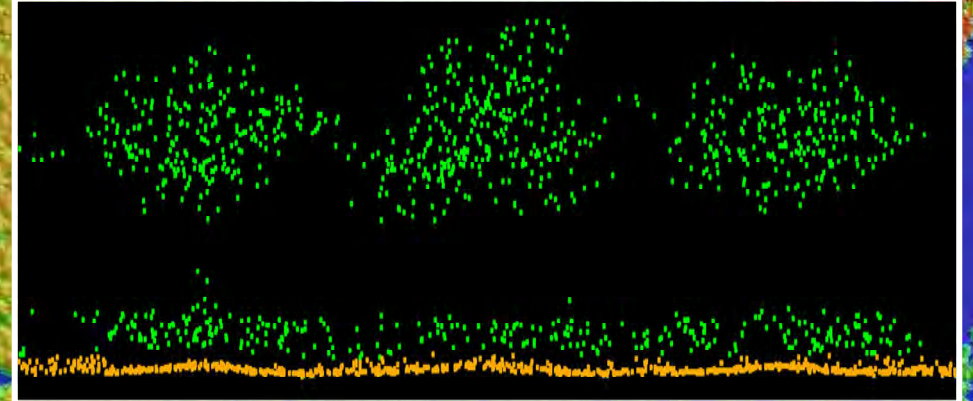
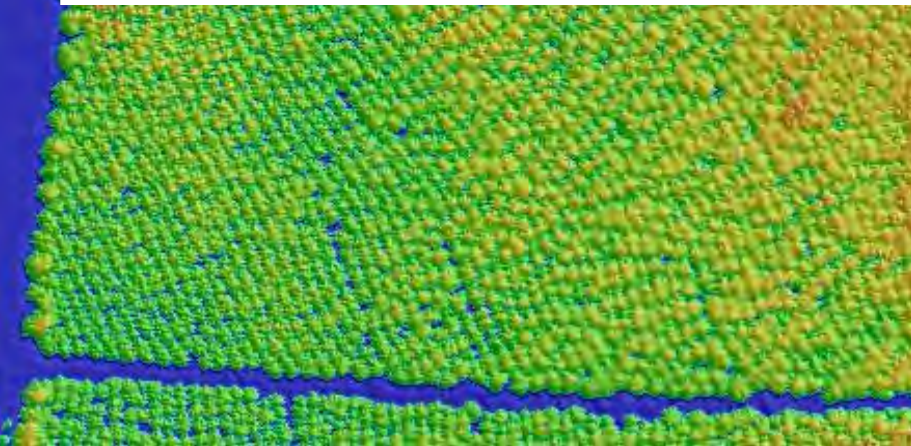
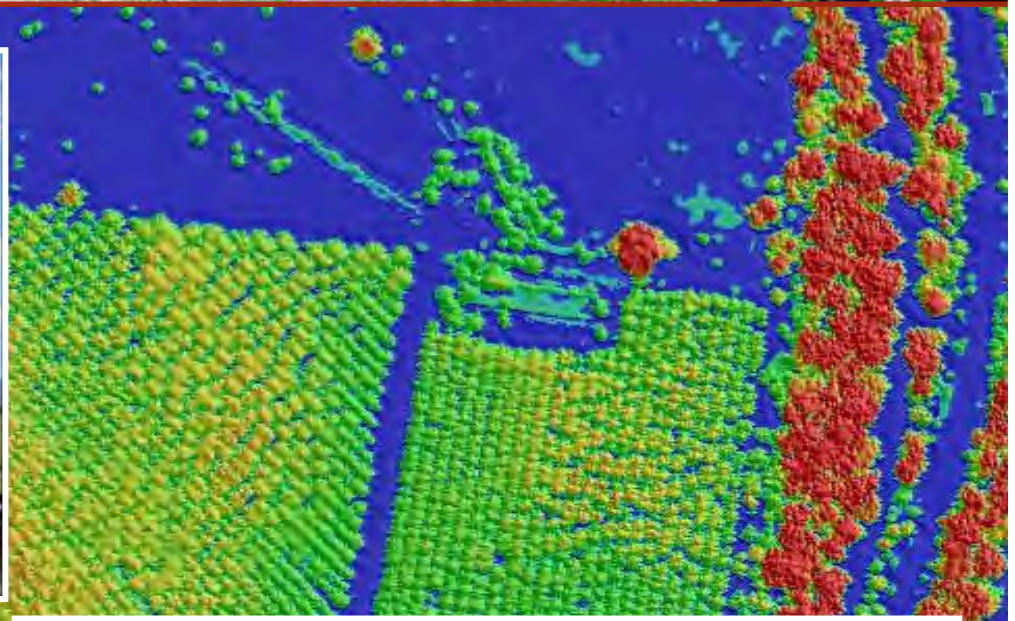
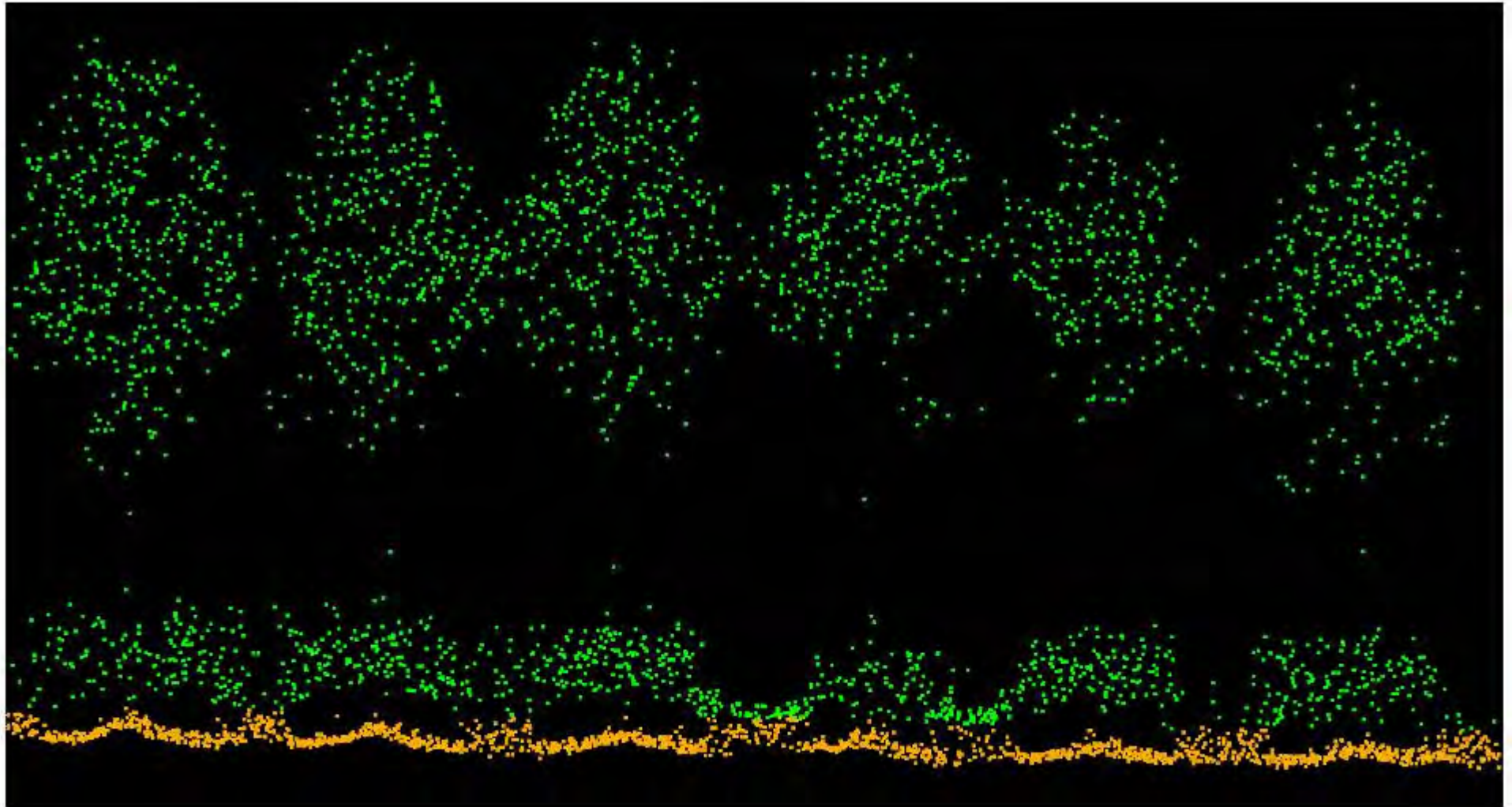


