

Land Cover Project Update



LOS ANGELES REGION
LAR|AC
imagery acquisition consortium



Benjamin H. Houston, P.E., GISP, PMP



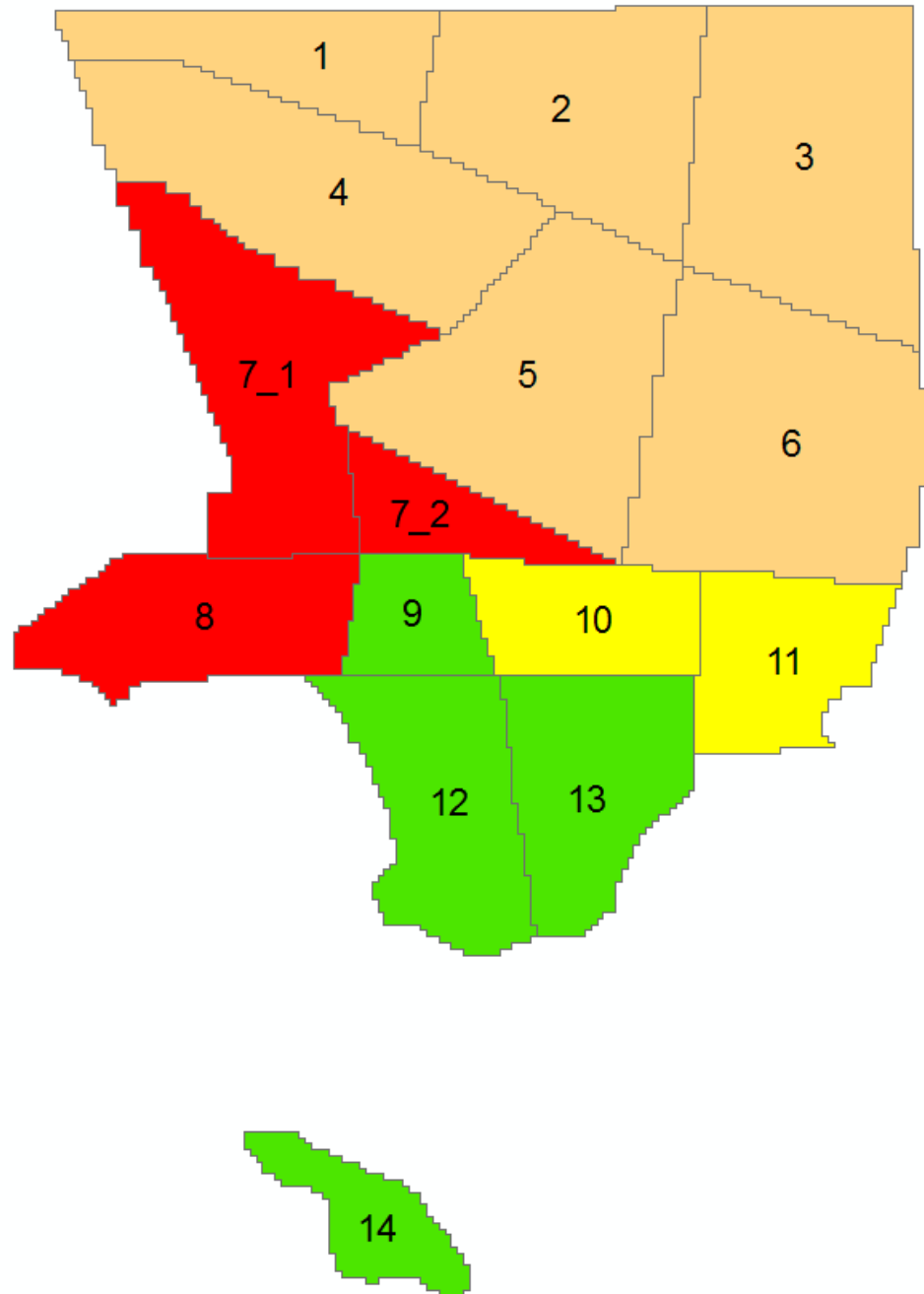
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Land Cover Schedule

- ▶ Full Production underway
- ▶ 15 Blocks separated into 2 piles
- ▶ 6 of the first 9 complete – in final review stages
 - 2 more by mid July
- ▶ Final six blocks by end of Summer

