Spatial Information Council

Role

Role Code

custodian

Code

nzl

Extent

EX\_ Extent

Geographic Element

EX\_ Geographic Bounding Box

174.606361667175.695293458-38.7231467556-37.050402108

Distribution Info

## Distribution

### Transfer Options

#### Digital Transfer Options

##### On Line

#### Online Resource

##### Linkage

##### URL

<https://data.linz.govt.nz/layer/53623-waikato-west-coast-and-hauraki-plains-lidar-1m-dsm-2015/>

## Data Quality Info

### DQ \_ Data Quality

#### Scope

##### DQ \_ Scope

##### Level

##### Scope Code

dataset

##### Level Description

##### Scope Description

##### Other

dataset

## Lineage

### LI \_ Lineage

#### Statement

Data Acquisition: Airborne Laser Scanner (ALS) data was acquired from a fixed wing aircraft on: 7th, 8th, 18th ,19th February & 1st March 2015, using Aerial Surveys OptechOrion H300 LiDAR system. Survey Specification: • Scanner: Optech Orion H300 • Flying Height: 500m AMGL • Scan Angle: ±10.4 degrees • Scan Frequency: 60.3Hz • Pulse Rate: 50kHz • Swath Overlap: 35% • Points Per M2: 4.02 Data processing: The LiDAR sensor positioning and orientation (POS) was determined using the collected GPS/IMU datasets and Applanix POSpac software. Benchmark: GSAM (Amberly) OWNER: Global Surveys Base Station: Type/Owner: VRS Geosystems Benchmark: BS02 Based on our control point MOR101 Base Station Position: 39 10 44.39864 S 176 37 48.07897 E 406.311 Ell Height Antenna Height: 2.250 Phase Center 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 standard deviation statistic is 0.041m; a RMS of 0.069m and the average difference is -0.055m. 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 landcover and terrain. All product deliverables are supplied in terms of NZTM map projection. Classification of the point cloud followed the classification scheme below: 0 - Created, never classified 2 - Ground 14 - Above\_Ground  
Re-processing: In 2016 the 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 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 Data hosted by OpenTopography was re-classified: the Above\_Ground (14) points were reclassified as Unassigned classification (1)

## Metadata Constraints

### Legal Constraints

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#### Access Constraints

##### Restriction Code

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**Legal Constraints**

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