New Geospatial Solutions Focusing on the Oil Palm Industry and other Plantation-based Agriculture

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Trimble

transforming the way the world works

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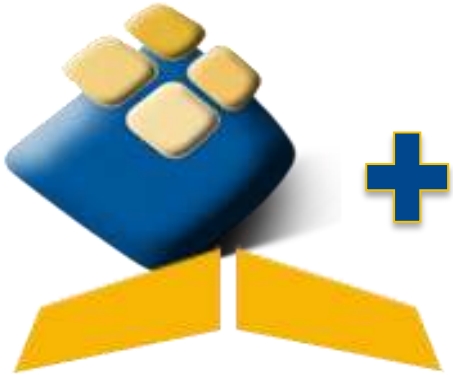
Trimble Plantations Deliverables

- Digital Terrain Model & Digital Surface Model
- Slope Mapping and RSOP Audit Data
- Palm Count
- Palm Crown Segmentation
- Block Segmentation
- Individual Palm Index for GIS
- Anomaly Identification
- Sick Palm Identification
- Density Map
- Asset Mapping (Roads, Bridges, Fleet, etc)

Trimble Plantations

COLLECT DATA

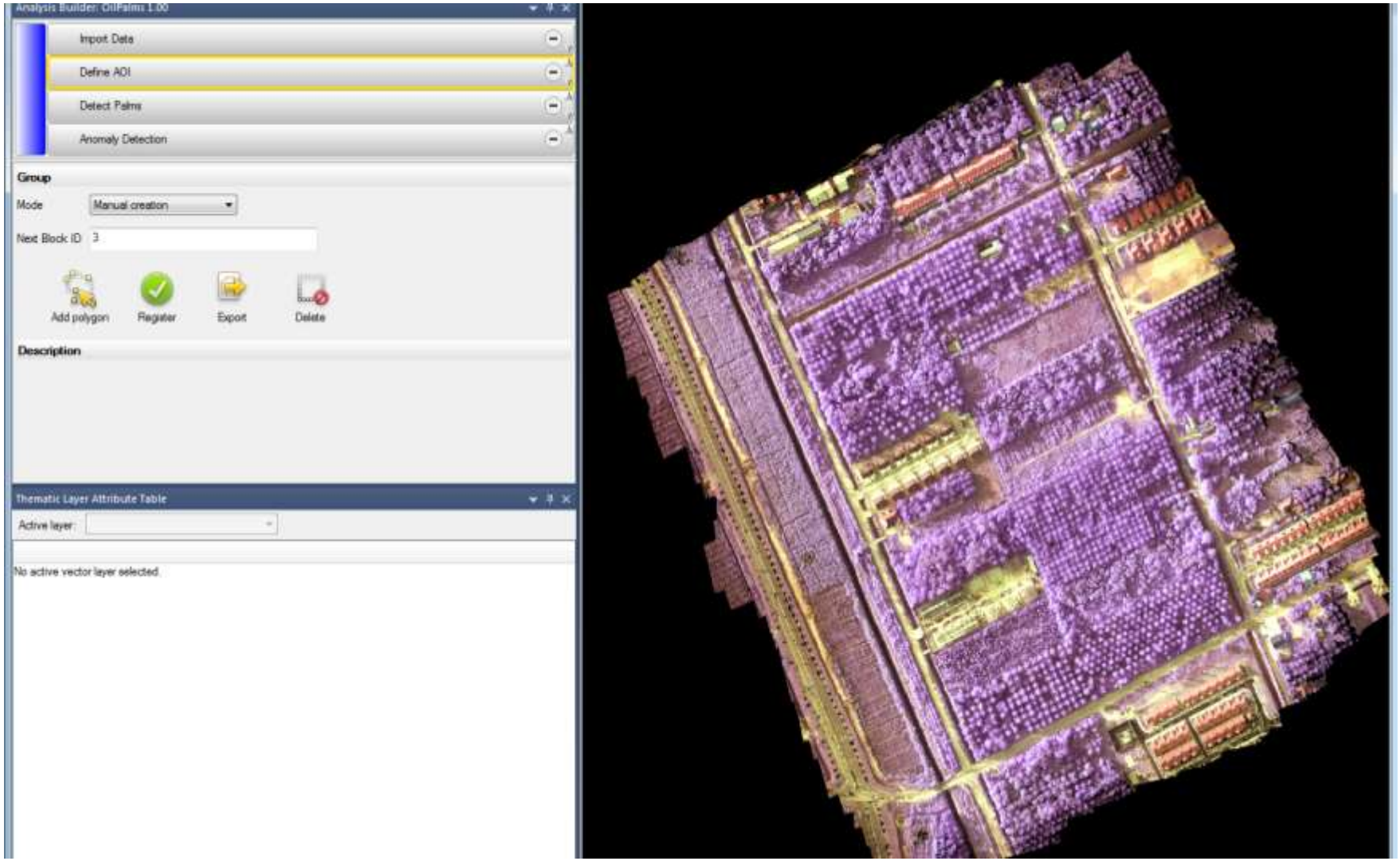
PROCESS & MODEL

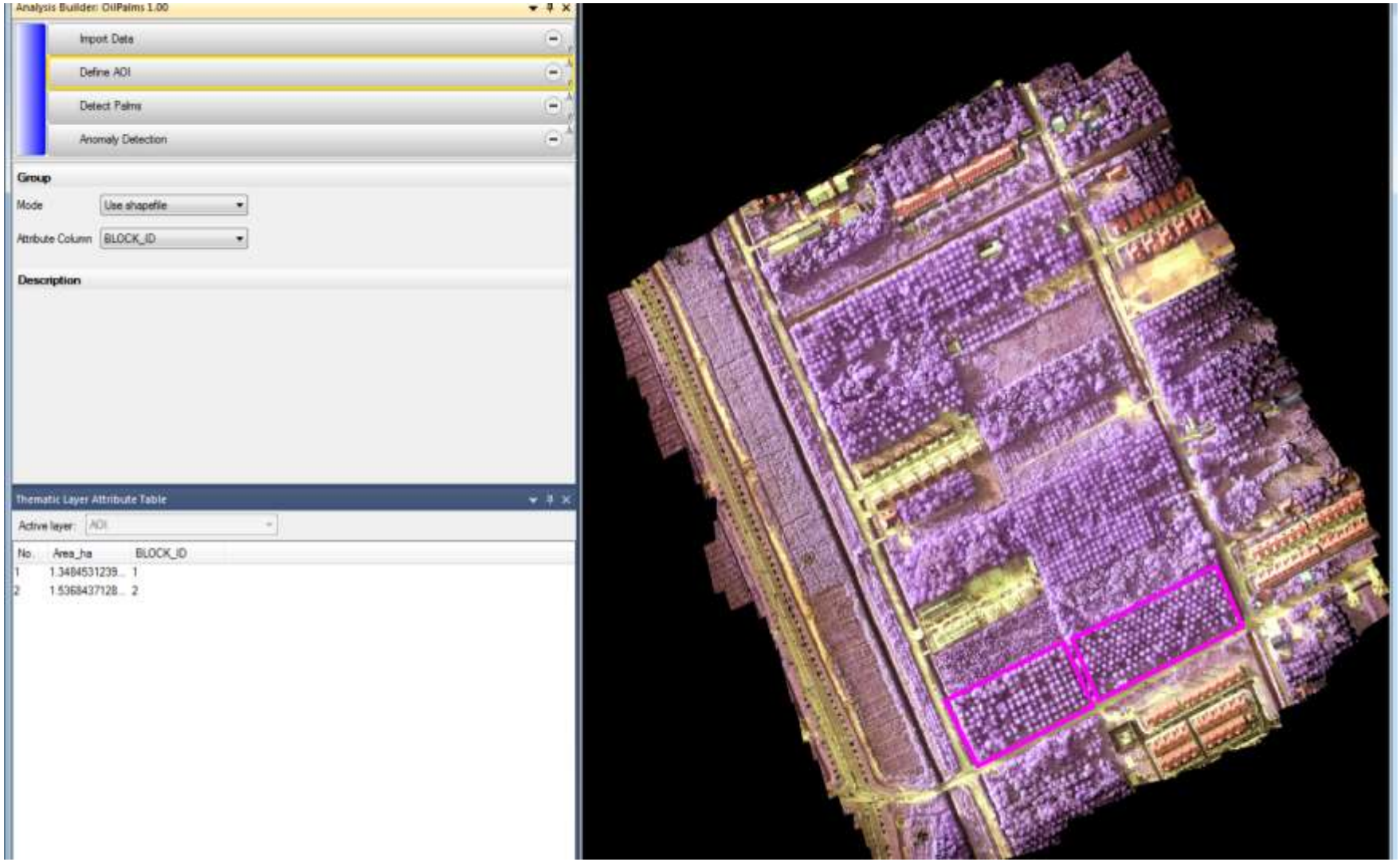


ANALYZE & ACT

Trimble TerraFlex

\+ **Operational Analytics Platform**


Import Data
Define AOI
Detect Palms
Anomaly Detection
Group
Mode
Manual creation
Next Block ID
3
Add polygon
Register
Export
Delete
Description
Thematic Layer Attribute Table
Active layer:
No active vector layer selected