- ▶ QC Process
- ▶ Accuracy Assessment
- ▶ Historic Change Detection





Classes

Urban Areas (7)

- ▶ Tree Canopy
- ▶ Grass/Shrub
- ▶ Buildings
- ▶ Roads
- ▶ Other Paved
- ▶ Bare Soil
- ▶ Water

Rural Areas (8)

- ▶ Tree Canopy
- ▶ Grass
- ▶ Scrub Shrub
- ▶ Buildings
- ▶ Roads
- ▶ Other Paved
- ▶ Bare Soil
- ▶ Water



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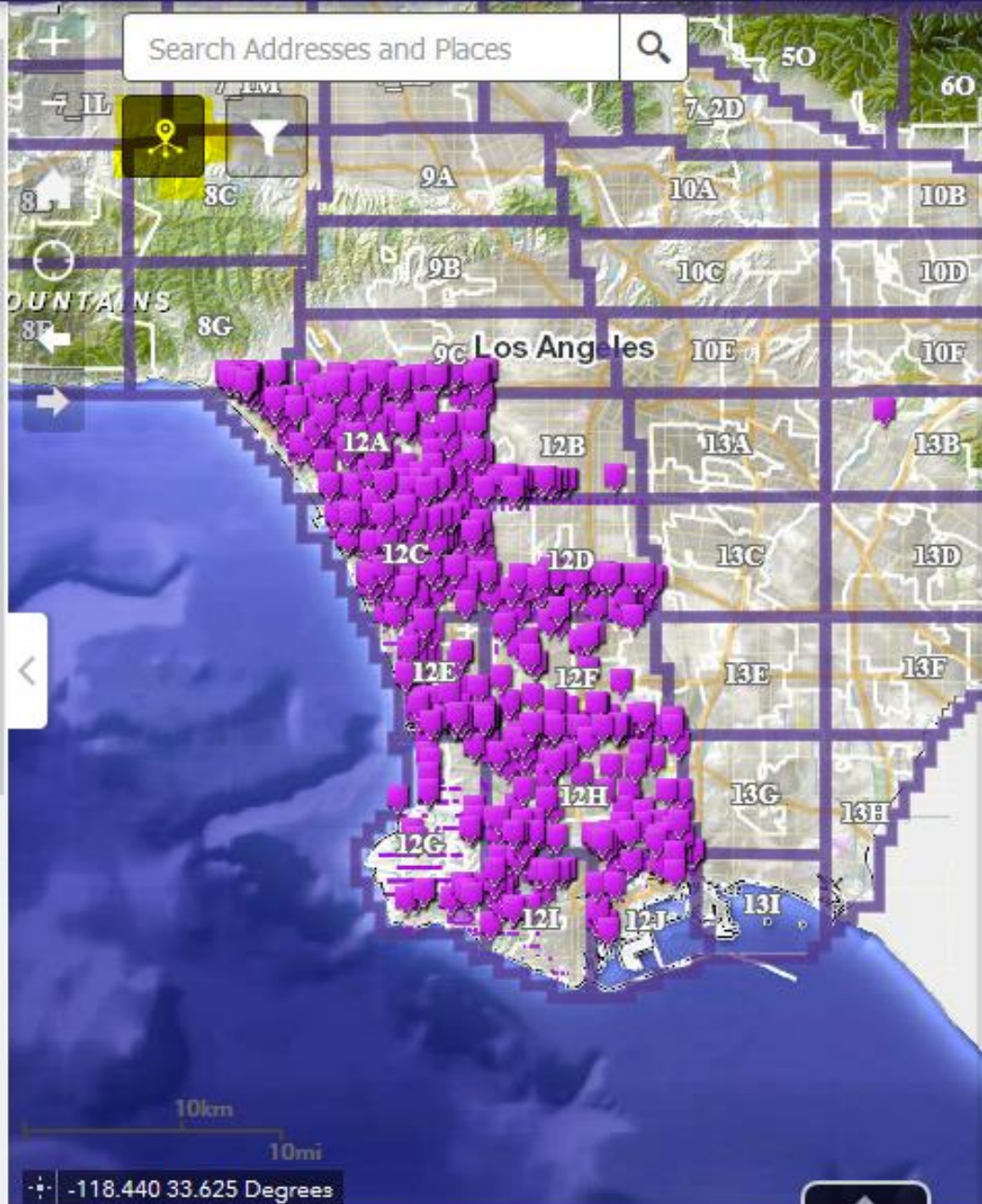


