FUGRO SPATIAL SOLUTIONS PTY LTD

Metadata Report



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			
	pi 08 9282 4 100 m banab@fugraanatial.com.cu			
Metadata Date Stamp	08/03/2011			
Dataset Title	Bosebery			
Dataset File	March 2011			
Dataset Reference Date	March 2011			
Dataset Description Abstract	Kosebery Lidar derived products			
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			
	SOUTH LATITUDE= 41° 57' 53" S			
Acquisition Start Date	15 ^m January 2011			
Acquisition End Date	20 th 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 XV7. Contours in ManInfo 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	Number Easting Northing Known Z Laser Z Dz			
	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			
	XPU4B 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			
	XPUOA 3/8960.900 5366432.70 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			
	XPU0D 3760000.440 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 5357399.260 186.740 186.720 -0.020			
	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 -0.100			
	XP09B 348698.330 5356568.820 7.190 7.180 -0.010			

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xP03C 349199.060 537565.0.70 161.450 -0.040 xP10B 367510.610 5365516.620 228.720 228.560 -0.170 xP11B 365479.750 5365794.030 187.960 187.980 -0.170 xP11B 365404.360 5365794.030 187.960 187.980 -0.110 xP12B 365404.360 5368282.300 246.190 246.200 -0.120 xP12B 365404.360 536828.000 246.330 246.210 -0.120 xP13B 368282.710 536844.500 337993.100 163.890 -0.130 xP13B 368282.710 536828.700 163.090 -0.100 286.690 -0.010 xP14B 37774.640 537928.750 163.990 163.890 -0.110 xP14B 37774.640 536928.700 164.040 163.890 -0.100 xP14B 385415.630 538027.70 190.860 190.660 +0.000 xP14G 379746.440 536191.100 514.310 514.310 514.310 514.310 xP16B 380554.190 536191.7160						
xP10 367531.590 536650.3780 228.550 -0.160 xP11 365479.750 5365794.300 187.960 187.980 -0.070 xP11 365476.490 536572.730 187.940 187.930 -0.070 xP12 365408.500 5368629.000 246.190 246.200 -0.110 XP12 365408.560 5368629.000 246.300 246.200 -0.120 XP13 3682827.10 5368646.530 311.270 311.190 -0.080 xP13 368287.810 5368629.510 163.980 -0.150 xP14 37746.840 538312.730 163.980 163.880 -0.110 xP15 385415.630 5386062.520 187.370 187.470 +0.000 xP15 385416.630 5362477.160 532.280 512.320 +0.040 xP16 30055.190 5362477.230 525.170 012.340 +0.030 xP16 379643.330 5362477.230 525.170 012.320 +0.020 xP16 379646.430 536990.500.507 500.590 +0.020 xP178	XP09C	349199.060	5357563.070	161.490	161.450	-0.040
NP10B 367510.610 5366503.700 228.550 228.380 -0.170 NP11B 365470.400 5365794.030 187.960 187.800 -0.070 NP11B 365401.560 536826.360 246.190 -0.110 XP12B 365404.560 536826.360 246.300 246.200 -0.120 XP13B 362287.810 5366444.530 298.680 298.650 -0.130 XP14B 377747.930 5378933.100 164.960 163.890 -0.150 XP14B 377747.930 5378933.100 164.960 -0.101 XP14B 377747.930 5378933.100 164.960 -0.100 XP14B 377747.930 5378933.100 163.990 163.880 -0.110 XP16B 38050.160 536549.720 187.370 190.860 +0.040 XP16B 380545.610 536549.720 512.320 +0.040 XP16C 379644.330 522.170 outside * XP16D 379646.30 536549.720 500.590 +0.020 XP16D 379646.400 53552.170 outs	XP10	367533.590	5366516.620	228.720	228.560	-0.160
