Record ID	Record
Metadata Filename	22395801_MMG_Rosebery
Metadata Language	English
Metadata Character Set	ASCII
Metadata File Parent Identifier	N/A
Metadata Point of Contact	Martin Bench Fugro Spatial Solutions Pty Ltd 18 Prowse Street West Perth WA 6005 ph 08 9282 4100 m.bench@fugrospatial.com.au
Metadata Date Stamp	08/03/2011
Dataset Title	Rosebery
Dataset Reference Date	March 2011
Dataset Description Abstract	Rosebery Lidar derived products
Dataset Language	English
Dataset Character Set	ASCII and binary
Dataset Topic Category	DEM and Contours
Geographic Location Description	Tasmania
Geographic Bounding Box	WEST LONGITUDE=145° 10' 01" E NORTH LATITUDE= 41° 39' 58" S EAST LONGITUDE=145° 37' 07" E SOUTH LATITUDE= 41° 57' 53" S
Acquisition Start Date	15th January 2011
Acquisition End Date	20th January 2011
Sensor Type Name	Leica ALS50-2
Sensor/Lens serial ID	SN087
Flying Height (AGL) meters	2220 to 3265m
INS / IMU Used	IPAS10
Number of Runs	45
Swath Width (metres)	1000
Flight Direction	Non-Cardinal
Side Overlap (%)	25
Output Data Format	DEM Model key points in ASCII XYZ, Contours in MapInfo TAB and 2m DEM in ASCII
Horizontal Datum	GDA94
Vertical Datum	AHD as defined by AUSGeoid09BETA7
Map Projection	MGA Zone 55 South

Number of control points

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Number          Easting      Northing    Known Z    Laser Z      Dz
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XP01           349818.580   5355146.470    7.360      7.480    +0.120
XP01B          349793.360   5355127.990    3.590      3.730    +0.140
XP02           378886.020   5374045.000  185.420    185.480    +0.060
XP02B          378882.340   5374046.060  185.360    185.360    +0.000
XP03           375408.700   5372952.310  153.980    153.970    -0.010
XP03B          375412.520   5372941.980  154.680    154.630    -0.050
XP04           382828.780   5373522.450  479.950    480.110    +0.160
XP04B          382828.700   5373526.730  479.970    480.100    +0.130
XP05           371358.280   5373918.140  172.400    172.460    +0.060
XP05B          371354.750   5373919.100  172.350    172.280    -0.070
XP06A          378966.900   5366432.710 1119.190   1119.220    +0.030
XP06B          378982.190   5366465.760 1118.190   1118.330    +0.140
XP06C          376001.710   5365066.830  932.520    932.560    +0.040
XP06D          376055.440   5365138.090  939.310    939.440    +0.130
XP07           352321.990   5357794.690  192.480    192.420    -0.060
XP07B          351211.220   5357399.260  186.740    186.720    -0.020
XP07C          351218.490   5357452.120  189.020    189.010    -0.010
XP08           356070.340   5359871.490  229.320    229.150    -0.170
XP08B          356087.380   5360326.510  218.610    218.540    -0.070
XP09           349278.570   5356865.980  126.100    126.000    -0.100
XP09B          348698.330   5356568.820    7.190      7.180    -0.010
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XP09C          349199.060  5357563.070  161.490  161.450   -0.040
XP10           367533.590  5366516.620  228.720  228.560   -0.160
XP10B          367510.610  5366503.780  228.550  228.380   -0.170
XP11           365479.750  5365794.030  187.960  187.890   -0.070
XP11B          365476.490  5365792.730  187.940  187.830   -0.110
XP12           365404.360  5368826.360  246.190  246.080   -0.110
XP12B          365408.560  5368829.000  246.330  246.210   -0.120
XP13           368282.710  5368464.530  311.270  311.190   -0.080
XP13B          368287.810  5368606.310  298.680  298.650   -0.030
XP14           377746.840  5378933.100  164.040  163.890   -0.150
XP14B          377747.930  5378928.750  163.990  163.880   -0.110
XP15           385415.630  5381027.370  190.860  190.860   +0.000
XP15B          385443.600  5380962.520  187.370  187.470   +0.100
XP16           380850.190  5356549.720  512.280  512.320   +0.040
XP16B          380754.610  5356191.190  514.310  514.340   +0.030
XP16C          379643.330  5362477.160  525.170  outside        *
XP16D          379646.430  5362477.230  525.170  525.150   -0.020
XP17           381770.820  5359599.670  500.570  500.590   +0.020
XP17B          381761.900  5359600.090  500.910  500.870   -0.040
XP18           386555.900  5368585.820  558.360  558.490   +0.130
XP18B          386448.700  5368467.090  562.620  562.640   +0.020
XP19           384989.910  5375184.040  174.890  174.920   +0.030
XP19B          385009.530  5375187.510  174.740  174.740   +0.000
XP20           387552.670  5373451.010  249.080  249.020   -0.060
XP20B          388284.870  5374291.440  266.300  266.220   -0.080
XP20C          388075.470  5374108.960  191.940  191.960   +0.020
PID01B         376003.380  5365066.520  932.590  932.680   +0.090
PID01NAIL      376001.560  5365064.490  932.490  932.580   +0.090
PID02BUSH      382515.090  5365456.480  851.410  851.280   -0.130
PID02SQUARE    382522.610  5365465.610  853.030  852.880   -0.150
PID02CROSS     382516.340  5365461.630  851.520  851.550   +0.030
PID03SQUARE    383948.900  5385117.260  308.030  308.130   +0.100
PID03TARGET    383951.590  5385114.960  307.830  307.900   +0.070
PID04CROSS     376415.030  5384964.920  415.750  415.710   -0.040
PID04TREE      376427.130  5384954.190  414.850  414.730   -0.120


