

Canterbury - Hurunui Rivers LiDAR 1m DEM (2013)

Metadata

File Identifier

51070b23-7e8b-6103-12f5-1416e0a948ed

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**

2017-05-11

Metadata Standard NameANZLIC 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 - Hurunui Rivers LiDAR 1m DEM (2013)

Date**Date****Abstract**

This layer contains the DEM for LiDAR data from the Hurunui District captured in 2013. The DSM is available as layer [Canterbury - Hurunui Rivers LiDAR 1m DSM (2013)](<http://data.linz.govt.nz/layer/3580>). The index tiles are available as layer [Canterbury - Hurunui Rivers LiDAR Index Tiles (2013)](<http://data.linz.govt.nz/layer/3581>). 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 in May 2013. The datasets were generated by Aerial Surveys and their subcontractors. The survey area includes Hanmer Springs, Hanmer Plain, Waiau, Waiau River, Hurunui River, Pahau River, and Culverden. 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 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

Status

Progress Code

completed

Point Of Contact

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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

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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

172.512334939173.340247576-42.9176852073-42.4961274165

Distribution Info

Distribution

Transfer Options

Digital Transfer Options

On Line

Online Resource

Linkage

URL

<https://data.linz.govt.nz/layer/53582-canterbury-hurunui-rivers-lidar-1m-dem-2013/>

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 between 12 and 30 May 2013, using Aerial Surveys' Optech ALTM 3100EA LiDAR system. Survey Specification: Scanner: Optech ALTM 3100EA Flying height: 1250m AMGL Scan Angle: +/- 14.9 degrees Scan Frequency: 47.3Hz Pulse Rate 70kHz Swath Overlap: 35% Points Per Sqm: 1.24 Data processing: The LiDAR sensor positioning and orientation (POS) was determined using the collected GPS/IMU datasets and Applanix POSPac software. 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 C & R Surveyors . This was done by calculating height differences statistics between the checkpoints and a TIN of the LiDAR ground points. The standard deviation statistic is 0.03 m , a RMS of 0.03m and Average of 0.01m for Middle Waiau. The standard deviation statistic is 0.03 m , a RMS of 0.07m and Average of -0.07m for Upper Hurunui, Pahau & Waitohi Areas. The standard deviation statistic is 0.03 m , a RMS of 0.04m and

Average of 0.01m for Hanmer Basin. The standard deviation statistic is 0.03 m , a RMS of 0.06m and Average of -0.053m for Lower Hurunui, & the standard deviation statistic is 0.03, a RMS of 0.05m and Average of -0.03 for Lower Waiau. The positional accuracy of the LiDAR data has been checked by overlaying C & R Surveyors 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 classified with TerraSolid LiDAR processing software into ground and above ground returns using automated routines tailored to the project landcover and terrain. The point cloud data was classified with TerraSolid LiDAR processing software into ground and above ground returns using automated routines tailored to the project landcover and terrain. Classification of the point cloud followed the modified ASPRS classification scheme below: 0 - Created, never classified 2 - Ground 9 - Water 14 - Above_Ground 15 - River Stream points 17 - Water Body points 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)

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