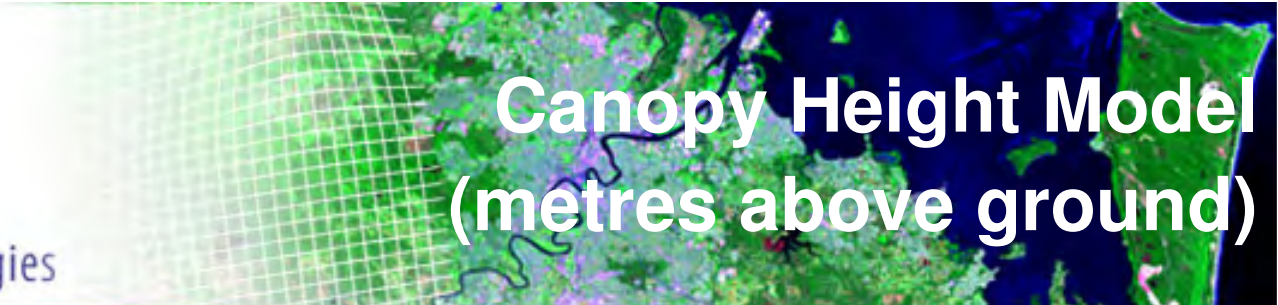
Forestry Application





TNTmips Point Profile Tool





**Canopy Height Model
(metres above ground)**

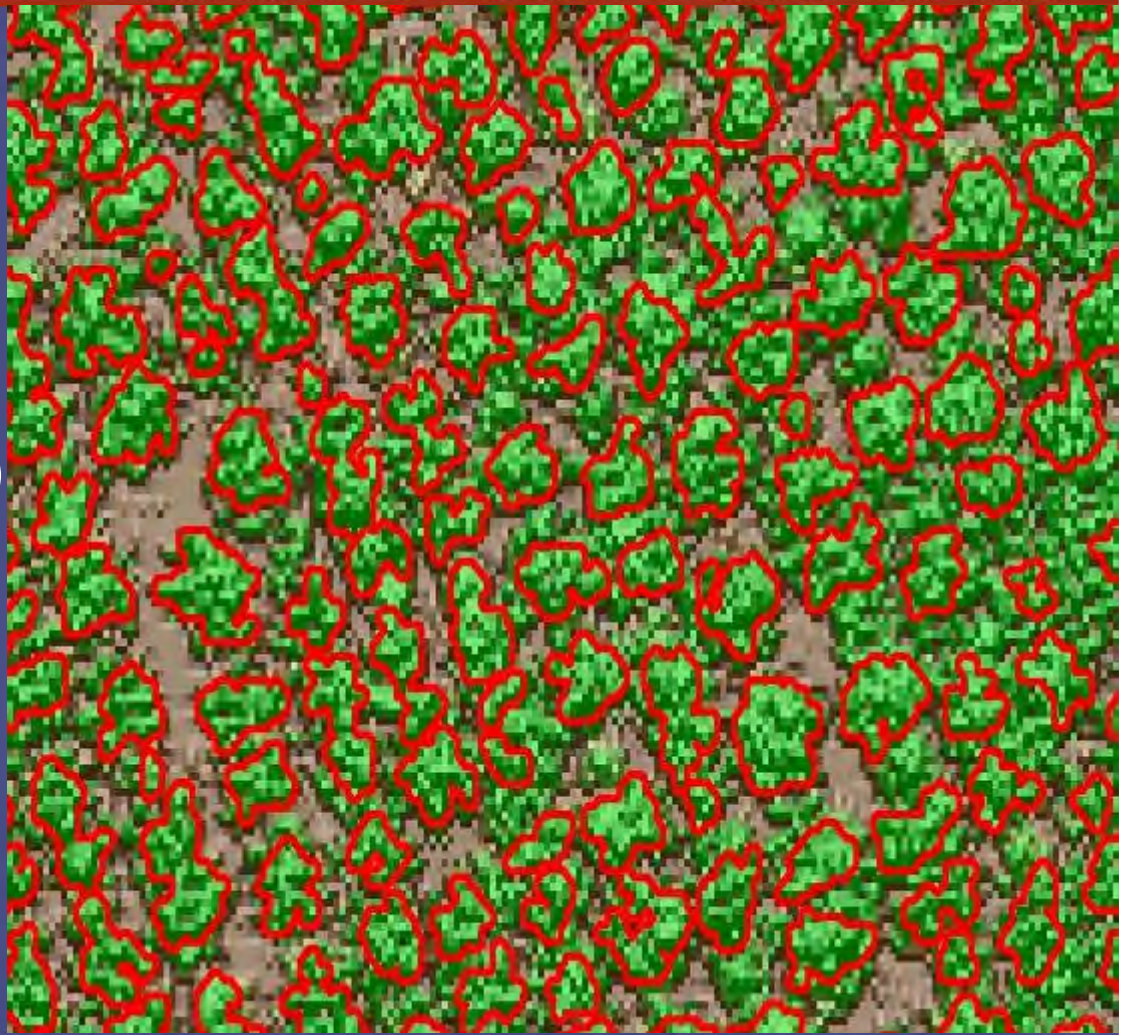


**TNTmips SML and
Surface Modelling**

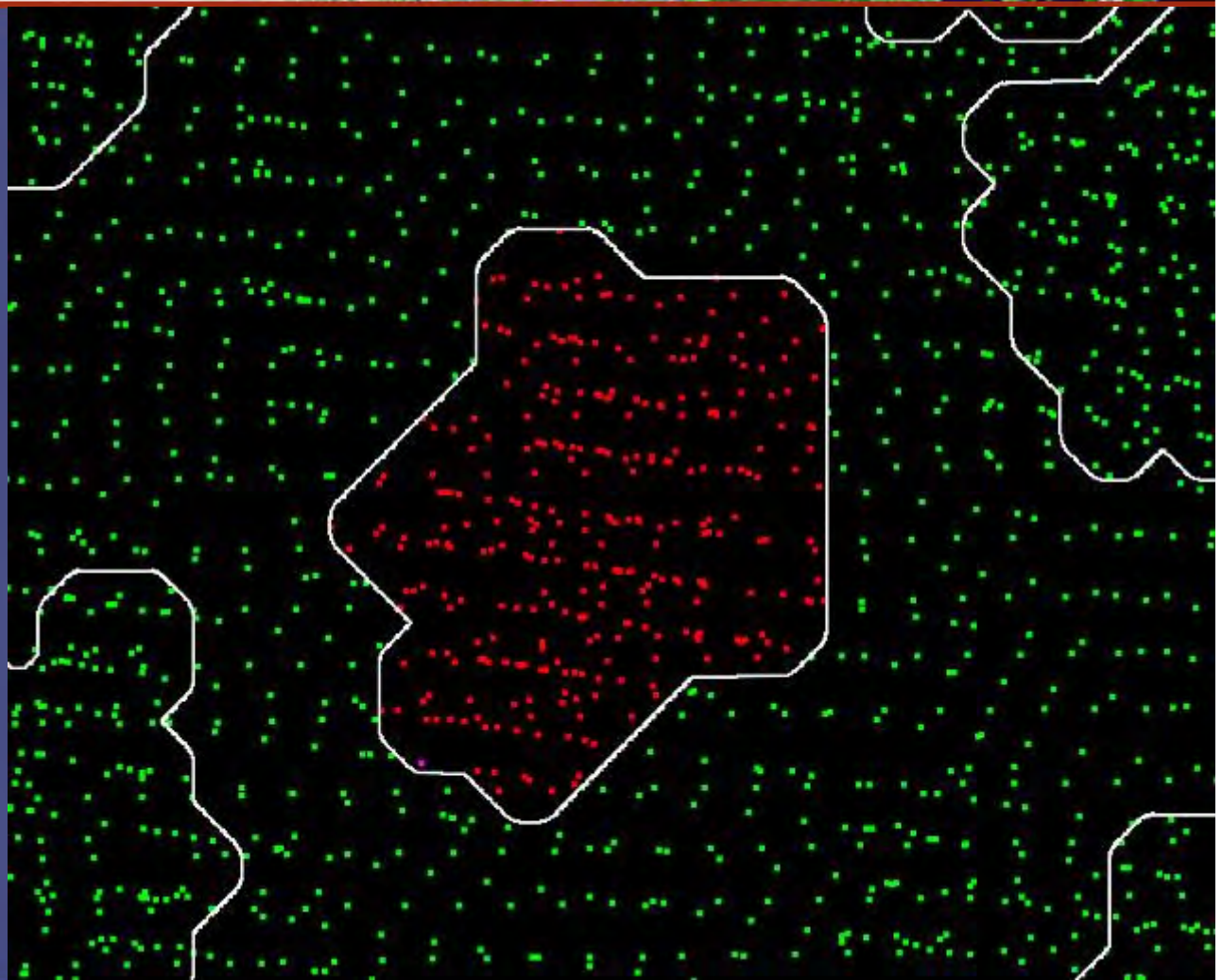


Tree Crown Polygons

- Vectorise DCM
- Filter to remove
 - Island Polygons
 - Small polygons
- Assign unique tree ID



- Import LiDAR points to TNTmips Vector
- Transfer tree polygon ID to LiDAR points.
- Calculate tree crown statistics from LiDAR.



