

# Wellington - Kapiti Coast LiDAR Index Tiles (2021)

## Metadata

### File Identifier

9bb7cca9-89b3-04ef-60fc-2136effd07c9

### Language

eng

### Character Set

#### Character Set Code

utf8

### Hierarchy Level

#### Scope Code

dataset

### Hierarchy Level Name

dataset

## Contact

### Responsible Party

#### Organisation Name

Toitū Te Whenua 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

6011

###### Country

New Zealand

###### Electronic Mail Address

customersupport@linz.govt.nz

### Role

#### Role Code

pointOfContact

#### Date Stamp

Date

2022-01-21

#### 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

Wellington - Kapiti Coast LiDAR Index Tiles (2021)

Date

#### Abstract

This layer contains the index tiles for LiDAR data in the Kapiti District and includes Kapiti coast, Paraparaumu, Paekākāriki, Ōtaki and the surrounding area captured in 2021. - The DEM is available as layer [Wellington - Kapiti Coast LiDAR 1m DEM (2021)] (<https://data.linz.govt.nz/layer/106990>) - The DSM is available as layer [Wellington - Kapiti Coast LiDAR 1m DSM (2021)](<https://data.linz.govt.nz/layer/106989>) - The LAS point cloud and vendor project reports are available from [OpenTopography](<https://portal.opentopography.org/datasets?loc=New%20Zealand>) LiDAR was captured for the Kapiti Coast District Council by AAM Ltd from 13 March to 15 March 2021. The dataset was generated by AAM and their subcontractors. Data management and distribution is by Toitū Te Whenua 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 8 pulses/square metre. Vertical Accuracy Specification is +/- 0.1m (95%) Horizontal Accuracy Specification is +/- 0.5m (95%) Vertical datum is NZVD2016.

#### Status

Progress Code

completed

#### Point Of Contact

Responsible Party

Organisation Name

Toitū Te Whenua Land Information New Zealand

Position Name

Lidar Coordination Manager

Contact Info

Contact

Phone

Telephone

Voice

04 4600110

Address

Address

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155 The Terrace

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Postal Code

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New Zealand

Electronic Mail Address

customersupport@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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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

Extent  
EX\_ Extent  
Geographic Element  
EX\_ Geographic Bounding Box  
174.91786856448016175.23470045048967-41.0209851948829-40.69285933001474

Distribution Info  
Distribution  
Transfer Options  
Digital Transfer Options  
On Line  
Online Resource  
Linkage  
URL  
<https://data.linz.govt.nz/layer/106983-wellington-kapiti-coast-lidar-index-tiles-2021/>

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 from 13 March 2021 to 15 March 2021, using AAM's Optech Galaxy Prime 473 LiDAR system. Survey Specification: - Scanner: Optech Galaxy Prime 473 - Flying height: 805 m AGL - Scan angle: 22.5 degrees - Pulse rate: 450 kHz - Swath overlap: 60% - Swath points per M<sup>2</sup>: 8.26 with overlap flag to achieve 16 pts per sq m. Data Processing: 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 ground point classification. AAM uses proprietary ground classification routines to provide the initial automated ground / non-ground classification and generate the initial ground surface. The classification is then manually edited to improve the ground classification to ICSM level 2 standard. Following this process, further automated techniques are used to classify the other classes shown above to ICSM level 1 standard. RTX processing was used to calculate the GPS trajectory solution. Trimble CenterPoint® RTX™ is a proprietary GPS, GLONASS, BeiDou, and QZSS enabled technology that provides high accuracy GNSS positioning worldwide without the use of traditional local base stations or a VRS network. By combining real-time data from a global reference station infrastructure with innovative positioning and compression algorithms, Trimble RTX technology computes centimeter-level positions based on satellite orbit and clock information. Ground surveyed test point sites were acquired by WSP, these allowed an assessment of the accuracy of the ALS point cloud data. Ground data in this volume has been compared to test points obtained by field survey and assumed to be error-free. The test points were located on open clear ground. Comparison of the field test points with elevations interpolated from measured data, after removing the mean offset yielded the following accuracy assessment: - Test point sites: 5 - No. Points: 221- Mean Difference: 0.00 - Std Deviation (m): 0.01 - RMS (m): 0.01 All product deliverables supplied in terms of NZTM map projection and NZVD2016 vertical datum. Classification of the point cloud followed the classifications scheme below: 1- Unclassified 2 - Ground 3 - Low Vegetation 4 - Medium Vegetation 5 - High Vegetation 6 - Buildings 7 - Low Noise 9 - Water 17 - Bridge deck 18 - High Noise The classification was undertaken in accord with the project specification (Toitū Te Whenua Land Information New Zealand, 2020, PGF Version: New Zealand National Aerial LiDAR Base Specification, January 2020). Elevation Grids were derived using the LAsTools las2dem command. This tool reads LIDAR points from the LAS/LAZ format (or some ASCII formats) and triangulates them temporarily into a TIN with a user defined interpolation distance. LAsTools then applies a TIN to raster conversion to create the 1m DEM raster dataset. High and low noise classes (7 and 18) have been removed from the point cloud. 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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**Restriction Code**

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