

# Northland - Whangarei Heads LiDAR Index Tiles (2016)

## Metadata

### File Identifier

585A1E46-7176-4588-9262-2E9A42638D13

### 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

2019-12-09

## 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

Northland - Whangarei Heads LiDAR Index Tiles (2016)

##### Date

### Abstract

This layer contains the Index Tiles for LiDAR data in the Northland Region surrounding Whangarei Heads captured in 2016. - The DEM is available as layer [Northland - Whangarei Heads LiDAR 1m DEM (2016)](<https://data.linz.govt.nz/layer/104236>). - The DSM is available as layer [Northland - Whangarei Heads LiDAR 1m DSM (2016)](<https://data.linz.govt.nz/layer/104237>). - The LAS point cloud and vendor project reports are available from [OpenTopography] (<http://opentopo.sdsc.edu/datasets>). LiDAR was captured for Land Information New Zealand by Aerial Surveys in November 2016. These 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 Pulse density specification is at a minimum of 2 pulses/square metre. Vertical datum is NZVD2016.

### Status

#### Progress Code

completed

### Point Of Contact

#### Responsible Party

##### Organisation Name

LINZ - Land Information New Zealand

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##### Role Code

pointOfContact

### Resource Maintenance

#### Maintenance Information

Maintenance And Update Frequency  
Maintenance Frequency Code  
notPlanned

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

Resource Constraints

Security Constraints  
Classification  
Classification Code  
unclassified

Resource Constraints

Legal Constraints  
Use Limitation  
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Use Constraints  
Restriction Code  
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Use Constraints  
Restriction Code  
license

Spatial Representation Type Code  
vector

Representative Fraction  
Denominator  
Integer  
1000

Language  
eng

Character Set  
Character Set Code  
utf8

Topic Category Code  
elevation

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

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 21 and 22 November 2016, using Aerial Surveys Optech Orion H300 LiDAR system. Survey Specification: • Scanner: Optech Orion H300 • Flying Height: 1475 m AMGL • Scan Angle:  $\pm 20$  degrees • Scan Frequency: 45.0Hz • Pulse Rate: 1750kHz • Swath Overlap: 30% • Points Per M2: 2 Data Processing: The LiDAR sensor positioning and orientation (POS) was determined using the collected GPS/IMU datasets and Applanix POSpac software. Base Station Position: WHNG owned by LINZ -35 48 13.577724 S 174 18 52.4394 E 172.775 Ell Height 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 0.019 m; a RMS of 0.038 m and the average difference is -0.03 m. 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 supplied in terms of NZTM map projection and NZVD2016 height datum. Classification of the point cloud followed the classification scheme below: 2 - Ground 14 - Above Ground Above\_Ground (14) points was reclassified by LINZ as Unassigned classification (1) before providing the classified point cloud data to Open Topography. There are no (7) Noise, (9) Water and (12) Overlap points in the data even though these were referenced in the report Lakes and large 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

## Metadata Constraints

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