NP11 365479.750 5365794.030 187.960 187.890 -0.700 NP12 365404.360 5368792.730 187.940 187.830 -0.110 NP12 365404.360 536829.700 246.190 246.080 -0.110 NP13 36282.710 5368464.530 311.270 311.190 -0.080 NP13 362827.100 5368464.530 311.270 311.190 -0.160 NP14 377746.840 5378933.100 164.040 163.890 -0.110 NP14 377747.930 5378932.730 190.660 190.866 +0.000 NP145 385415.630 5336549.720 187.470 +0.100 NP16 300551.05 535549.720 187.470 +0.100 NP16 300546.430 5362477.160 525.170 0x12.44 + NP16 379646.330 536549.720 525.170 0x12.44 + NP16 396555.90 53559.60.790 500.570 500.570 + + NP16 386555.910 5358.490 537849.401 5374.810 574.410	XP10B	367510.610	5366503.780	228.550	228.380	-0.170
xP11B 365476.490 536592.730 187.940 187.830 -0.110 xP12B 365404.560 536826.360 246.190 246.080 -0.120 xP12B 365404.560 536826.360 246.210 -0.120 xP13B 368287.810 5368464.530 298.680 298.650 -0.030 XP14B 377746.840 5378933.100 164.040 163.890 -0.110 XP14B 377746.840 5378933.100 164.900 163.880 -0.110 XP14B 377746.840 5378933.100 164.900 163.880 -0.110 XP15B 385431.660 5380962.520 187.370 187.470 +0.100 XP16B 380550.190 536519.120 512.320 +0.040 + XP16C 379643.330 532477.160 525.170 outside + xP16C 379646.430 536599.670 500.570 500.590 +0.020 XP17 381761.700 535860.900 562.20 562.400 +0.130 XP17B 386448.700 5368457.900 566.220 -0.040 <tr< td=""><td>XP11</td><td>365479.750</td><td>5365794.030</td><td>187.960</td><td>187.890</td><td>-0.070</td></tr<>	XP11	365479.750	5365794.030	187.960	187.890	-0.070
XP12 365404.360 5368826.360 246.190 246.080 -0.110 XP13 36508.560 536882.00 246.080 246.080 -0.120 XP13 368282.710 536806.300 246.303 246.280 -0.150 XP13 368282.810 536806.100 298.680 298.650 -0.030 XP14 377746.840 5578933.100 164.040 163.890 -0.150 XP14 377747.900 5578928.750 163.990 163.880 -0.110 XP15 385415.630 5881027.370 190.860 190.860 +0.000 XP16 380551.100 5356547.20 512.280 512.320 +0.040 XP16 380551.100 5356547.20 512.280 518.320 +0.030 XP16 380551.100 535597.70 500.570 500.590 +0.020 XP17 381761.900 5358597.70 500.570 500.590 +0.020 XP17 381761.900 5358599.70 500.508.490 501.30 XP1.80 XP18 386059.500 5368457.200 558.490 +0.130<	XP11B	365476.490	5365792.730	187.940	187.830	-0.110
XP12B 365408.560 536829.000 246.330 246.210 -0.120 XP13B 368227.10 536846.30 311.270 311.190 -0.080 XP13B 368287.810 536846.30 312.270 311.190 -0.150 XP14B 377746.840 5378932.750 163.990 163.880 -0.110 XP15B 385443.600 5380962.520 187.370 187.470 +0.100 XP16C 399643.330 535649.720 512.320 +0.404 XP16D 379644.400 5362477.160 521.70 outside * XP16D 379644.303 5362477.30 551.70 outside * XP16D 379644.700 558959.670 500.570 500.570 -0.020 XP17B 381770.820 535599.670 500.570 500.570 -0.020 XP17B 381674.000 558658.820 558.400 +0.130 XP18B 366455.700 537346.101 174.980 174.920 +0.030 XP19B 38509.510 5373491.404 174.880 174.920 +0.030	XP12	365404.360	5368826.360	246.190	246.080	-0.110