Analysis Builder: OilPalms 1.00
Import Data
Define AOI
Detect Palms
Anomaly Detection
Group
Mode
Use shapefile
Attribute Column
BLOCK_ID
Description
Thematic Layer Attribute Table
Active layer:
AOI
No.
Area_ha
BLOCK_ID
1
1.3484531239...
1
2
1.5368437128...
2

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Analysis Builder: OilPalms 1.00

Import Data

Define AOI

Detect Palms

Anomaly Detection

Detection Sensitivity

Oil palms 0.3 0 1

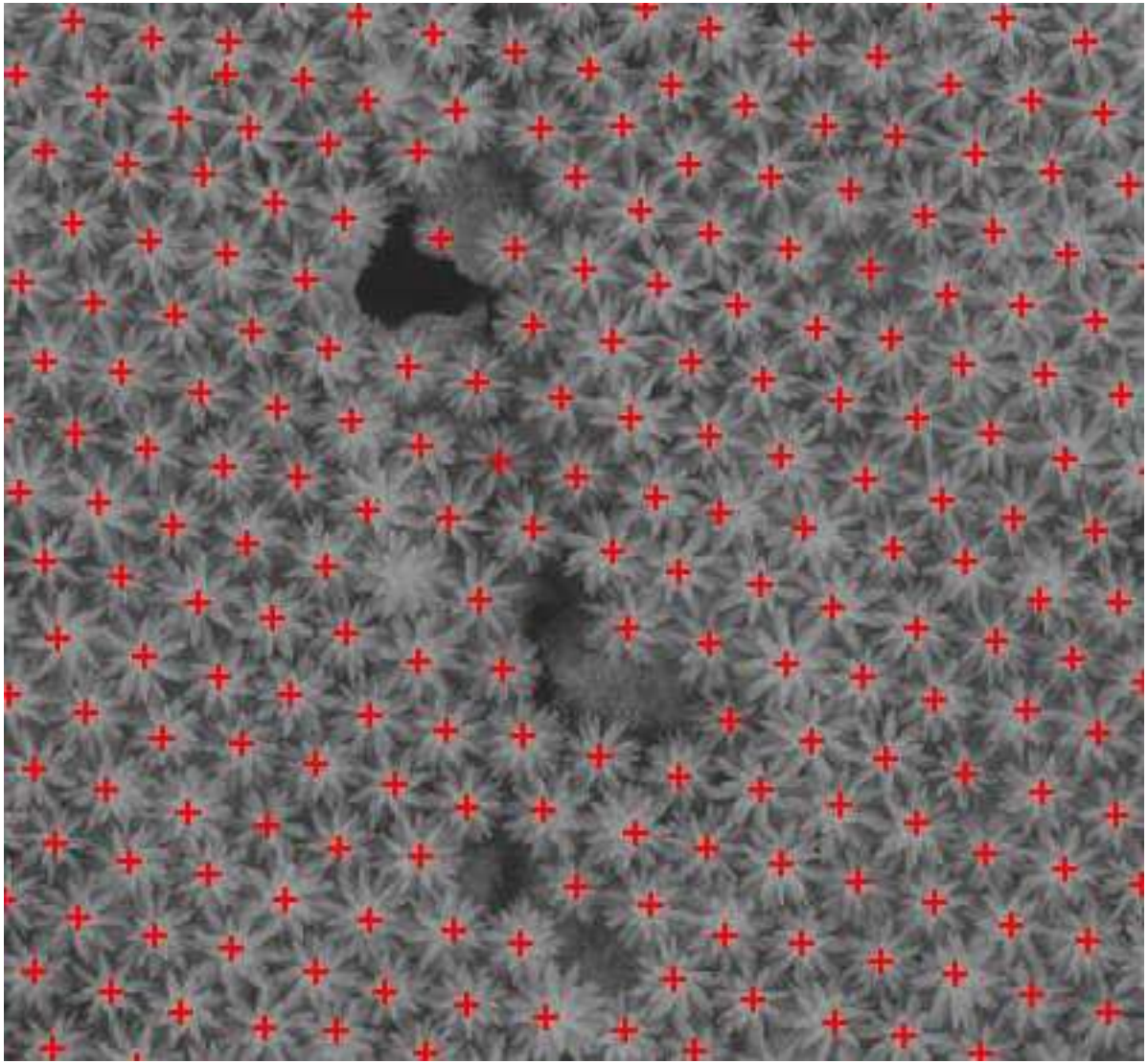
Detect Trees

