LiDAR DTM and Orthoimagery

Information Sheet

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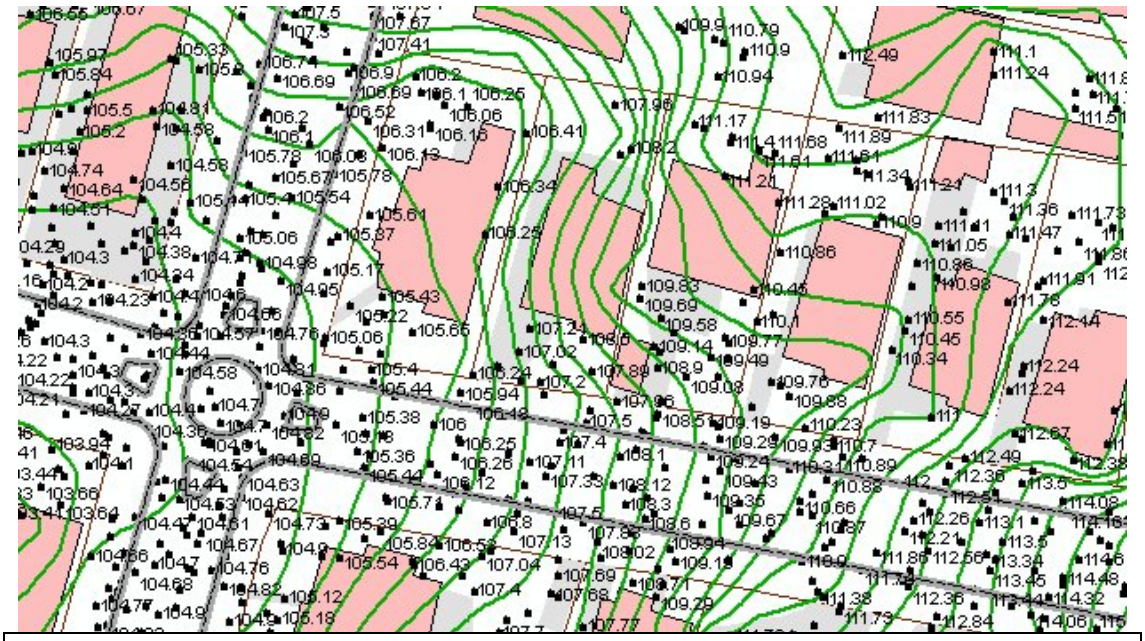
General Enquiries for data to:	**Auckland City Council Spatial Centre** **Jovanna Leonardo (09) 374 1336** **Email: DigitalData@aucklandcity.govt.nz**
NB. ALGGi data is owned by the eight Councils of the Auckland Region: Rodney District Council, Franklin District Council, Auckland Regional Council, North Shore City Council, Waitakere City Council, Auckland City Council, Papakura District Council and Manukau City Council. Data covering areas of less than one map sheet may be sourced from individual councils	



Example map of the urban LIDAR derived DTM and contours
NB the point density of the DTM depends on above ground obstructions in the area (e.g. trees). (Nominal urban point density is 1 point per square metre).
(Building outlines, property boundaries, kerblines etc. not included with the DTM)

Urban Digital Terrain Model (DTM) and Contours

General

The Councils of the Auckland Region commissioned LIDAR data of the region, flown mostly in early 2008.

Urban LIDAR

Urban DTM:

- 1 point per 2 square metres (approximately)
- Height Accuracy about 0.25 metres (2σ 95% confidence)

Urban Contours

- 0.5 metres interval urban contour lines

Both urban and rural contour lines are continuous across entire Cities and Districts.

Other Urban LIDAR derived Datasets

Urban regular Grid DTM: (derived from the above).

- 1 point per 4 square metres (2 x 2 metre grid)

Urban Non ground points

- A LIDAR point dataset of non ground points (with noise removed). Includes tops of buildings, vegetation and other permanent and temporary features.

Urban Keypoint DTM

- A thinned DTM of keypoints only with infill points removed (much smaller filesize than standard DTM)

Rural Digital Terrain Model (DTM) and Contours

Rural LIDAR	**Rural DTM**: • 1 point per 25 square metres (approximately) • Height Accuracy 0.5 metres (2σ 95% confidence) **Rural Contours (smoothed)** • 1 metres interval rural contour lines **Rural regular Grid DTM: (derived from the above).** • 1 point per 100 square metres (10 x 10 metre grid) **Rural Non ground points** • A LIDAR point dataset of non ground points (with noise removed). Includes tops of buildings, vegetation and other permanent and temporary features. **Rural Keypoint DTM** • A thinned DTM of keypoints only with infill points removed

Intertidal LIDAR **(flown at low tide)**	**Intertidal DTM (at low tide)**: • 1 point per 2 square metres (approximately) • Height Accuracy mostly 0.25 metres (2σ 95% confidence) **Intertidal Contours (smoothed)** **0.5 metres interval urban contour lines** **Intertidal regular Grid DTM: (derived from the above).** • 1 point per 4 square metres (2 x 2 metre grid)

Digital Orthophotography

Digital orthophotography

Orthophotography for the whole urban area of Auckland (including most small towns in the Auckland region) (mostly flown in early 2008, some in late 2007).

What is it?

Orthophotography combines the image characteristics of an aerial photograph with the geometric qualities of a map. Orthophotography maps are geo-referenced and can be used to measure distances, angles, positions, areas and ground features.

Digital orthophoto sample data

Urban Orthoimagery

- 0.125 metre pixel size
- 24 bit colour TIF files with TIF-W.
- New Zealand Transverse Mercator Projection.

(NZMG imagery may be available on request)

	Rural Orthoimagery (0.625 metre pixel size)