XP13 368228.710 5368464.530 311.270 311.190 -0.080 XP14 377746.840 5378933.100 164.040 163.890 -0.150 XP14 377747.930 5378928.750 163.990 163.880 -0.110 XP15 385443.600 5380962.520 187.370 190.860 +0.000 XP16 380551.90 5356447.720 512.80 512.320 +0.100 XP16 380543.619 535619.71.60 521.70 outside * XP16C 379646.430 5362477.230 525.170 outside * XP17 381761.900 5356960.090 500.870 -0.040 XP178 381761.900 535646.090 562.620 562.640 +0.020 XP178 381761.900 5375187.510 174.740 +0.030 XP188 386555.900 536467.909 562.620 562.640 +0.020 XP19 38498.910 537418.900 174.890 174.920 +0.030 XP198 386055.467.990 562.200 52.640 +0.020 XP200	XP12B	365408.560	5368829.000	246.330	246.210	-0.120
XP13B 368227.810 536606.310 298.680 298.650 -0.030 XP14 377746.840 53789328.750 163.990 -0.150 XP14B 377747.930 5378928.750 163.990 -0.100 XP15B 385415.630 538092.320 187.370 187.470 +0.100 XP16B 380751.600 5356549.720 512.280 512.320 +0.040 XP16B 380754.610 5356497.723 525.170 outside + XP16D 379643.330 5362477.160 525.150 -0.020 XP17 381770.820 535959.670 500.570 500.590 +0.020 XP17 381761.900 536467.090 50.840 +0.020 XP18 386448.700 537484.040 174.740 +0.020 XP18 386448.700 537414.040 174.740 +0.020 XP18 386548.70 537451.010 249.080 249.020 -0.040 XP18 38648.700 537441.040 174.740 +0.020 XP19 384948.910 5375148.040 174.740 +0.030 <td>XP13</td> <td>368282.710</td> <td>5368464.530</td> <td>311.270</td> <td>311.190</td> <td>-0.080</td>	XP13	368282.710	5368464.530	311.270	311.190	-0.080
XP14 377746.840 537933.100 164.040 163.890 -0.150 XP14B 377747.930 5378932.750 163.880 -0.110 XP15 38543.600 5380962.520 187.370 190.860 190.860 +0.000 XP15B 38543.600 5380962.520 187.370 187.470 +0.100 XP16 380754.610 5356549.720 512.280 512.320 +0.040 XP16D 379646.430 5362477.160 525.170 outside * XP16D 379646.430 536299.670 500.570 500.590 +0.020 XP17 381761.900 536685.820 568.360 588.490 +0.130 XP18 38655.900 5366467.090 560.580 562.640 +0.020 XP19 384989.910 5375187.510 747.474 +0.030 XP19 384989.910 5375187.510 747.474 +0.030 XP19 384989.910 5375187.510 747.474 +0.030 XP20 38752.670 5373451.010 249.080 249.020 -0.060 XP20	XP13B	368287.810	5368606.310	298.680	298.650	-0.030
XP14B 377747,930 5379228,750 163.990 163.880 -0.110 XP15 385415.630 5380962.520 187.370 187.470 +0.100 XP15B 38050.190 5366549.720 512.280 512.320 +0.040 XP16C 379643.330 5362477.160 525.170 outside * XP16C 379643.330 5362477.200 525.170 outside * XP16D 379646.430 5362477.200 525.170 outside * XP17D 381770.820 535959.670 500.570 500.870 -0.020 XP17B 381761.900 5358640.090 562.620 562.640 +0.120 XP18B 386648.700 562.620 562.640 +0.020 XP19 38499.910 5375187.510 174.780 174.920 +0.030 XP19B 386009.533 5375187.510 174.740 +0.000 XP20 38752.670 5374361.010 249.020 -0.660 XP20B 388284.870 5374291.440 266.300 266.220 -0.080 XP20C 38075.470 5374306.5	XP14	377746.840	5378933.100	164.040	163.890	-0.150
