



Photomapping Project #5035

GHD – Tasmania Mining Tenements Digital Photography Acquisition

Project Summary

Tasmania Mining Tenements imagery was captured by Photomapping Services using our Leica ADS80 SH92 system on the **11th of November and the 15th of December 2014**. The data was captured in order to provide 15cm orthorectified imagery products.

1. Data supplied:

1.1 Orthorectified imagery in GeoTIFF format - RGB. Tile sizes are 1km x 1km.

Naming convention for these tiles:

"eXXXnYYYY"

where:

XXX is the Easting of the of South West tile corner.

YYYY is the Northing of the of South West tile corner.

e.g. e123n5678.tif

1.2 Orthorectified mosaic imagery in ECW format – RGB.

Target compression ratio is 9:1.

Naming convention for mosaic imagery:

"Location_REScm_Mosaic"

where:

Location is the area name of the mosaic

REScm is the pixel size of the imagery.

e.g. TasmaniaMining_15cm_Mosaic.ecw

** All supplied products with accompanying world (.tfw, .eww) files.*

2. Metadata

2.1 Project

Project Number	5035
Acquisition Date	11 th of November and the 15 th of December 2014
Device Name	ADS80 SH92
IMU / GPS	Leica IPAS20 CUS6
Flying Height (AMSL)	6629' – 7965'
No. of Runs	29
Swath Width	1.8km
Flight Direction	77°, 257°, 167° & 347°
Flight Time (EDST)	11/11/14: 14:38 – 15:18 15/12/14: 10:45 – 15:35
Pixel Size	15cm
Weather Conditions	Mostly clear with some very minor wispy cloud on eastern side of area.
Horizontal Datum	GDA94
Vertical Datum	AHD
Map Projection	MGA Zone 55
Forward Overlap	100%
Side Overlap	30 - 40 %
Control	7 surveyed control points
Aerial Positioning Method	Basestation: Burnie
Vertical Accuracy	±0.40m RMSE
Horizontal Accuracy	±0.30m RMSE

2.2 Orthorectified Imagery

Description of mosaicing and Colour balancing	Xpro, ERDAS Imagine, ERMapper
Output Naming Convention	eXXXnYYYY where: XXX is the Easting of the South West tile corner. YYYY is the Northing of the South West tile corner.
Output File Type	GeoTIFF, ECW
Output Tile Size	1km x 1km
Compression Rate	8-bit
Tile Index	5035_GHD_TasmaniaMining_Tile_Index.shp
Tile Index File Formats	Shapefile
Overall Mosaic – Resolution & File Type(s)	ECW: target compression ratio 9:1
Spatial Metadata	Tile Index Source Footprints Mosaic Footprint All in ESRI shapefile format.

3. Data Accuracy

Airborne survey position was collected by the on-board Leica IPAS20 CUS6 system. This collected data was then post-processed using a base station from the area. The Tasmania Mining area used the Burnie base station.

3.1 Triangulation Results

	Control Points Residuals (m)		Tie Points σ (m)	
	RMS	Max	RMS	Max
X	0.049	0.107	0.117	0.335
Y	0.042	0.109	0.106	0.232
Z	0.018	0.031	0.271	0.618

3.2 Surveyed Ground Control

Name	Easting	Northing	Elevation (AHD)
9_SPM10336	407662.409	5455216.329	9.405
10_whiteline	408119.686	5453638.475	33.153
11_pit	410292.986	5453069.269	11.719
13_post	404556.997	5443910.738	275.216
15_post	395355.786	5431970.526	481.443
16_pit	398241.411	5431378.984	466.259
17_post	391954.667	5428105.390	526.953

4. Additional Services

Photomapping Services are the mapping and airborne imagery specialists with a focus on delivering spatial solutions including: Photogrammetry, Aerial Photography and Digital Imagery, LiDAR Airborne Laser Scanning, GIS Data Capture, Revision and Management and Cartography and Custom Map Production.

For further information contact:

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