QC Process

- ▶ Automated and Manual Editing Completed
- ▶ Published in ArcGIS Online [Viewer](#)
- ▶ <https://spatialanalytix.maps.arcgis.com/apps/webappviewer/index.html?id=3fdb4245afba482aa42c640099dc254e>



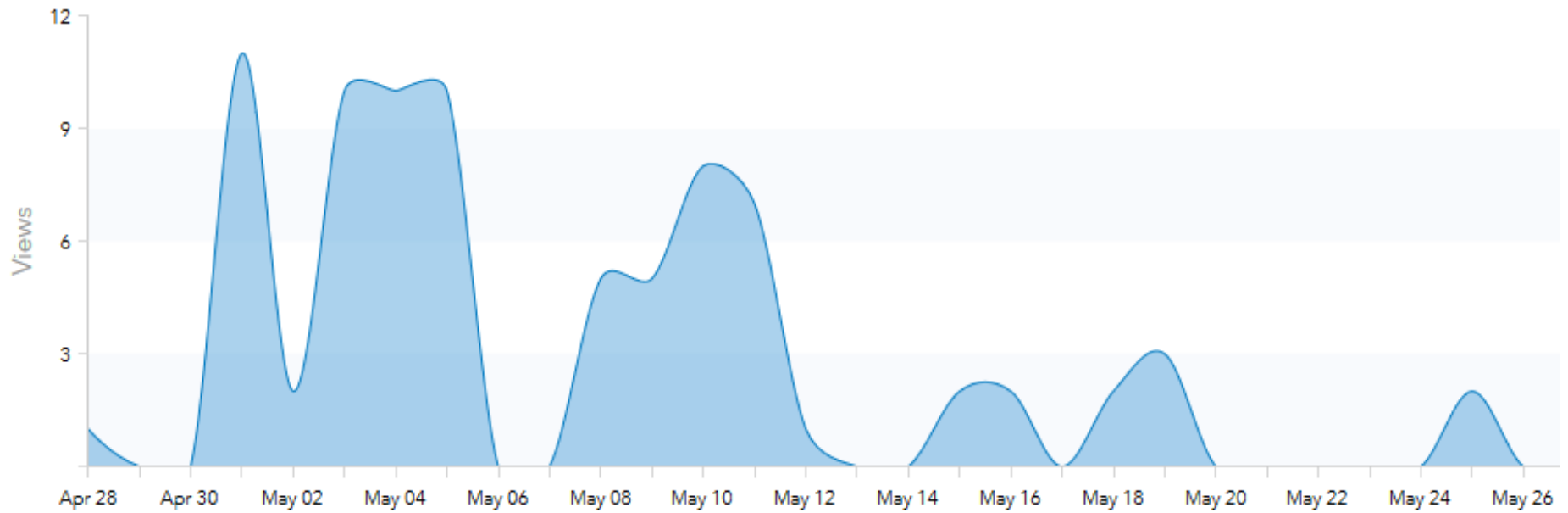
Search Addresses and Places



Info Summary

-  Comments: tile seams
-  Comments: walkway/driveway (other paved); not shrubbery
-  Comments: dirt
-  Comments: primarily bare soil (occasional shrubbery)
-  Comments: partial pavement
-  Comments: space between buildings has concrete not grass
-  Comments: appears to be either concrete (other paved) or bare soil; not grassy area; hard to tell because there seems to be a shadow over it
-  Comments: No longer a building; house was removed. It is empty space (shrubbery/grass)
-  Comments: pool (other paved)
-  Comments: no dirt, pavement
-  Comments: dirt
-  Comments: grass/shrubs
-  Comments: tile seams
-  Comments: tile seam
-  Comments: dirt
-  Comments: paved (not bare soil)

Usage Time Series



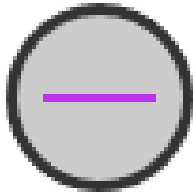
Usage activity is based on GMT time reporting. Your local time zone is G

Info Summary



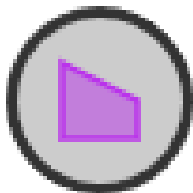
Points

1,553



Lines

372



Areas

275



Live Demo?