XP15 385415.63 5381027.370 190.860 +0.000 XP15B 385443.600 5380962.520 512.280 512.320 +0.040 XP16B 380754.610 5356549.720 512.280 512.320 +0.040 XP16B 380754.610 5356191.190 514.310 514.340 +0.030 XP16D 379646.330 5362477.200 525.170 outside * XP16D 379646.430 535299.670 500.570 -0.020 XP17 381770.820 53599.670 500.570 -0.040 XP18 386555.900 5368467.900 562.620 562.640 +0.020 XP18 386555.900 5375187.510 174.740 174.920 +0.030 XP19 384989.910 5375187.510 174.740 174.920 +0.030 XP20 38752.670 5374291.440 266.300 266.220 -0.060 XP20B 382541.500 5365465.400 932.490 932.680 +0.090 PID01B 376001.560 5365466.490 932.490 932.680 +0.090 PID02A	XP14B	377747.930	5378928.750	163.990	163.880	-0.110
XP15B 385443.600 5380962.520 187.370 187.470 +0.100 XP16 380850.190 5356549.720 512.280 +0.040 XP16B 380754.610 5356191.190 514.310 514.340 +0.030 XP16C 379643.330 5362477.160 525.170 outside * XP17D 381770.820 535959.670 500.570 500.590 +0.020 XP17B 381761.900 5368457.900 5368457.900 506.558.490 +0.130 XP18B 386488.700 5368467.090 526.200 562.640 +0.020 XP19B 386095.510 5375187.510 174.740 +0.000 XP19B 386498.9910 5375187.510 174.740 +0.000 XP20 38752.670 5373451.010 249.020 -0.060 XP20B 382515.000 5365064.20 932.590 932.680 +0.020 YP20B 382515.000 5365064.200 932.590 932.680 +0.020 YP20B 382515.000 5365064.940 931.400 851.280 -0.130 YP20C	XP15	385415.630	5381027.370	190.860	190.860	+0.000
XP16 380850.190 5366549.720 512.280 512.320 +0.040 XP16B 380754.610 5366191.190 514.310 514.340 +0.030 XP16C 379643.330 5362477.160 525.170 outside * XP16D 379646.430 5362477.230 550.570 outside * XP17D 381770.820 535959.670 500.570 500.500 +0.020 XP17B 381761.900 5358600.990 500.910 500.870 -0.040 XP18B 386448.700 5375184.040 174.890 174.920 +0.030 XP19B 385099.530 5375187.510 174.740 +0.040 XP202 38752.670 5373451.010 249.080 249.020 -0.060 XP208 38824.870 5374291.440 174.890 174.920 +0.020 XP20C 388075.470 535451.630 932.590 932.680 +0.020 XP202 382515.090 5365456.480 851.410 851.280 -0.130 PID01B 376003.380 5365464.80 851.410 851.280 -	XP15B	385443.600	5380962.520	187.370	187.470	+0.100
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 535959.670 500.570 500.870 -0.040 XP18 386555.900 5368585.820 558.490 +0.130 XP18 386458.700 5376840.01 74.920 +0.033 XP19B 386499.910 5375184.040 174.740 +0.030 XP20 387552.670 5374291.440 249.080 249.020 -0.060 XP20B 388284.870 5365066.520 932.680 +0.090 P1D01B 376003.80 5365066.520 932.680 +0.090 PID01B 376003.80 5365066.440 932.490 932.680 +0.090 P1D02SUARE 82522.610 5365456.480 851.410 851.280 -0.130 PID02BUXHR 382516.340 5365466.10 853.303 852.880 -0.150 P1D02SUARE 839515.90 5365466.10 853.50 <td< td=""><td>XP16</td><td>380850.190</td><td>5356549.720</td><td>512.280</td><td>512.320</td><td>+0.040</td></td<>	XP16	380850.190	5356549.720	512.280	512.320	+0.040
XP16C 379643.330 5362477.160 525.170 outside * XP16D 379646.430 5362477.230 525.170 525.150 -0.020 XP17 381770.820 5359599.670 500.570 500.870 -0.040 XP17B 381761.900 536865.820 558.360 558.490 +0.130 XP18B 3866448.700 5368467.090 562.620 562.640 +0.020 XP19B 386909.530 5375184.040 174.920 +0.030 XP20C 388075.70 5373451.010 249.080 249.020 -0.060 XP20B 382824.870 5375066.520 932.580 +0.090 P1D011NIL 76003.380 5365064.490 932.490 932.580 +0.090 PID02BUSH 382515.090 536546.640 851.100 451.280 -0.130 PID02SQUARE 38252.610 5365464.640 851.410 851.820 -0.130 PID02SQUARE 382515.900 5385114.960 307.803 307.900 +0.070 PID02SQUARE 383951.590 538514.960 307.803 307.900 +0.070	XP16B	380754.610	5356191.190	514.310	514.340	+0.030