TreeID	Min	Max	MinNonGrd	TreeHeight	NumPoints	GrdCount	NONGrdCount	CrownDensity	AvGrdEL	AvNONGrdEL	SDevNONGrd	CanopyDepth	BoleHeight
12645	466.80	475.63	474.02	8.83	18	12	6	0.33	466.92	474.99	0.65	1.61	7.22
11426	465.50	475.35	473.73	9.85	24	11	13	0.54	465.63	474.70	0.57	1.62	8.23
6544	475.77	483.35	481.72	7.58	17	8	9	0.53	475.90	482.50	0.53	1.63	5.95
3767	481.55	491.25	489.61	9.70	15	6	9	0.60	481.63	490.61	0.53	1.64	8.06
12784	464.88	474.53	468.88	7.43	19	11	8	0.42	464.15	470.36	0.58	1.64	5.75
15644	464.88	474.53	468.88	7.43	80	38	42	0.53	455.65	462.94	1.05	1.64	6.51
11210	464.88	474.53	468.88	7.43	16	9	7	0.44	468.36	477.22	0.60	1.65	8.06
13007	464.88	474.53	468.88	7.43	21	12	9	0.43	461.70	469.93	0.49	1.65	7.25
547	464.88	474.53	468.88	7.43	21	11	10	0.48	470.37	481.45	0.51	1.67	10.43
6587	464.88	474.53	468.88	7.43	52	27	25	0.48	474.86	482.02	0.52	1.67	6.55
12857	464.88	474.53	468.88	7.43	23	11	12	0.52	463.03	467.89	0.45	1.67	3.97
13018	464.88	474.53	468.88	7.43	17	8	9	0.53	461.26	467.92	0.57	1.67	5.76
12761	464.88	474.53	468.88	7.43	20	10	10	0.50	464.06	469.97	0.70	1.68	5.12
2299	464.88	474.53	468.88	7.43	70	32	38	0.54	476.19	483.12	0.50	1.70	6.27
9026	464.88	474.53	468.88	7.43	23	12	11	0.48	471.54	477.14	0.73	1.71	4.65
9101	464.88	474.53	468.88	7.43	28	13	15	0.54	470.63	478.49	0.57	1.73	7.10
3979	464.88	474.53	468.88	7.43	14	7	7	0.50	480.69	490.54	0.66	1.75	9.05
11574	464.88	474.53	468.88	7.43	20	13	7	0.35	466.59	473.75	0.59	1.75	6.41
14002	464.88	474.53	468.88	7.43	18	10	8	0.44	459.14	467.81	0.57	1.75	7.65
3893	464.88	474.53	468.88	7.43	19	9	10	0.53	482.19	487.38	0.52	1.76	4.15
11783	464.88	474.53	468.88	7.43	16	11	5	0.31	464.51	472.79	0.93	1.77	7.75
6281	464.88	474.53	468.88	7.43	16	7	9	0.56	479.98	486.14	0.80	1.79	5.46
12719	464.88	474.53	468.88	7.43	17	10	7	0.41	465.18	473.99	0.62	1.79	7.57
16339	464.88	474.53	468.88	7.43	69	30	39	0.57	455.77	461.67	0.88	1.80	5.35
6193	464.88	474.53	468.88	7.43	28	11	17	0.61	478.98	485.12	0.59	1.82	5.21
10767	464.88	474.53	468.88	7.43	19	6	13	0.68	459.84	464.99	0.71	1.84	4.55
15024	464.88	474.53	468.88	7.43	13	6	7	0.54	454.48	463.49	0.68	1.86	8.03
6225	464.88	474.53	468.88	7.43	36	16	20	0.56	479.48	486.23	0.66	1.87	5.76
7926	464.88	474.53	468.88	7.43	60	78	82	0.51	460.83	467.64	0.99	1.87	6.21
15217	464.88	474.53	468.88	7.43	22	13	9	0.41	453.84	461.35	0.64	1.88	6.38
16296	455.80	464.03	462.06	8.23	59	27	32	0.54	455.88	463.32	0.62	1.88	6.37
9019	470.97	478.14	476.25	7.17	20	12	8	0.40	471.11	477.65	0.61	1.89	5.28

Tree Crowns / PolygonDatab...

