

# Canterbury - Hawarden LiDAR 1m DEM (2015)

## Metadata

### File Identifier

ed6fbee6-0e15-ee44-0225-7f98cd045069

### 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**

2017-03-21

**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**

Canterbury - Hawarden LiDAR 1m DEM (2015)

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

This layer contains the DEM for LiDAR data from the Hawarden area captured in 2015. The DSM is available as layer [Canterbury - Hawarden LiDAR 1m DSM (2015)](<http://data.linz.govt.nz/layer/3551>). The index tiles are available as layer [Canterbury - Hawarden LiDAR Index Tiles (2015)](<http://data.linz.govt.nz/layer/3584>). The LAS point cloud and vendor project reports are available from [OpenTopography](<http://opentopo.sdsc.edu/datasets>). Lidar was captured for Environment Canterbury Regional Council by Aerial Surveys on 1 April 2015, under survey name Hurunui. The datasets were generated by Aerial Surveys and their subcontractors. The survey area includes the Hawarden township area. 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

Planned

pulse density is 1.3 pulses/square metre. Vertical accuracy specification is per the ICSM LiDAR Acquisition Specifications and Tender Template NZ Version March 2011. 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

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Address

Address

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155 The Terrace

City

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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

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### Access Constraints

#### Restriction Code

license

### Resource Constraints

#### Legal Constraints

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##### Use Constraints

#### Restriction Code

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##### Use Constraints

#### Restriction Code

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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

172.623532847172.735350633-42.975758899-42.8782383064

### Distribution Info

#### Distribution

##### Transfer Options

##### Digital Transfer Options

##### On Line

##### Online Resource

##### Linkage

##### URL

<https://data.linz.govt.nz/layer/53550-canterbury-hawarden-lidar-1m-dem-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 1 April 2015, using Aerial Surveys' Optech Orion H300 LiDAR system. Survey Specification: Scanner: Optech Orion H300 Flying height: 1200m AMGL Scan Angle: +/- 20 degrees Scan Frequency: 34Hz Pulse Rate 75kHz Swath Overlap: 30% Points Per Sqm: 1.3 Data processing: The LiDAR sensor positioning and orientation (POS) was determined using the collected GPS/IMU datasets and Applanix POSMMS software. This work was all undertaken in NZGD2000 coordinate system using the data collected from the following basestations: Project: Ecan Hawarden Date of Capture: 1/4/15 Base Station Type/Owner: Global Surveys Bench Mark: GSAM Base Station Position: 43 09 06.47086 S 172 43 45.04334 E 66.747 Ell Height Ant Height : 0.00 Phase Center Output LAS Projection: TM2000 Height: WGS84 Ellipsoid Validation was carried out using the guidelines contained in the ICSM specification template as required for this program. Vertical Accuracy Validation: The height accuracy of the LiDAR points was checked using check points collected during the ground control survey Horizontal Accuracy Validation 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. All product deliverables were initially supplied in terms of NZTM and Lyttelton 1937 height datum. Classification of the point cloud followed the classification scheme below: 0 - Created, never classified 2 - Ground 12 - Flight line overlap points 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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##### Restriction Code

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**Restriction Code**

| copyright

**Metadata Constraints**

**Legal Constraints**

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