XP16D 379646.430 5362477.230 525.170 525.150 -0.020 XP17 381770.820 5359599.670 500.570 500.870 -0.040 XP18 38655.900 536585.820 558.360 558.490 +0.130 XP18 386548.709 536467.090 562.620 562.640 +0.020 XP19 384989.910 5375184.040 174.920 +0.030 XP20 38752.670 5373410.10 249.020 -0.060 XP20 38752.670 5373410.10 249.020 -0.060 XP20 386284.870 5374291.440 266.300 266.220 -0.080 XP20 38675.470 5374108.960 191.940 191.940 +0.020 YP20 38675.470 5374108.960 191.940 +0.020 -0.130 PID01B 37601.560 5365464.409 932.490 932.580 +0.090 PID01B 37601.500 5365465.610 851.940 -0.130 -0.130 PID02SQUARE 382516.340 5365465.610 851.550 +0.030 PID02CROSS 38	XP16C	379643.330	5362477.160	525.170	outside	*
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 5368855.820 558.360 558.490 +0.130 XP18B 386481.700 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 +0.000 XP20 387552.670 5374391.440 266.300 266.220 -0.060 XP20B 388075.470 5374108.960 191.940 191.960 +0.020 Y20C 388075.470 5365466.490 932.490 932.680 +0.090 PID01B 376001.560 5365465.610 851.303 852.880 -0.130 PID02SQUARE 382515.90 5365465.610 851.50 +0.030 PID02SQUARE 383948.900 5385117.260 307.830 307.900 +0.700 PID02SQUARE 383941.900 538494.4920 415.750 415.710 <	XP16D	379646.430	5362477.230	525.170	525.150	-0.020
XP17B 381761.900 5359600.990 500.870 -0.040 XP18 386555.900 536855.820 558.360 558.490 +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 5374291.440 266.300 266.220 -0.060 XP20B 388075.470 5374108.960 191.940 191.960 +0.020 PID01B 376003.380 5365066.520 932.580 +0.090 PID01RAIL 376001.560 536546.440 932.449 932.580 +0.090 PID02ZBUSH 382515.090 5365465.610 851.280 -0.130 PID02ZRUSS 382516.340 5365461.630 851.520 851.550 +0.030 PID02CROSS 382516.340 5385117.260 308.030 308.130 +0.100 PID02SQUARE 383948.900 5385117.260 308.030 308.130 +0.100	XP17	381770.820	5359599.670	500.570	500.590	+0.020
XP18 386555.900 536585.820 558.360 558.490 +0.130 XP18B 386448.700 5368467.090 562.620 562.640 +0.020 XP19 384989.910 5375184.040 174.740 174.920 +0.030 XP19 385009.530 5375187.510 174.740 174.740 +0.000 XP20 38752.670 5374291.440 266.200 -0.060 XP20E 382824.870 5374108.960 191.940 191.960 +0.020 XP20C 38075.470 5374108.960 191.940 191.960 +0.020 PID01B 376003.380 5365064.490 932.580 +0.090 PID02BUSH 382515.090 5365456.480 851.410 851.280 -0.130 PID02SQUARE 382915.090 5365461.610 851.520 851.550 +0.030 PID03SQUARE 383948.900 5385117.260 308.030 308.130 +0.100 PID03TARGET 383951.590 5384964.920 415.750 415.710 -0.040 PID04TREE 376415.030 5384964.920 414.850 414.730	XP17B	381761.900	5359600.090	500.910	500.870	-0.040