Table Edit Record

Name Value

TreeID 12645

Min 466.80

Max 475.63

MinNonGrd 474.02

TreeHeight 8.83

NumPoints 18

GrdCount 12

NONGrdCount 6

CrownDensity 0.33

AvGrdEL 466.92

AvNONGrdEL 474.99

SDevNONGrd 0.65

CanopyDepth 1.61

BoleHeight 7.22

strata1 0

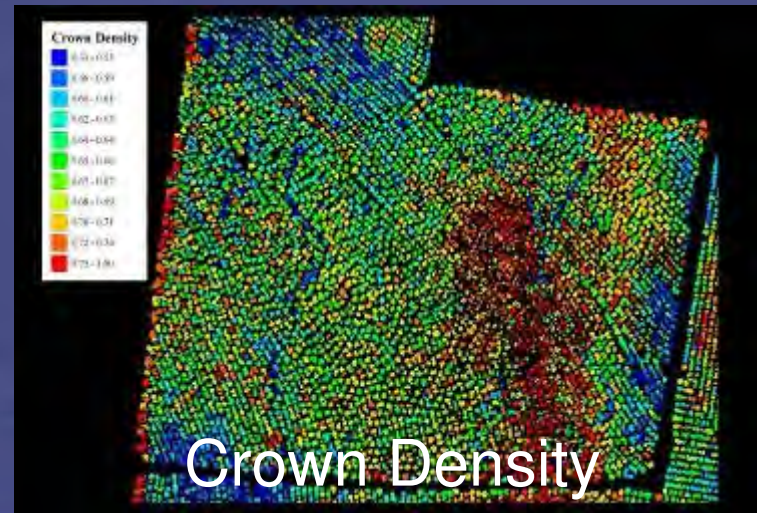
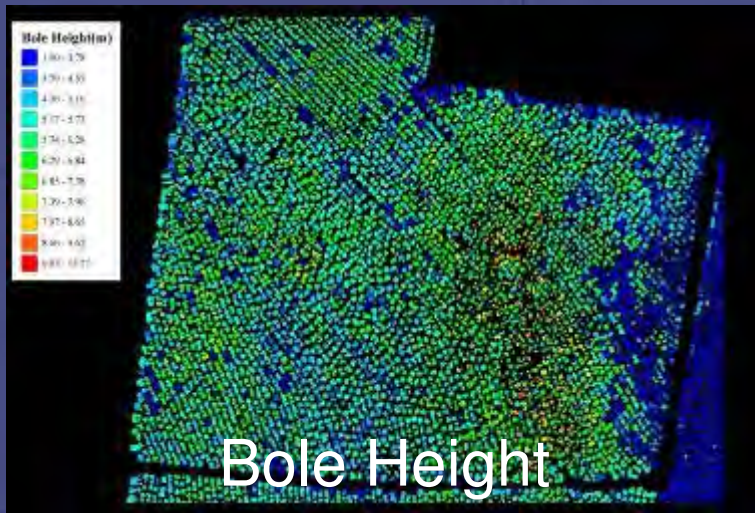