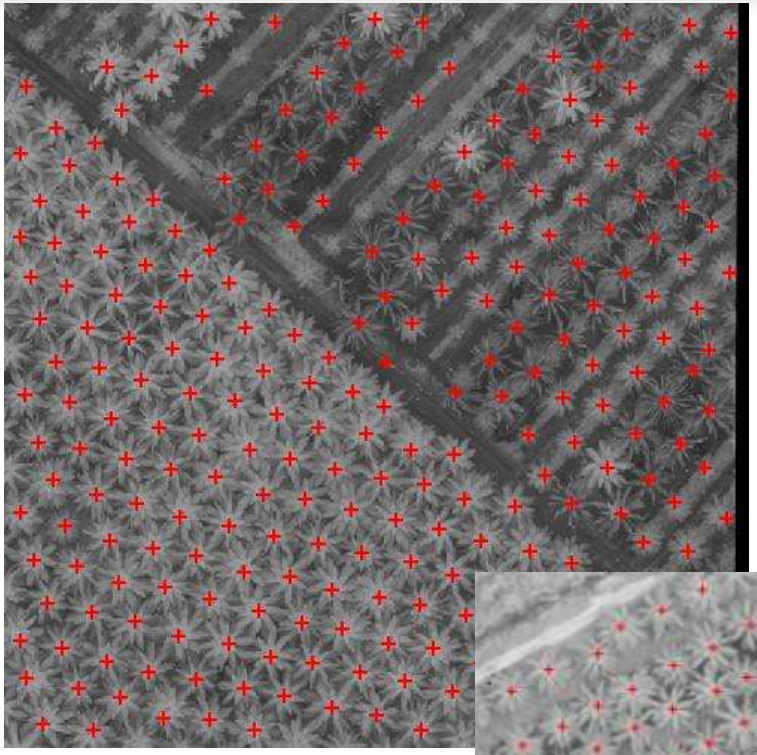
Description

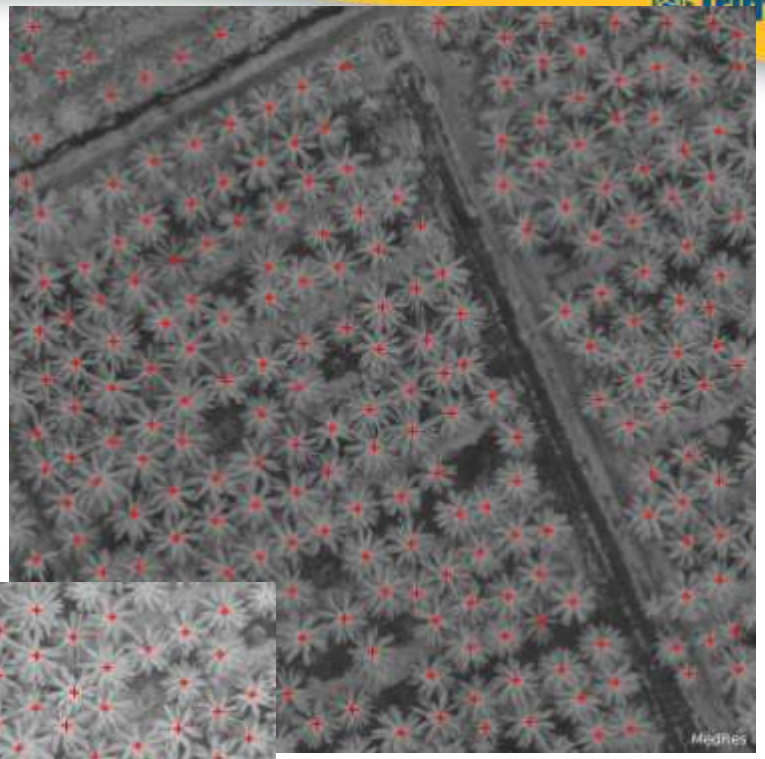
Thematic Layer Attribute Table

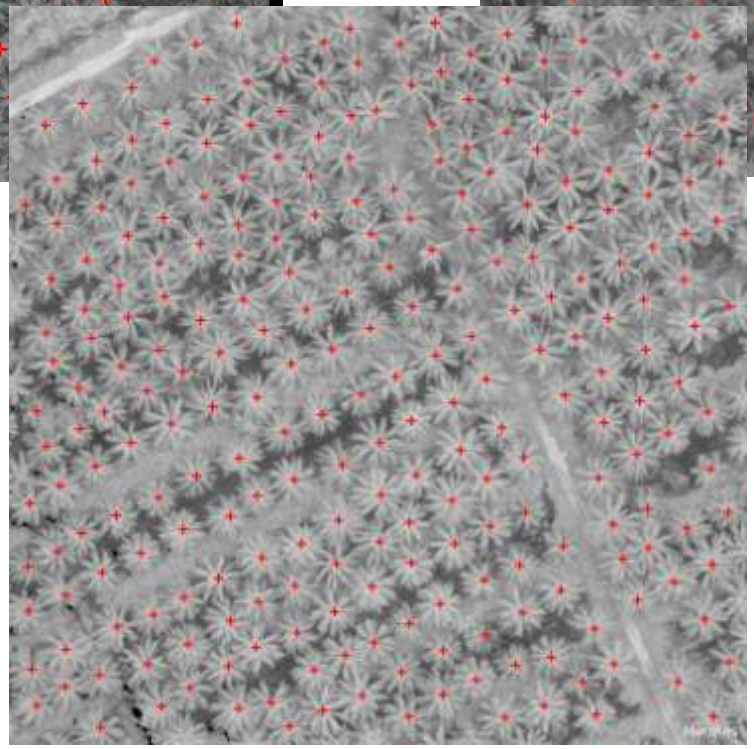
Active layer: Trees

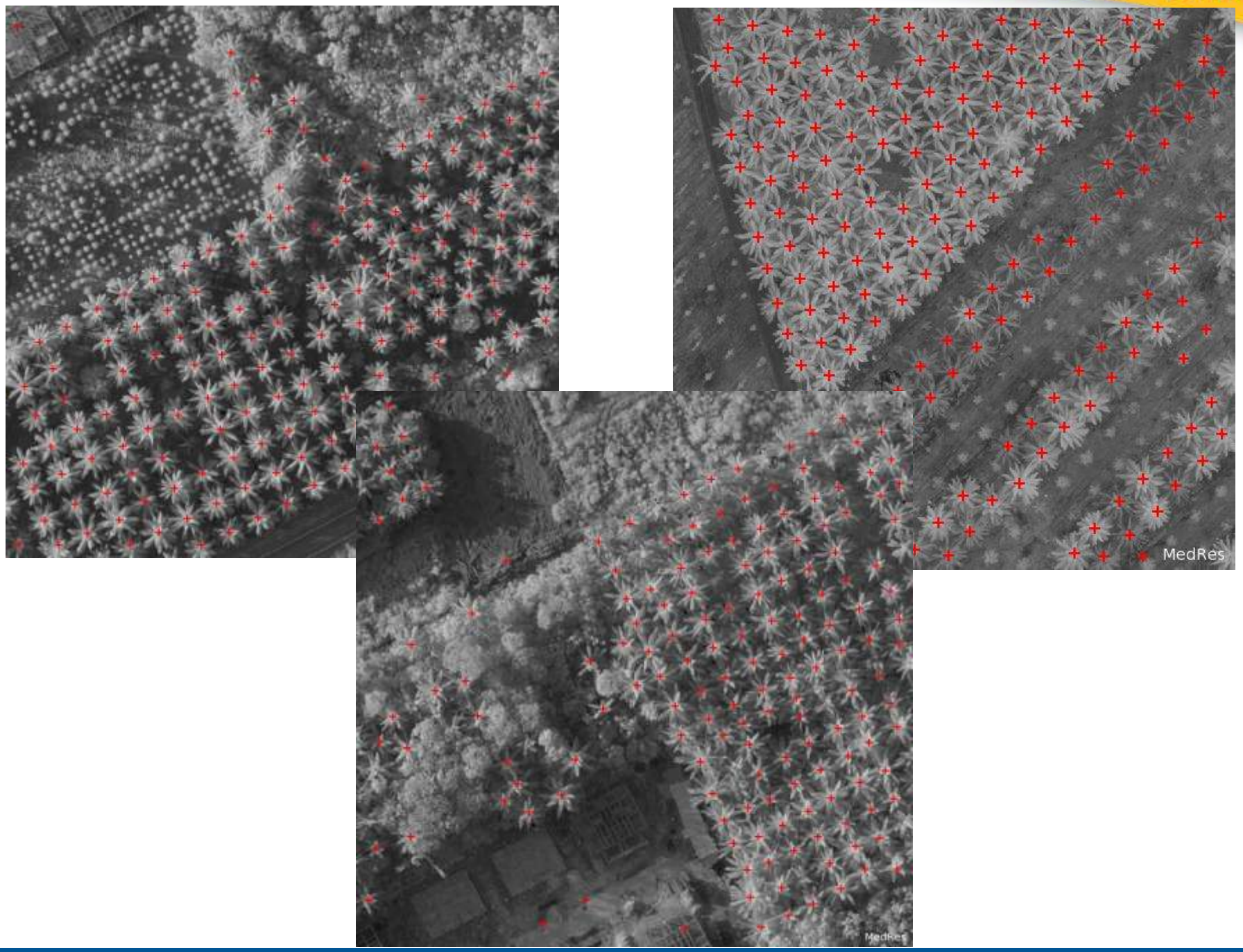
No.	BLOCK_ID_A	TREE_ID	Density	X_Center_P	Y_Center_P
1	1	1	93.4475860596	783529.476259	328072.990447
2	1	2	98.5756835938	783537.375868	328079.090145
3	1	3	94.7006378174	783545.475468	328086.389784
4	1	4	94.2763900757	783522.976581	328086.489779
5	1	5	102.749336243	783554.175038	328089.889611
6	1	6	103.497962952	783547.375374	328091.589527
7	1	7	93.6135101318	783518.676793	328091.589527
8	1	8	102.006881714	783526.876388	328095.489334
9	1	9	94.9855957031	783514.776986	328097.689226
10	1	10	103.98664856	783555.174988	328098.689176
11	1	11	101.523986816	783574.274044	328099.489136
12	1	12	103.075523376	783542.375621	328103.388944
13	1	13	105.210227966	783523.676546	328103.388944
14	1	14	106.107154846	783561.974652	328103.588934
15	1	15	103.921295166	783547.875349	328105.388845
16	1	16	102.433082581	783512.4771	328106.2888