QC Process

- ▶ Blocks 9, 12, 13, 14 through QC
- ▶ Blocks 10, 11 up on the viewer now
- ▶ Blocks 7-1, 7-2, 8 next

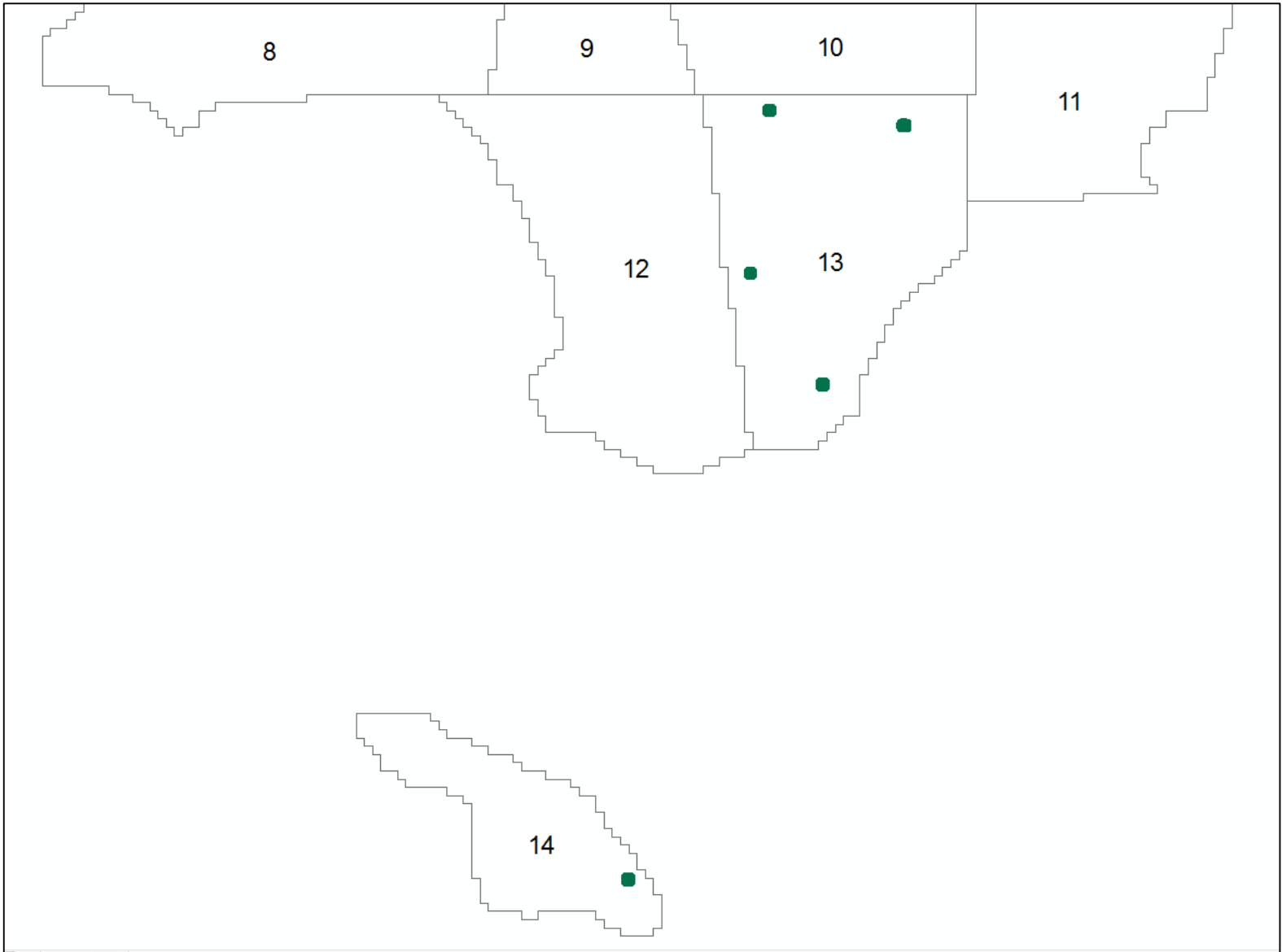
- ▶ Once completed and revised, begin AA