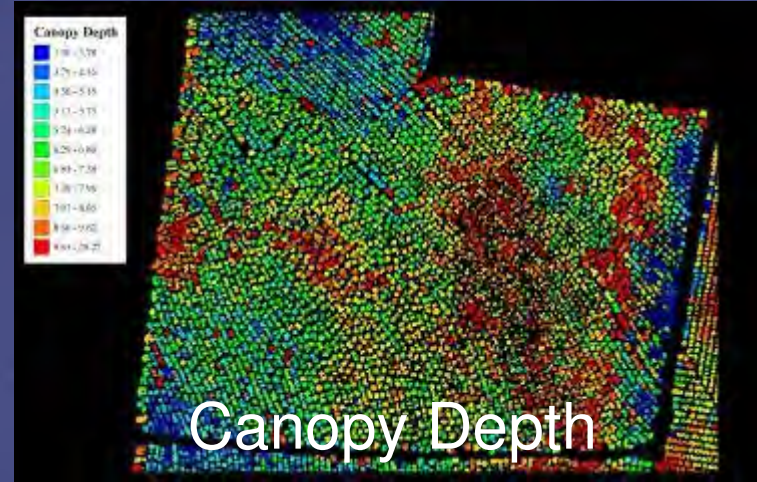
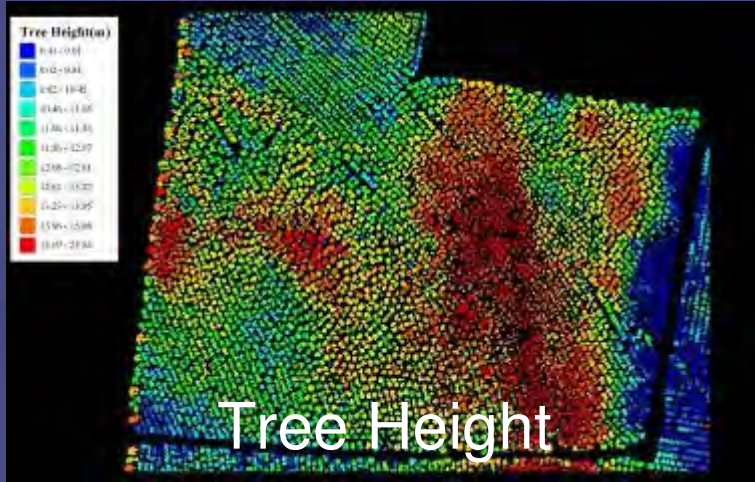
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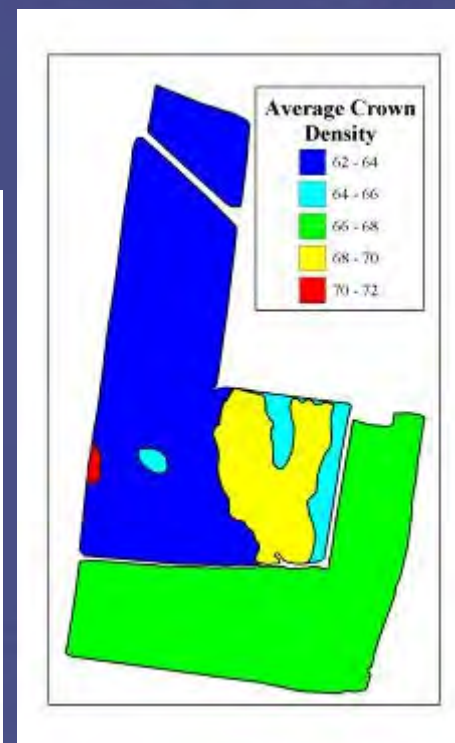
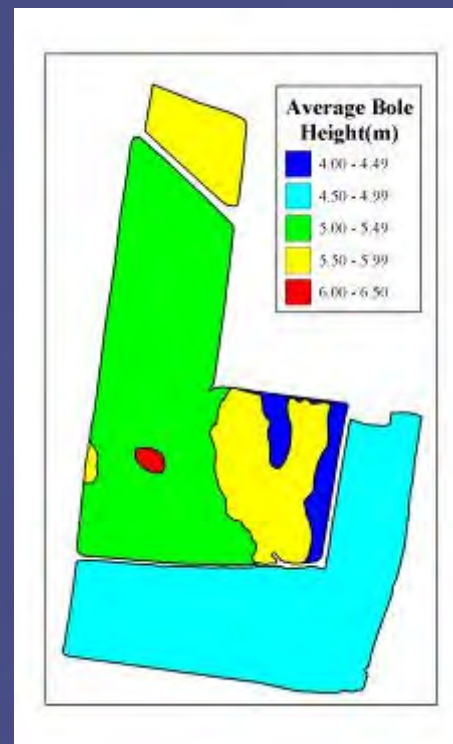
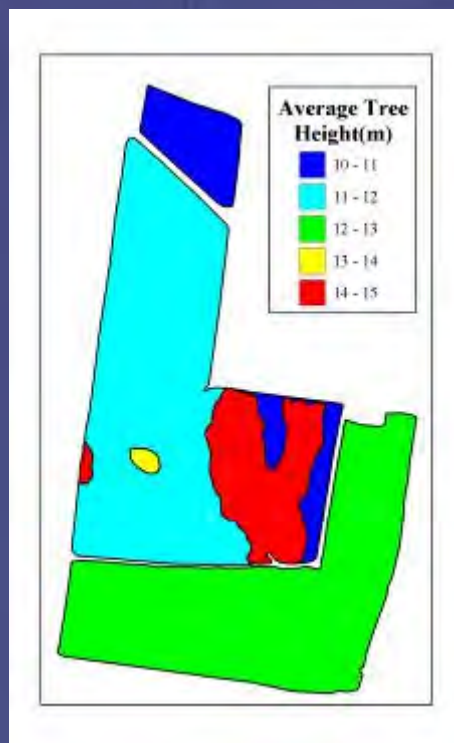
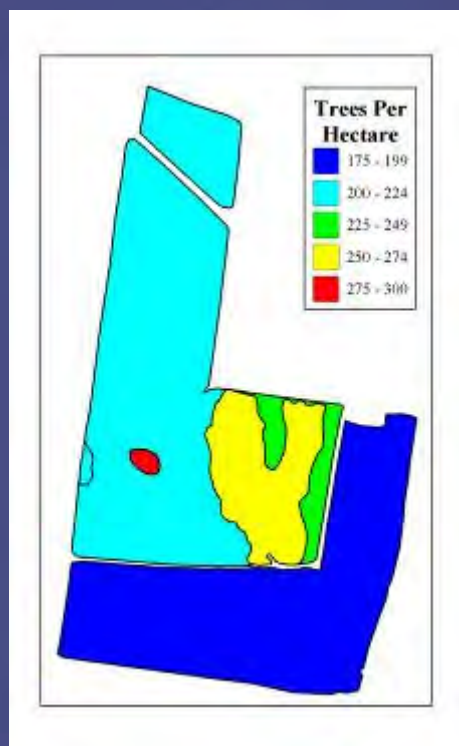
strata3 33