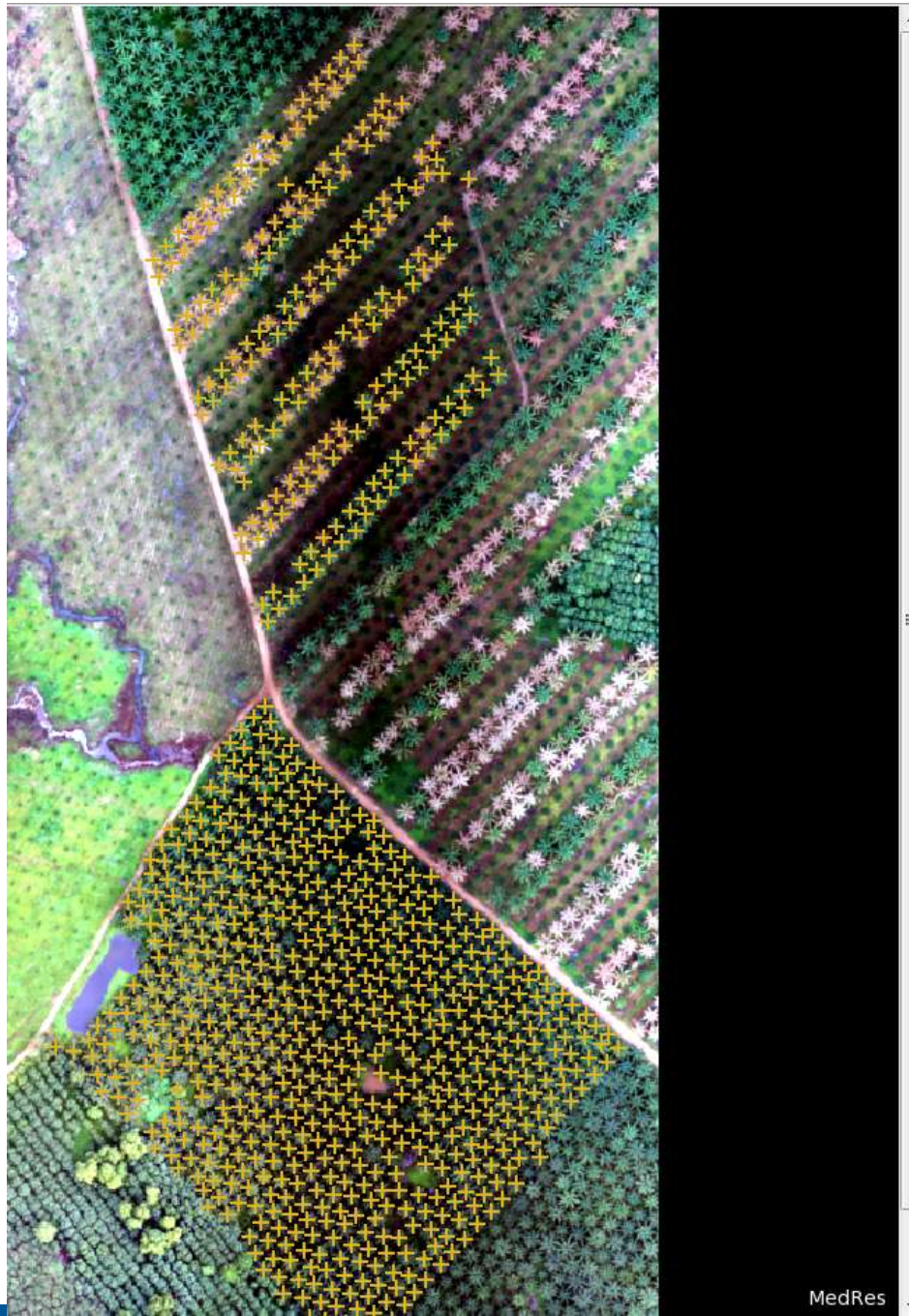








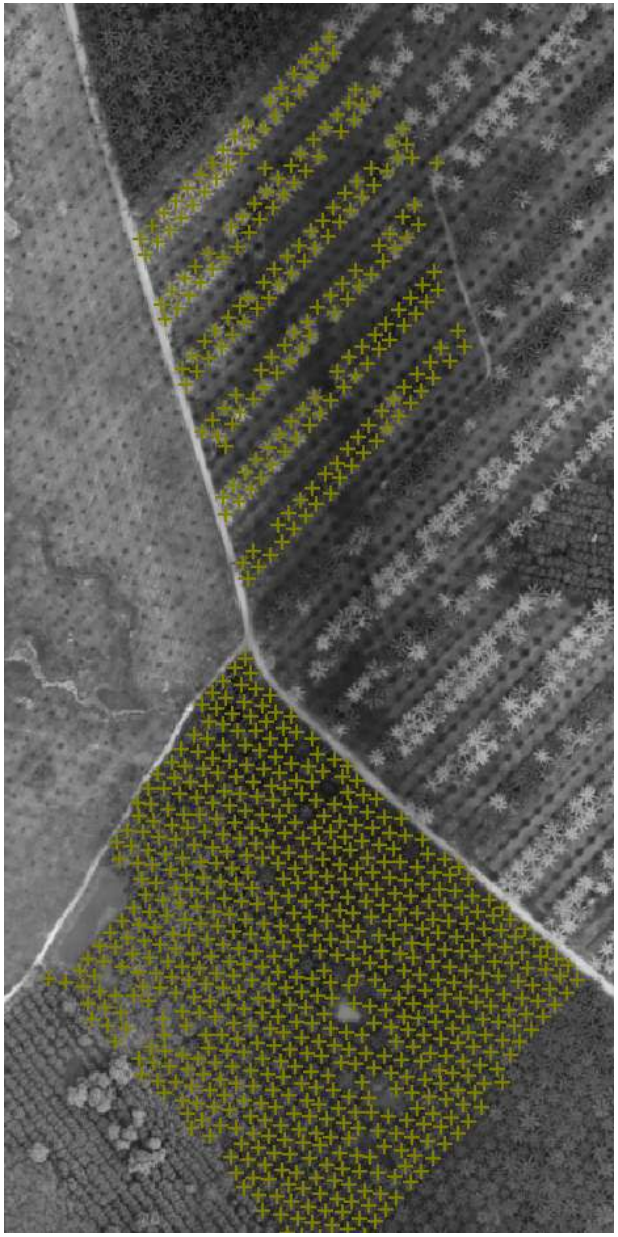

MedRes

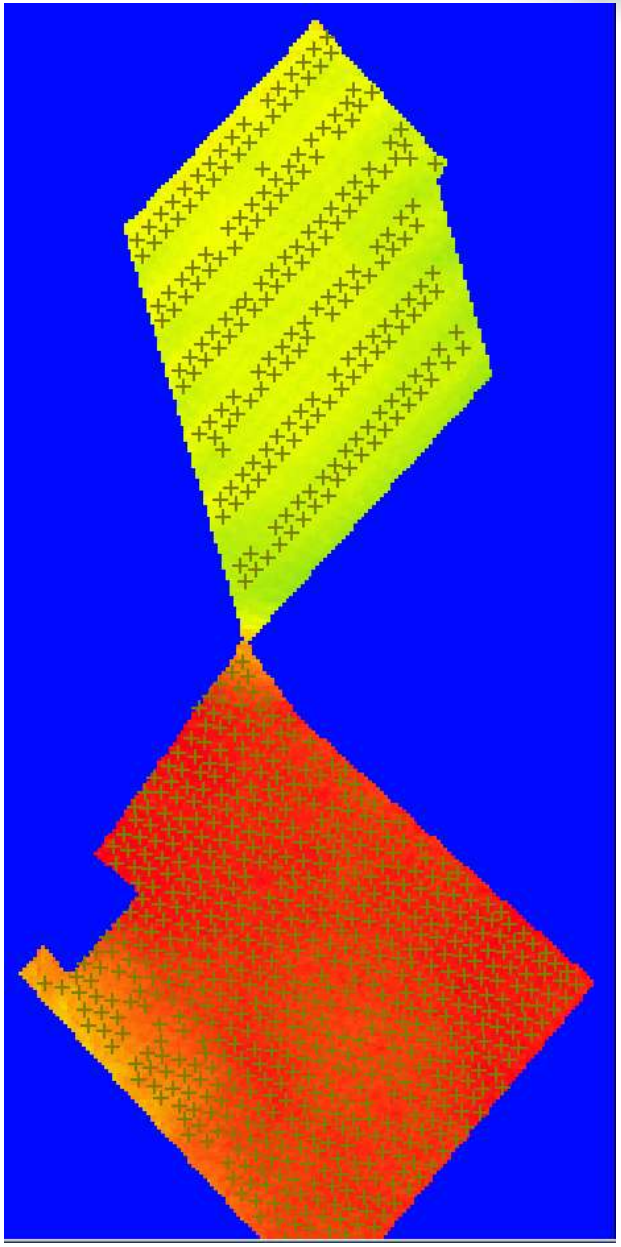


Thematic Layer Attribute Table

Active layer: Trees

No.	BLOCK_ID	Density	TREE_ID	X_Center_P	Y_Center_P
819	1	74.7520828247	819	494527.979292	1020536.77181
820	1	74.4517211914	820	494494.780651	1020536.77181
821	1	76.3808135986	821	494486.280999	1020538.47174
822	1	70.3749771118	822	494586.076913	1020540.87164
823	1	72.5996322632	823	494542.778686	1020540.97164
824	1	65.7877578735	824	494577.277273	1020542.37158
825	1	71.4122924805	825	494520.579595	1020542.37158
826	1	75.9162368774	826	494501.080393	1020543.07155
827	1	73.6745147705	827	494534.679017	1020543.47154
828	1	54.1823768616	828	494612.675824	1020544.77148
829	1	77.8148193359	829	494492.480745	1020545.07147
830	1	70.7521209717	830	494591.176704	1020547.37138
