Canterbury - Kaikoura LiDAR Index Tiles (2012)

- Metadata
  - File Identifier
    - df8e28f6-3082-483d-5023-86e0c9ce6828
  - 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
2017-03-14

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 - Kaikoura LiDAR Index Tiles (2012)

Date

Date

Abstract
This layer contains the index tiles for LiDAR data from the Kaikoura area captured in 2012. The DEM is available as layer [Canterbury - Kaikoura Lidar 1m DEM (2012)](http://data.linz.govt.nz/layer/3542). The DSM is available as layer [Canterbury - Kaikoura Lidar 1m DSM (2012)](http://data.linz.govt.nz/layer/3545). 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 2012. Note that this capture was prior to the significant vertical and horizontal displacements from the 2016 Kaikoura earthquakes. The datasets were generated by Aerial Surveys and their subcontractors. The survey area includes the Kaikoura township area and adjacent coastal strips. Data management and distribution is by Land Information New Zealand. Data comprises: •DEM: tif or asc files in NZTM2000 projection, tiled into a 1:1,000 tile layout •DSM: tif or asc files in NZTM2000 projection, tiled into a 1:1,000

tile layout •Point cloud: las files 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 accuracy specification is +/-0.2m (@ 95% confidence) 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
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

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

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Spatial Representation Type Code
vector
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
173.25868598174.071551417-42.917421095-41.946632302

Distribution Info
Distribution
Transfer Options
Digital Transfer Options
On Line
Online Resource
Linkage
URL
https://data.linz.govt.nz/layer/53570-canterbury-kaikoura-lidar-index-tiles-2012/

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 July 10 and 17 2012, 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 Data processing: The LiDAR sensor positioning and orientation (POS) was determined using the collected GPS/IMU datasets and Applanix POSPac software. This work was all undertaken in NZGD2000 coordinate system using the data collected from Aerial Surveys basestation: Benchmark : A79B Base Station Position: 42 15 55.52400 S 173 48 23.40990 E 18.425 Ell Height Antenna Height: 216mm, 218mm, 218mm 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 Ltd. This

was done by calculating height differences statistics between the checkpoints and a TIN of the LiDAR ground points. A -0.188m vertical offset was applied to the data to bring it into terms with the survey check site data. The standard deviation statistic is 0.041 m and a RMS of 0.089m. C & R Surveyors Ltd field surveyed check sites that were used to verify the accuracy of the processed ground dataset. 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. Classification of the point cloud followed the modified ASPRS classification scheme below: 0 - Created, never classified 1 - Unassigned classification 2 - Ground 9 - Water 14 - Above_Ground Re-processing: In 2016 the data was reprocessed by Aerial Surveys for LINZrelative 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

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