

# Tasman - Golden Bay LiDAR 1m DSM (2017)

## Metadata

### File Identifier

c7f8dbb2-1b4b-f3df-ef89-6771ca0c4221

### 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

2018-12-06

#### 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

Tasman - Golden Bay LiDAR 1m DSM (2017)

Date

#### Abstract

This layer contains the DSM for LiDAR data from Golden Bay - Aorere Extension, Lee Dam, St Arnaud and Farewell Spit captured in 2017. - The DEM is available as layer [Tasman - Golden Bay LiDAR 1m DEM (2017)](<http://data.linz.govt.nz/layer/95503-tasman-golden-bay-lidar-1m-dem-2017/>). - The index tiles are available as layer [Tasman - Golden Bay LiDAR Index Tiles (2017)] (<http://data.linz.govt.nz/layer/95627-goldenbaytilelayout/>). - The LAS point cloud and vendor project reports are available from [OpenTopography](<https://portal.opentopography.org/datasets?loc=New%20Zealand>). Lidar was captured for Tasman District Council by AAM New Zealand in November and December 2017. The datasets were generated by AAM New Zealand 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, Farewell Spit tiled into a 1:1,000 tile layout, the rest of the data tiled into a 1:2,000 tile layout Pulse density specification is 2 pulses/square metre. Vertical accuracy specification is +/- 0.12m (95%). Horizontal accuracy specification is +/- 1.00m (95%). 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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info@linz.govt.nz

Role

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

copyright

Resource Constraints

Legal Constraints

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Use Constraints

Restriction Code

license

Spatial Representation Type Code

grid

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

Extent  
EX\_ Extent  
Geographic Element  
EX\_ Geographic Bounding Box  
172.40940527761143173.19547009223874-41.82180242236882-40.49184875418581

Distribution Info  
Distribution  
Transfer Options  
Digital Transfer Options  
On Line  
Online Resource  
Linkage  
URL  
<https://data.linz.govt.nz/layer/95512-tasman-golden-bay-lidar-1m-dsm-2017/>

Data Quality Info  
DQ\_ Data Quality  
Scope

## DQ\_Scope

### Level

#### Scope Code

dataset

### Level Description

#### Scope Description

#### Other

dataset

## Lineage

### LI\_Lineage

#### Statement

Survey Specification: -Device Name: Q1560 -Half Scan Angle: 30 degrees -Laser Pulse Rate: 340 kHz -Laser Pulse Mode: Multi Pulse -Average Point Spacing: 2.0 pts/m2 -Laser return: 1st, 2nd, 3rd and last -File Format: ESRI ASCII Grid, LAS 1.2, ESRI Shapefile -Horizontal Datum: NZGD2000 -Vertical Datum: NZVD2016 -Map Projection: NZTM2000 -Vertical Accuracy Specification:  $\pm 0.06\text{m}$  Standard Error (68% confidence level or 1 sigma) -Horizontal Accuracy Specification:  $\pm 0.50\text{m}$  Standard Error (68% confidence level or 1 sigma) Airborne Laser Scanner (ALS) data was acquired from a fixed wing aircraft between 24th November and 16th December 2017 using AAM New Zealand's Riegl LMS-Q1560 LiDAR systems. This area included Golden Bay - Aorere Extension, Lee Dam, St Arnaud and Farewell Spit. Coastal areas were flown within 1.5 hours of low tide. Classification of the point cloud followed the classification scheme below; 1 - Default 2 - Ground 3 - Low Vegetation 4 - Medium Vegetation 5 - High Vegetation 9 - Water 10 - Bridges Note: A small amount of points were erroneously classified by vendor as 10 and 14. Please consider these points under the 1- Default Classification. Data Validation: Ground data in this volume has been compared to 468 test points obtained by field survey and assumed to be error-free. The test points were distributed across the mapping area and located on clear open ground. The mean difference has been removed from the data. Data Classification has been manually checked and edited against any available imagery. Limitations of Data: The definition of the ground under trees may be less accurate. Ground Support GPS base station support was sourced from GeoNET CORS. The ground check points surveyed by Sound Surveying Ltd allowed an assessment of the accuracy of the ALS data. Data Processing: Reduction of the ALS data proceeded without any significant problems. Laser strikes were classified into ground and non-ground points using a single algorithm across the project area. Manual checking and editing of the data classification further improved the quality of the terrain model. Ground and water classes have been classified to ICSM Level 3. ArcGIS 10.1 Terrain Grids were derived using the Natural Neighbour interpolation. This method uses the closest triangles and applies weights to the proportionate areas from the grid cell centroid to interpolate the value. It uses known elevation data, it does not make any predictions regarding the surface and accurately depicts existing troughs and peaks in the data and supports irregular point spacing, which suits the nature LiDAR data. Lakes and large rivers were hydroflattened in the Bare Earth Digital Elevation Model.

## Metadata Constraints

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#### Restriction Code

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