831	1	72.186050415	831	494598.976385	1020547.97135
832	1	72.8250961304	832	494549.178424	1020548.07135
833	1	71.6109466553	833	494507.980111	1020549.57129
834	1	75.8071594238	834	494539.778809	1020550.07127
835	1	77.2435836792	835	494498.4805	1020551.97119
836	1	67.9044876099	836	494596.576483	1020554.47109
837	1	64.0410079956	837	494588.576811	1020556.27101
838	1	74.9401168823	838	494513.879869	1020556.27101
839	1	78.2960968018	839	494546.378538	1020557.27097
840	1	81.2396774292	840	494504.58025	1020558.67091
841	1	73.3923797607	841	494561.377924	1020561.87078
842	1	63.6642913818	842	494593.97659	1020562.77075
843	1	76.5218048096	843	494519.979619	1020562.97074
844	1	77.5837249756	844	494552.978268	1020563.57071
845	1	78.5245742798	845	494511.17998	1020565.97062
846	1	73.2268600464	846	494568.07765	1020567.87054
847	1	76.0256271362	847	494526.07937	1020570.07045
848	1	77.4119644165	848	494559.478002	1020570.57043
849	1	76.0647659302	849	494572.777458	1020575.37023
850	1	76.8320007324	850	494532.479108	1020576.67018
851	1	75.8616638184	851	494565.377761	1020577.07016
852	1	78.897857666	852	494523.279484	1020578.77009
853	1	72.9817962646	853	494578.57722	1020582.46994
854	1	74.9070281982	854	494538.77885	1020583.3699
855	1	75.8616638184	855	494568.877617	1020584.36986
856	1	79.4343490601	856	494529.079247	1020584.86984
857	1	71.6223297119	857	494545.378579	1020590.46961
858	1	76.3372802734	858	494536.478944	1020592.66952
859	1	70.080909729	859	494551.47833	1020596.86935
860	1	73.8218841553	860	494542.278706	1020598.96926
861	1	75.6596298218	861	494557.378088	1020603.66907
862	1	78.4811935425	862	494548.278461	1020605.56899
863	1	81.8460006714	863	494554.978186	1020612.06873





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