Accuracy Assessment

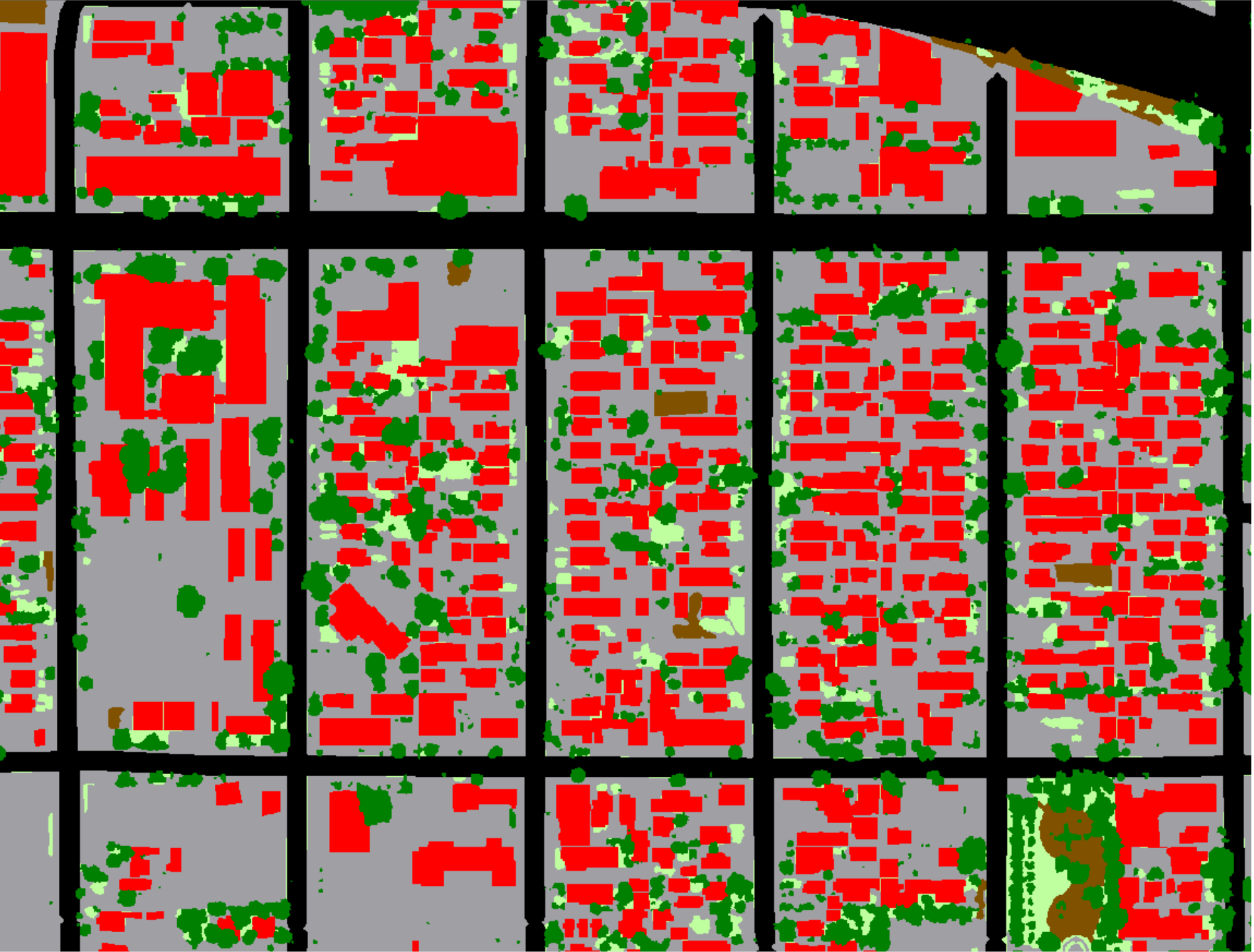
- ▶ 2 Part Process
- ▶ Comparisons based on total area
 - Project data vs 1"=20' planimetrics
- ▶ Statistical random point analysis
 - 1000 points











Impervious Area Comparison

Data Set	Impervious Surfaces	Revised Impervious Surfaces
Land Cover Mapping (1:2000)	121990011	121990011
Planimetrics (1:240 or 1"=20')	11866352	12094324
Difference (Percentage)	2.8%	0.9%
Trees Overhanging Impervious surfaces	227972	1.9%