Average dz         -0.011
Minimum dz         -0.170
Maximum dz         +0.160
Average magnitude   0.075
Root mean square    0.091
Std deviation       0.09
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Spatial Accuracy (Hz) metres	0.25m @ 67 % CI
Spatial Accuracy Vt) metres	0.13m @ 67 % CI
Surface Type	Various
Average Point Separation	Target spacing 1 pnt/m^2
Laser Return Types	All Returns
Data Thinning	None
Laser Footprint Size (metres)	0.60
Data Tile size (km 2)	1km2
Processing / Derivation Lineage	Ground classifications Fugro Spatial Solutions Pty Ltd aim is to select those points that are part of a clean ground surface, which might not be 100% of the ground hits. This results in a cleaner dataset, without compromising on terrain detail and accuracy. Ground filtering algorithms, tailored for this project, data type and terrain type, are applied to the full dataset. The ground filtered dataset is then visually checked by an operator, and incorrectly classified data is corrected or the ground filtering algorithm is adjusted and then visually checked. For the verification of the ground classifications, intensity imagery is used as a backdrop image. **Bare_Earth_DEM_2m** A 2m DEM has been generated from the lidar ground surface. The method of deriving the height for each grid point is by triangulation between the three nearest lidar ground points. **Model keypoints** A resampled ground dataset, consisting of only those points that actually contribute to the shape of the terrain (+/- 15cm), with a minimum point density of 1 point every 20m. **Contours** From the modelkeypoints, triangles are being built. At 0.5m intervals in height, points or interpolated points on triangle edges with that same height are being connected using smoothed curved lines. The lines for each height interval are then merged to become the final contours. **Note:** Returns on water have not been removed from the (classified) point clouds. Gridded datasets have been interpolated across voids (up to 500m in diameter) caused by either no-return due to water bodies, or removal of buildings, vegetation or other above ground features. Contour datasets are interpolated across voids, and contours across waterbodies have not been removed/clipped. Above ground datasets only start at 30cm above the classified ground surface, to avoid low grasses/system noise to become part of this above ground dataset. All data has been cut into 2km tiles, where the file name prefix corresponds with the Upper Left coordinate of the 2km block.
Limitations of Data	This data has not been field tested for completeness or accuracy.
Conditions of Supply	1. This Metadata file is always to be stored with the unaltered data contained in this volume. 2. Any supplied data is to be used only for the purpose for which it was commissioned and in accordance with the terms of engagement. 3. Use of any supplied data for purposes other than those stated is entirely at the risk of the Client.