XP18B 386448.700 5368467.090 562.620 562.640 +0.020 XP19 384989.910 5375184.040 174.890 174.920 +0.030 XP19B 38509.530 5375187.510 174.740 174.740 +0.000 XP20 38752.670 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 5365064.520 932.680 +0.090 PID01NLL 37601.560 5365044.490 932.490 932.580 +0.090 PID02BUSH 38251.090 536546.610 851.410 851.280 -0.130 PID02SQUARE 38251.090 5365461.630 851.520 851.550 +0.030 PID02SQUARE 383948.900 5385114.960 307.830 307.900 +0.070 PID03SQUARE 383948.900 538514.960 307.830 307.900 +0.070 PID04CROSS 376415.030 5384964.920 415.750 <td>XP18</td> <td>386555.900</td> <td>5368585.820</td> <td>558.360</td> <td>558.490</td> <td>+0.130</td>	XP18	386555.900	5368585.820	558.360	558.490	+0.130
XP19384989.9105375184.040174.890174.920+0.030XP19B385009.5305375187.510174.740140.000XP2038752.6705373451.010249.080249.020-0.060XP20B388284.8705374291.440266.300266.220-0.080XP20C388075.4705374108.960191.940191.960+0.020PID01B376001.5605365066.520932.590932.680+0.090PID02BUSH382515.0905365465.610851.410851.280-0.130PID02SQUARE382522.6105365465.610853.030852.880-0.150PID03SQUARE383948.9005385117.260308.030308.130+0.000PID03TARGET383951.590538514.960307.830307.900+0.070PID04CROSS376415.0305384964.920415.750415.710-0.040PID04TREE376427.1305384954.190414.850414.730-0.120Average dz-0.170Maximum dz+0.160Average magnitude0.075Root mean square0.091Std deviation0.09	XP18B	386448.700	5368467.090	562.620	562.640	+0.020
XP19B385009.5305375187.510174.740174.740+0.000XP20387552.6705373451.010249.080249.020-0.060XP20B38284.8705374291.440266.300266.220-0.080XP20C388075.4705374108.960191.940191.960+0.020PID01B376003.3805365066.520932.590932.680+0.090PID01BMIL376001.5605365464.490932.490932.580+0.090PID02BUSH382515.0905365465.610851.3280-0.130PID02SQUARE382522.6105365465.610853.030852.880-0.150PID03SQUARE383948.9005385117.260308.030308.130+0.100PID03TARCET383951.5905384964.920415.750415.710-0.040PID04CROSS376415.0305384954.190414.850414.730-0.120Average dz-0.011Minimum dz+0.160Average magnitude0.075Root mean square0.091Std deviation0.09-0.091	XP19	384989.910	5375184.040	174.890	174.920	+0.030
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 5365465.610 853.030 852.880 -0.130 PID02SQUARE 382516.340 5365465.610 853.550 +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 376427.130 5384954.190 414.850 414.730 -0.120 Average dz -0.011 -0.170 -0.170 -0.120 -0.120 -0.120 Average dz -0.170 -0.170 -0.170 -0.170 -0.120 -0.120 Average magnitude 0.075	XP19B	385009.530	5375187.510	174.740	174.740	+0.000
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 PID01MAIL 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 PID02SQUARE 383948.900 5385117.260 308.030 308.130 +0.000 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 -0.170 -0.120 -0.120 -0.120 -0.120 Average magnitude 0.075 Root mean square 0.091 -0.091 -0.120 -0.120	XP20	387552.670	5373451.010	249.080	249.020	-0.060
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 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 Average magnitude 0.075 Koot mean square 0.091 Std deviation 0.09 555 555 555 555 555 555 555 555 555 555 555 555 555 555 555	XP20B	388284.870	5374291.440	266.300	266.220	-0.080