- ▶ Results are preliminary
- ▶ pending additional review

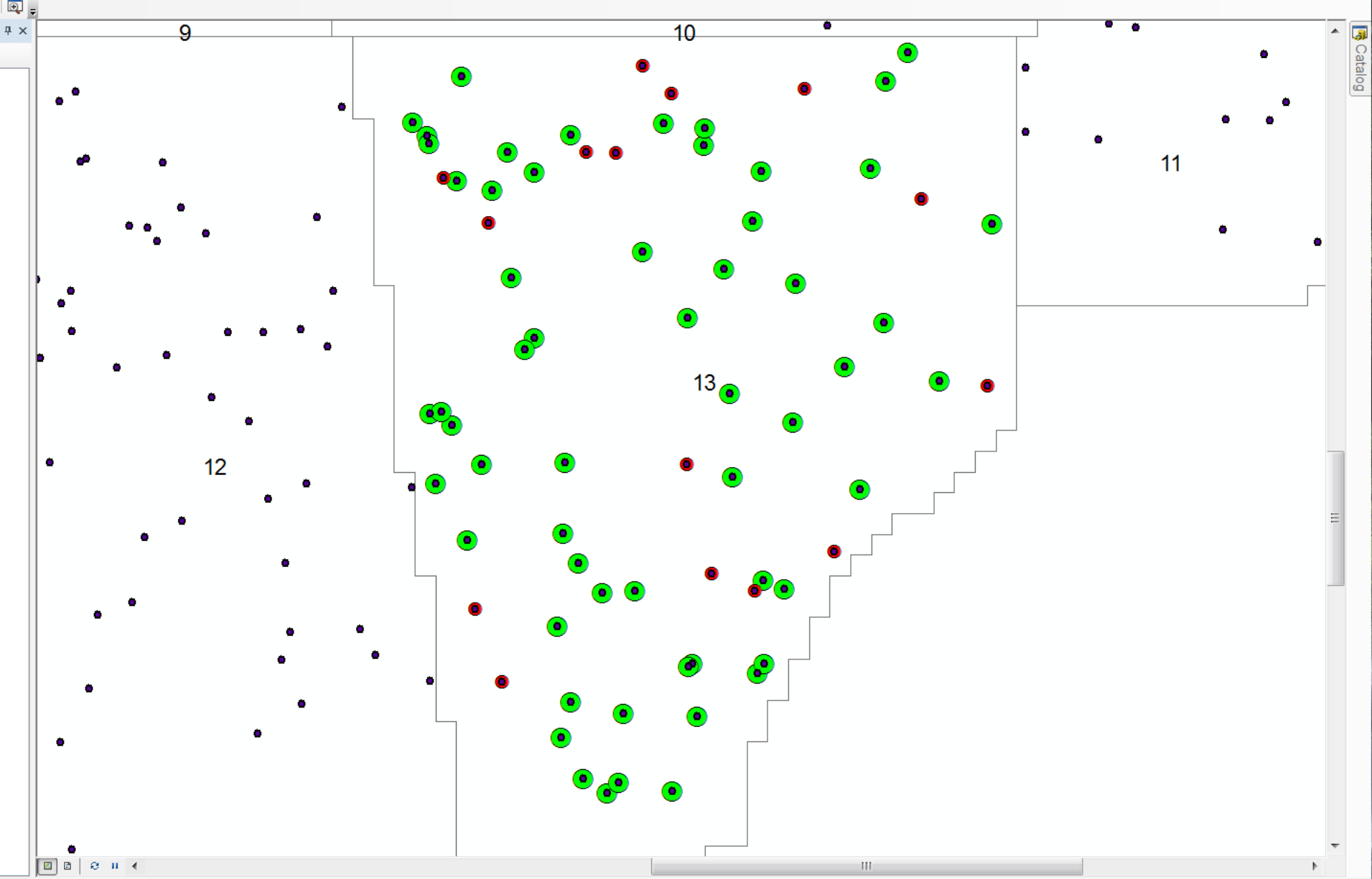


Total Area Comparison

Data Set	Total Impervious Percentage	Difference
Land Cover	39.0%	
Planimetrics w/Trees (1:240 or 1"=20')	40.7%	1.7%
Planimetrics w/o Trees	39.5%	0.5%

- ▶ Results are preliminary
- ▶ pending additional review





Historic Change Detection

- ▶ Compare 2006 data to Current Data
- ▶ Differences:
 - Resolution
 - Horizontal accuracy
- ▶ Largely Automated process





Review

- ▶ Schedule
- ▶ QC Process
- ▶ Accuracy Assessment
- ▶ Historic Change Detection

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