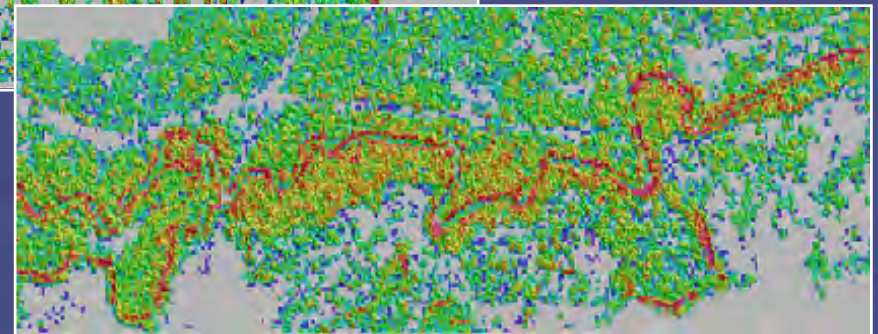
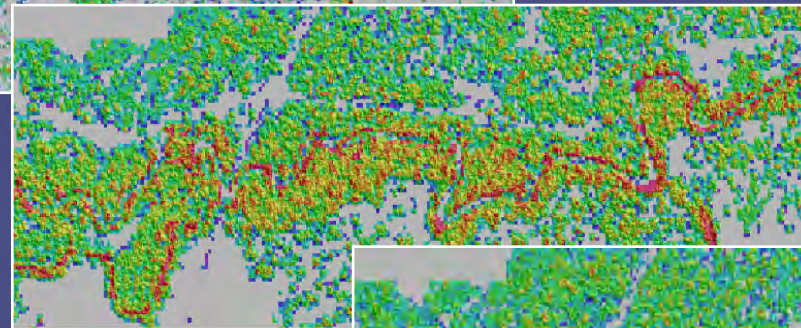
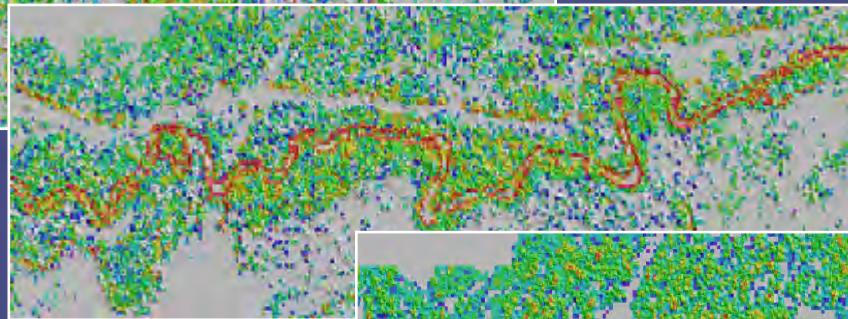
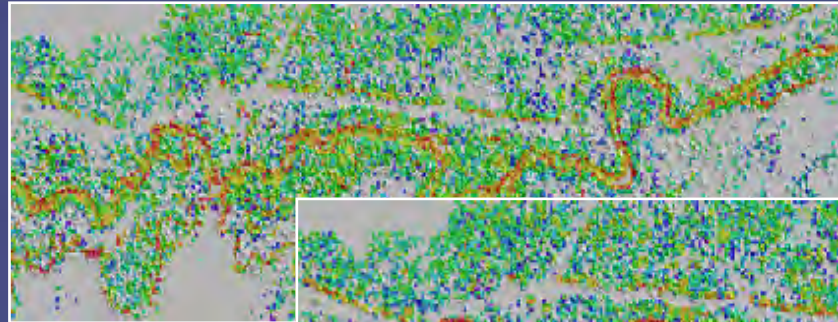
strata4 0

Attached record 1 of 1 - 10728 of 13449 in table

Individual Tree Metrics



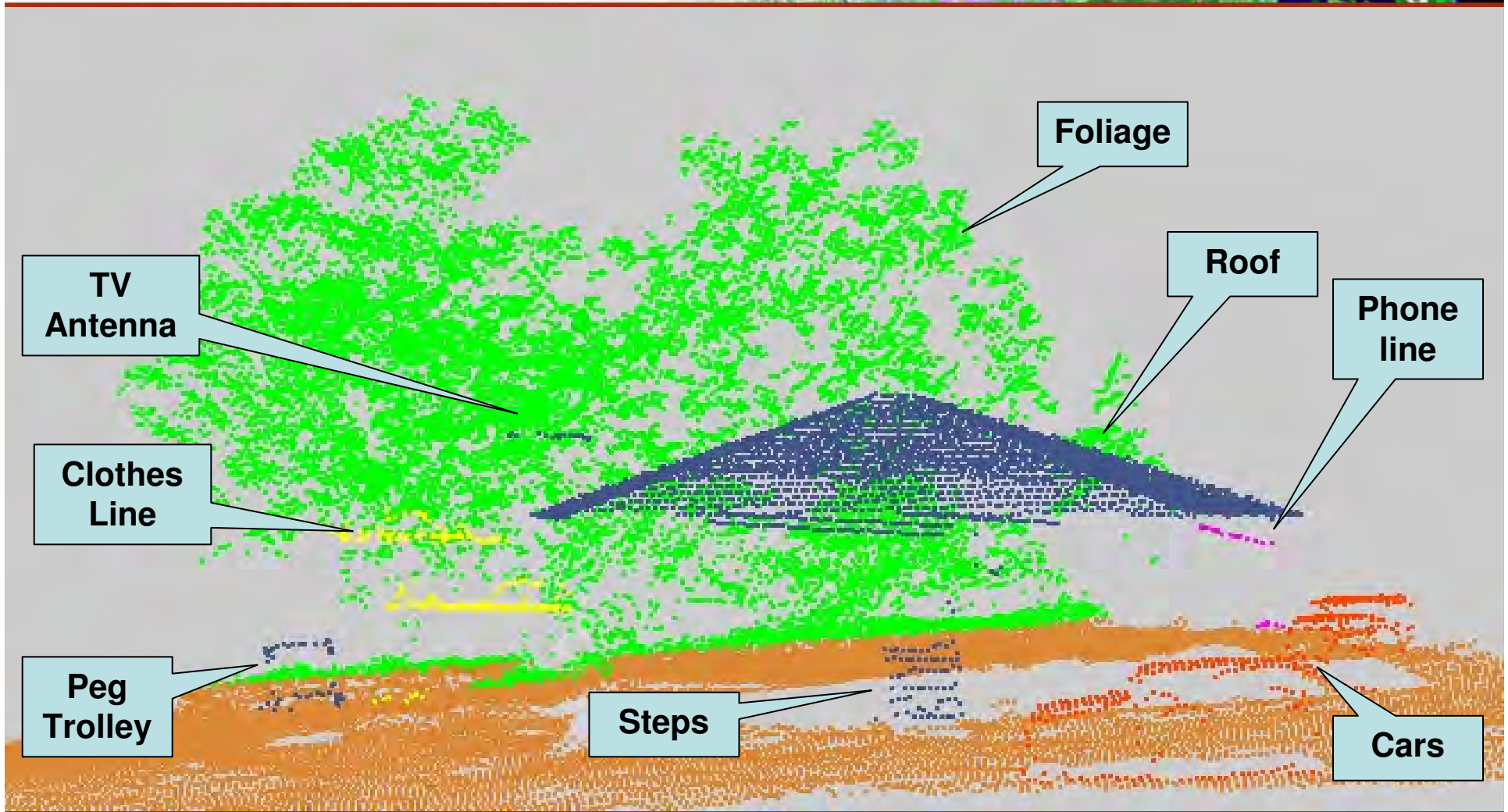




Foliage Project Cover
(% LiDAR returns within
vegetation stratum)

