

Waikato 0.1m Urban Aerial Photos (2021)

Metadata

File Identifier

b9c4c7a0-66a9-b2f5-fa2e-95d3ba02b52e

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

National Imagery 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

2022-07-06

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

Waikato 0.1m Urban Aerial Photos (2021)

Date

Abstract

Orthophotography within the Waikato Region captured in January to March 2021. Coverage encompasses Hopuhopu, Horotiu, Huntly, Matangi, Meremere, Ngāruawāhia, Ohinewai, Pōkeno, Port Waikato, Raglan, Rangiriri, Tamahere, Te Kowhai, Tuakau, and Whatawhata. Imagery was captured for CoLAB by Landpro Ltd, 13 Pinot Noir Drive, Cromwell 9310, New Zealand. Data comprises:

- 944 ortho-rectified RGB GeoTIFF images in NZTM projection, tiled into the LINZ Standard 1:1000 tile layout
- Tile layout in NZTM projection containing relevant information. The supplied imagery is in terms of New Zealand Transverse Mercator (NZTM) map projection. Please refer to the tile index layer for specific details, naming conventions, etc. Imagery supplied as 10cm pixel resolution (0.1m GSD), 3-band (RGB) uncompressed GeoTIFF. The final spatial accuracy is $\pm 0.3\text{m}$ at 68% confidence level in clear flat areas. Index tiles for this dataset are available as layer [Waikato 0.1m Urban Aerial Photos Index Tiles (2021)](<http://data.linz.govt.nz/layer/109475>)

Status

Progress Code

completed

Point Of Contact

Responsible Party

Organisation Name

Toitū Te Whenua Land Information New Zealand

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pointOfContact

Resource Maintenance

Maintenance Information

Maintenance And Update Frequency

Maintenance Frequency Code

notPlanned

Resource Format

Format

Name

*.xml

Version

Unknown

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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<https://www.linz.govt.nz/data/licensing-and-using-data/attributing-elevation-or-aerial-imagery-data>

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
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

174.70235153442175175.41609391635518-37.85502353366641-37.210923545474515

Distribution Info

Distribution

Transfer Options

Digital Transfer Options

On Line

Online Resource

Linkage

URL

<https://data.linz.govt.nz/layer/109415-waikato-01m-urban-aerial-photos-2021/>

Data Quality Info

DQ_ Data Quality

Scope

DQ_ Scope

Level

Scope Code

dataset

Level Description

Scope Description

Other

dataset

Lineage

LI_ Lineage

Statement

Camera Imagery for this schedule was acquired using the Leica ADS100 line scanning camera with SH100 sensor head. The camera was fitted to a Leica PAV100 HP high performance gyro-stabilised mount. Flight Planning Careful consideration was given during flight planning to geographic location, terrain, topographical characteristics of the area, acquisition efficiency, final output resolution and meeting the various requested orthophoto quality specifications. Environmental Specification All imagery was captured without the presence of cloud or cloud shadow within the specified areas of interest. Where affected, all coastal, harbour, and tidal regions were captured during low tide periods, this being defined as the period 2 hours either side of low tide. Imagery covering coastal areas extends from the tide line during low tide periods out to 100 meters. Imagery of harbour areas extends out to 100 meters from the perimeter of the harbour. Elevated Feature Displacement The Raglan area was flown with a minimum of 40% side overlap as limited by the Nadir sensor. All areas comprising Schedule H were planned with a minimum of 35% side overlap and seamlines carefully positioned in order to minimize the effects of elevated feature displacement. Ground Control A total of 184 new ground control points were observed for use with the aerial triangulation and final bundle adjustment. Data from Global Survey's and LINZ CORS sites, along with several existing LINZ benchmarks, were used in Leica Infinity software to process and check the ground control. Map Projection and Datum All spatial data for this project is supplied in the New Zealand Transverse Mercator (NZTM2000) projection in terms of the New Zealand Geodetic Datum 2000 (NZGD2000). Image Processing Orthophoto production was carried out by Hexagon Geosystems Services India. Leica Xpro software along with the QS2 distributed processing environment and inbuilt Hexagon Image Manager and Quality Manager2 were used during relevant phases of production. Aerial Triangulation (AT) No abnormalities or complications were encountered during this phase. All aerial triangulations are carried out to ensure accuracies in the region of 1xGSD value. This was achieved with all adjusted RMS residual values near or better than 10cm, ensuring excellent overall quality and spatial accuracy. DEM for Orthophoto XPro uses Semi-Global Matching (SGM) for high-

resolution DSM computation. A ratio of 1:1 was used for generation resulting in a 10cm GSD resolution point cloud. SGM filtration was done in Batch Converter and consisted of two processes following one after the other: Lasground to filter input data and extract ground points from input point cloud, and Lasclip for removal of ground points inside polygons with buildings. The following accuracy requirements have been met for this DEM: Vertical Accuracy ≤ 1 metre (@ 90% confidence), and Horizontal Accuracy ≤ 2 meters (@ 90% confidence).

Metadata Constraints

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