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 5365465.610 851.410 851.280 -0.130 PID02SQUARE 382522.610 5365461.630 851.520 851.550 +0.030 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 5385144.960 307.830 307.900 +0.070 PID04CROSS 376427.130 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 +0.160 Average magnitude 0.075 Root mean square 0.091 Std deviation 0.09 5td deviation 0.09	XP20C	388075.470	5374108.960	191.940	191.960	+0.020
PID01NAIL 376001.560 5365064.490 932.490 932.580 +0.090 PID02BUSH 382515.090 5365465.480 851.410 851.280 -0.130 PID02SQUARE 382516.340 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 -0.170 -0.120 Average magnitude 0.075 Root mean square 0.091 5td deviation 0.09 -0.191	PID01B	376003.380	5365066.520	932.590	932.680	+0.090
PID02BUSH 382515.090 5365456.480 851.410 851.280 -0.130 PID02SQUARE 382522.610 5365465.610 853.030 852.880 -0.150 PID02SQUARE 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 +0.160 Average magnitude 0.075 Root mean square 0.091 Std deviation 0.09 501 501 501	PID01NAIL	376001.560	5365064.490	932.490	932.580	+0.090
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 +0.160 Average magnitude 0.075 Root mean square 0.091 Std deviation 0.09 509 509 509 509 500	PID02BUSH	382515.090	5365456.480	851.410	851.280	-0.130
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 -0.170 -0.160 -0.170 -0.400 Average magnitude 0.075 Root mean square 0.091 5td deviation 0.09	PID02SQUARE	382522.610	5365465.610	853.030	852.880	-0.150
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 -0.170 -0.170 -0.160 -0.75 -0.091 Std deviation 0.09 -0.99 -0.99 -0.99 -0.99	PID02CROSS	382516.340	5365461.630	851.520	851.550	+0.030
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 -0.170 -0.170 -0.160 -0.160 Average magnitude 0.075 Root mean square 0.091 5td deviation 0.09	PID03SQUARE	383948.900	5385117.260	308.030	308.130	+0.100
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	PID03TARGET	383951.590	5385114.960	307.830	307.900	+0.070
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	PID04CROSS	376415.030	5384964.920	415.750	415.710	-0.040
Average dz-0.011Minimum dz-0.170Maximum dz+0.160Average magnitude0.075Root mean square0.091Std deviation0.09	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						
Minimum dz-0.170Maximum dz+0.160Average magnitude0.075Root mean square0.091Std deviation0.09	Average dz	-0.011				
Maximum dz+0.160Average magnitude0.075Root mean square0.091Std deviation0.09	Minimum dz	-0.170				
Average magnitude0.075Root mean square0.091Std deviation0.09	Maximum dz	+0.160				
Root mean square0.091Std deviation0.09	Average magnitude	0.075				
Std deviation 0.09	Root mean square	0.091				
	Std deviation	0.09				

FUGRO SPATIAL SOLUTIONS PTY LTD

Metadata Report



Spatial Accuracy (Hz) metres	0.25m @ 67 % Cl			
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.			
	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	 This Metadata file is always to be stored with the unaltered data contained in this volume. Any supplied data is to be used only for the purpose for which it was commissioned and in accordance with the terms of engagement. Use of any supplied data for purposes other than those stated is entirely at the risk of the Client. 			