

# Palmerston North 0.1m Urban Aerial Photos Index Tiles (2015)

## Metadata

### File Identifier

71ef8461-3790-d3c5-4487-215b5e97d0cc

### 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

National Imagery 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**

2017-09-21

**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**

Palmerston North 0.1m Urban Aerial Photos Index Tiles (2015)

**Date****Abstract**

Index Tiles ONLY, for actual orthophotos see layer [Palmerston North 0.1m Urban Aerial Photos (2015)](<http://data.linz.govt.nz/layer/88138>) Orthophotography over the Palmerston North urban area taken in the flying season (summer period) 2014-15. Imagery was captured for the 'Palmerston North City Council' by Aerial Surveys Ltd, Unit A1, 8 Saturn Place, Albany, 0632, New Zealand. Data comprises: •1,021 ortho-rectified RGB GeoTIFF images in NZTM projection, tiled into the LINZ Standard 1:1,000 tile layout •Tile layout in NZTM projection containing relevant information. The supplied imagery is in terms of New Zealand Transverse Mercator (NZTM) map projection. The products are tiled into NZTopo50 1:1,000 tiles. Please refer to the supplied tile layout shape file for specific details, naming conventions, etc. Imagery supplied as 12.5cm pixel resolution (0.125m GSD), 3-band (RGB) uncompressed GeoTIFF. The final spatial accuracy is  $\pm 0.2$  m @ 95% confidence level in clear open

spaces.

## Status

Progress Code

completed

## Point Of Contact

Responsible Party

Organisation Name

LINZ - Land Information New Zealand

Position Name

National Imagery Manager

Contact Info

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info@linz.govt.nz

Role

Role Code

pointOfContact

## 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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### Access Constraints

#### Restriction Code

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## 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 Bounding Box

175.510114774175.795989917-40.4443980697-40.2385773392

## Distribution Info

### Distribution

#### Transfer Options

##### Digital Transfer Options

###### On Line

###### Online Resource

###### Linkage

###### URL

<https://data.linz.govt.nz/layer/88092-palmerston-north-01m-urban-aerial-photos-index-tiles-2015/>

## 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 The aerial photography for this project was captured within the 2014/15 flying season (September 2014 – April 2015) on the following dates: 12rd ,18th February 2015. All photography was captured using Vexcel's digital UCE camera and flown at: 0.125m GSD: 7887ft (2404m) flying height Camera Lens: 100mm Sun Angle Minimum of +50 degrees Urban Building Displacement Specification Urban 0.125m GSD imagery – The CBD area has been captured with 80% forward lap and 80% sidelap to achieve near true ortho imagery (near to no building lean). Data Processing All aspects of the data processing from imagery processing to DTM creation and ortho production and product deliverables was undertaken in-house by Aerial Surveys staff. Map Projection All spatial data for this project provided in terms of New Zealand Transverse Mercator 2000 map projection (NZTM2000) . The datum is New Zealand Geodetic Datum 2000 (NZGD2000). The height datum is orthometric Moturiki 1953 (sea level). Image Processing and Aerial Triangulation All imagery has gone through QA checks ensuring there is no cloud cover and cloud shadow. During aerial acquisition the aircraft on-board GPS navigation data and ground base station data collected and post processed. Imagery processed to Level 3 and checked for colour correctness/radiometry and even tonal balance across each project area. The aerial triangulation brings together the GPS data and imagery using a two part process which stitches the imagery together using tie point matching for the relative orientation phase and observing ground control points for the absolute orientation phase. A final report is generated to check RMSE values are within specification. DTM Source: The digital terrain model used for this project was derived from LiDAR DTM data flown 2006 and 2009 and the existing 2012/13 photogram DTM collected by ASL. The DTM data is merged together seamlessly and accuracy is checked to meet the ortho imagery specification. Note about updated DTM (if applicable) needs to be added here. RGB Ortho Specification Ortho rectification is the process of removing (from the image) the effects of camera tip/tilt and displacement caused by terrain relief. During this process each frame is 'draped' over the terrain model and the photograph then becomes 'scaled' and 'levelled' in terms of true ground coordinates. The generation of seamlines between frames follow natural physical features such as ridges, valleys, roads and rivers. The seamlines are used for the final ortho mosaic that stitches the imagery together using feather mosaicking

techniques. The ortho imagery is then extracted aligned to LINZ 1:1000 sheet tile layout.

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