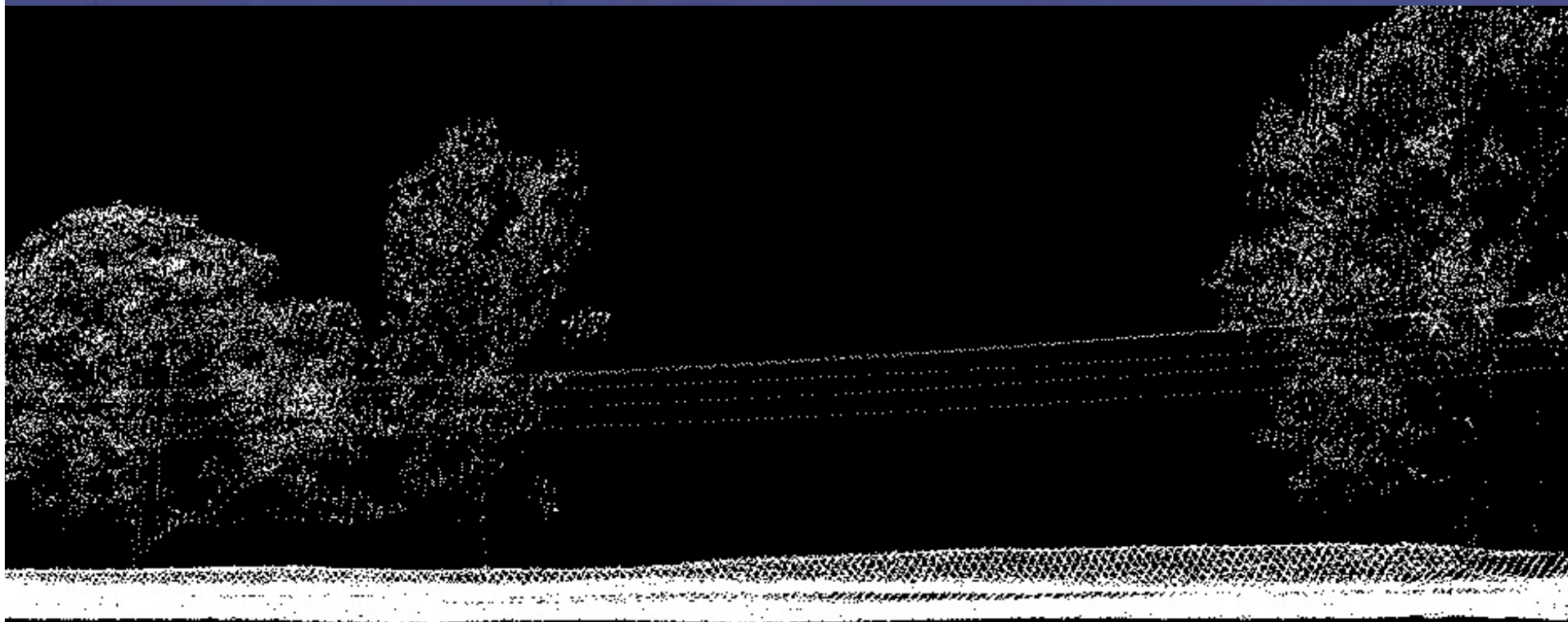
TNTmips SML

TNTmips Interactive LiDAR Classification

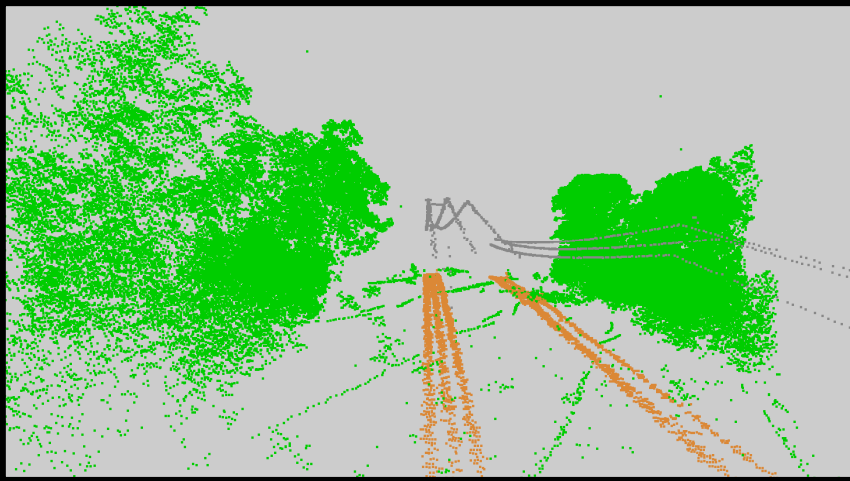




Power Line Mapping



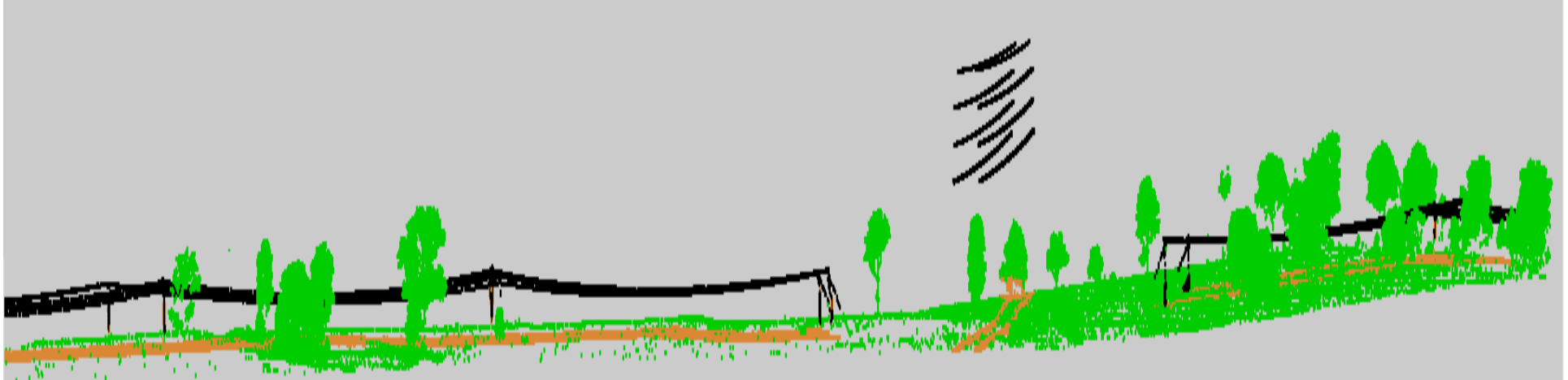
Satellite Remote Sensing | Aerial Mapping | LiDAR | GIS Services



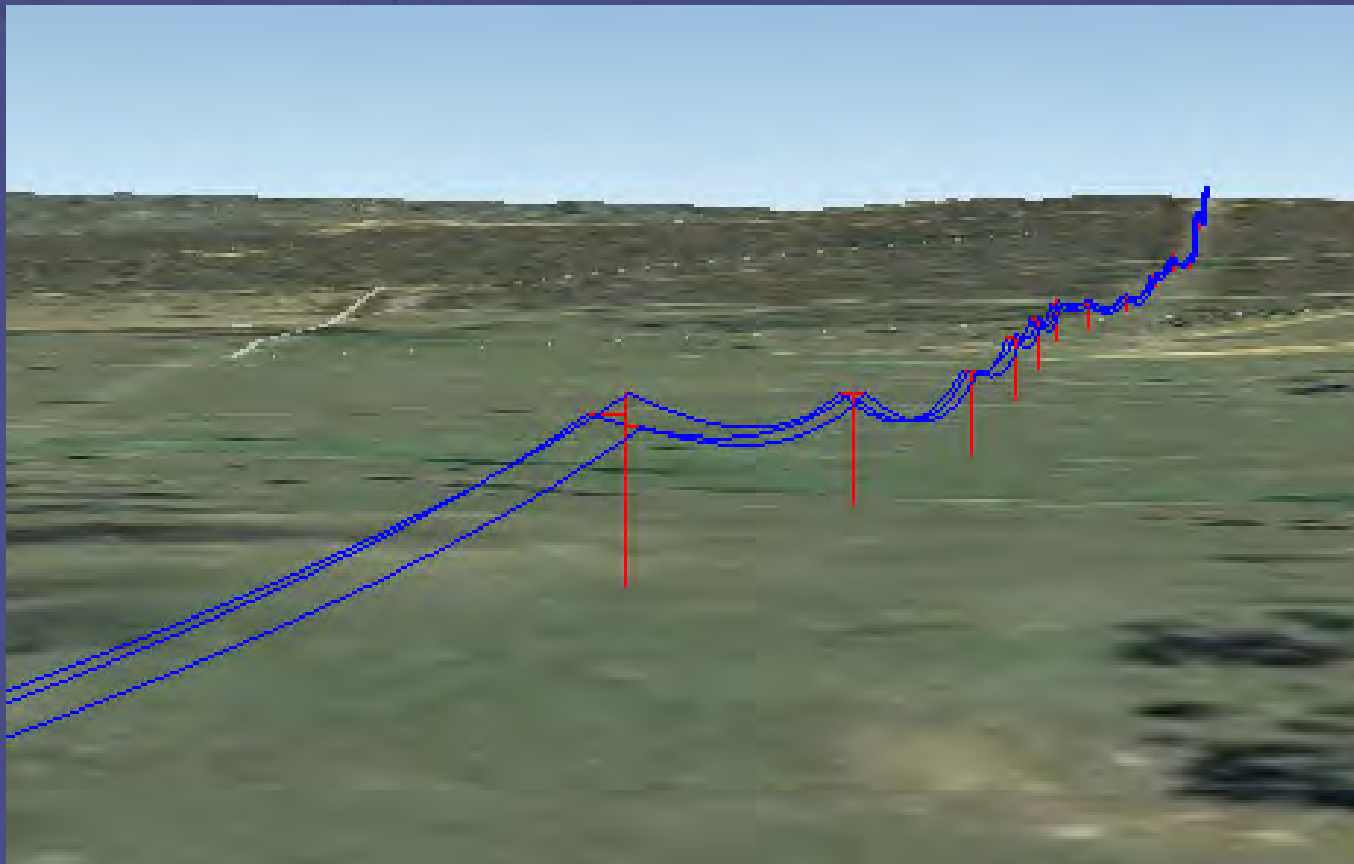
TNTmips SML Power line Classifier

```
if ( (p.Return_Number == 1) and  
      (p.Z - DEM[line,col] ) > 5) and  
      (Min_nonground_ht[line,col] > 3)) then  
      p.Classification = powerline;
```

Where “p” is a LAS record.



TNTmips → PLS-CADD → GoogleEarth



High Density LiDAR

13 pulses / sq. m returns
up to 65 points / sq. m
in complex vegetation

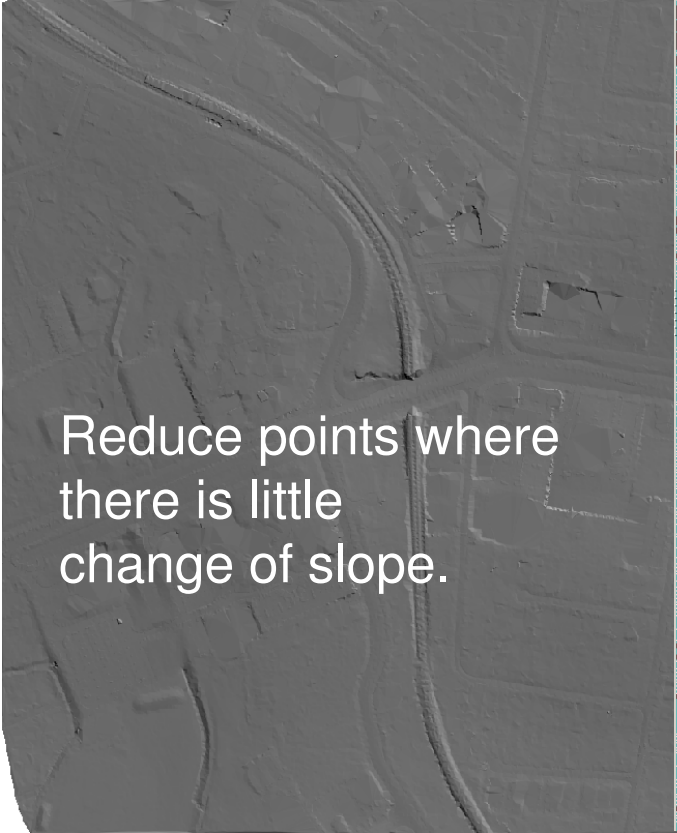
Use TNTmips to transfer
RGB values from
ortho-image to LiDAR.



LiDAR Filtering

Before Filtering: 2.6 M points / tile

After Filtering: 1.3 K points /tile



Reduce points where
there is little
change of slope.