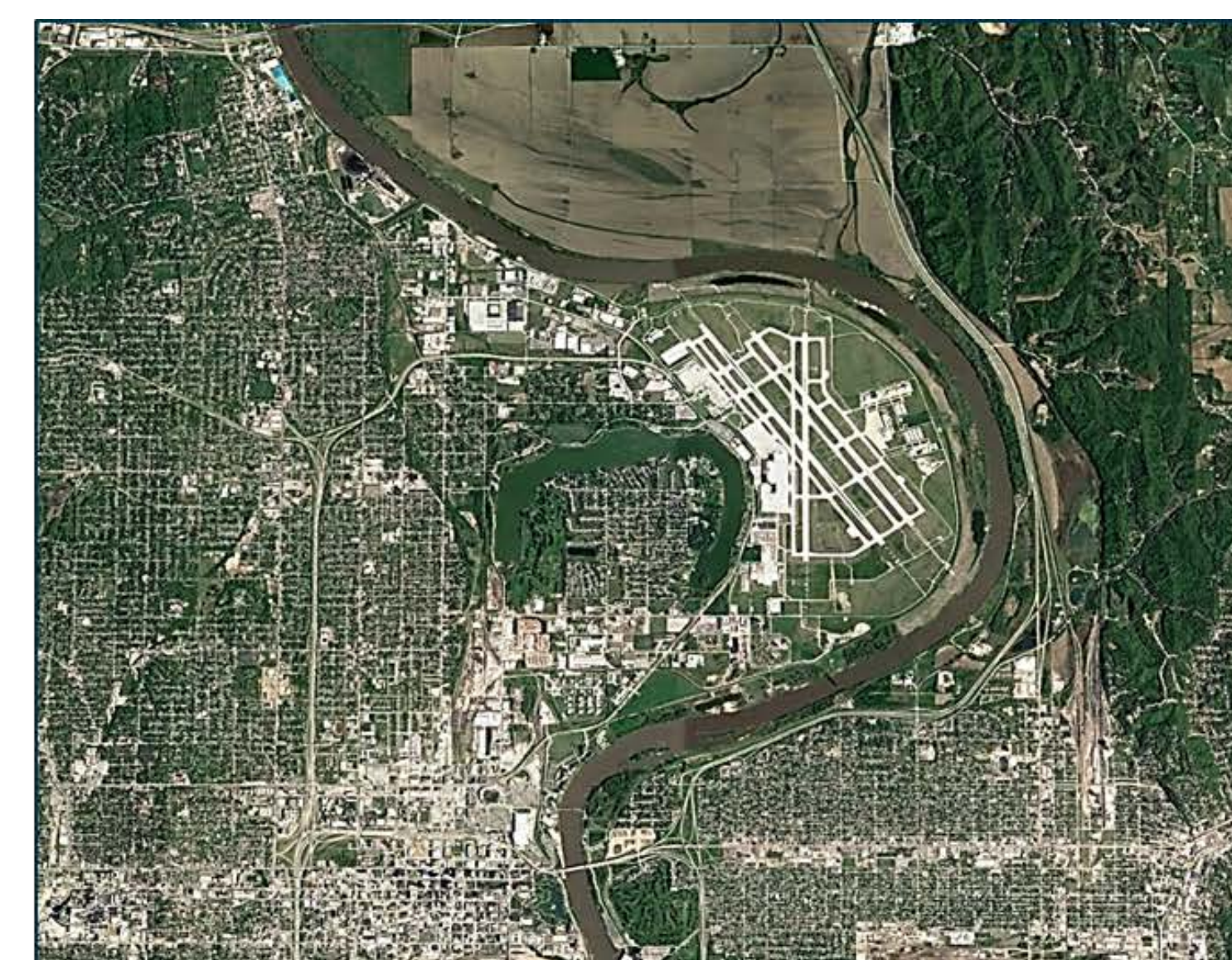
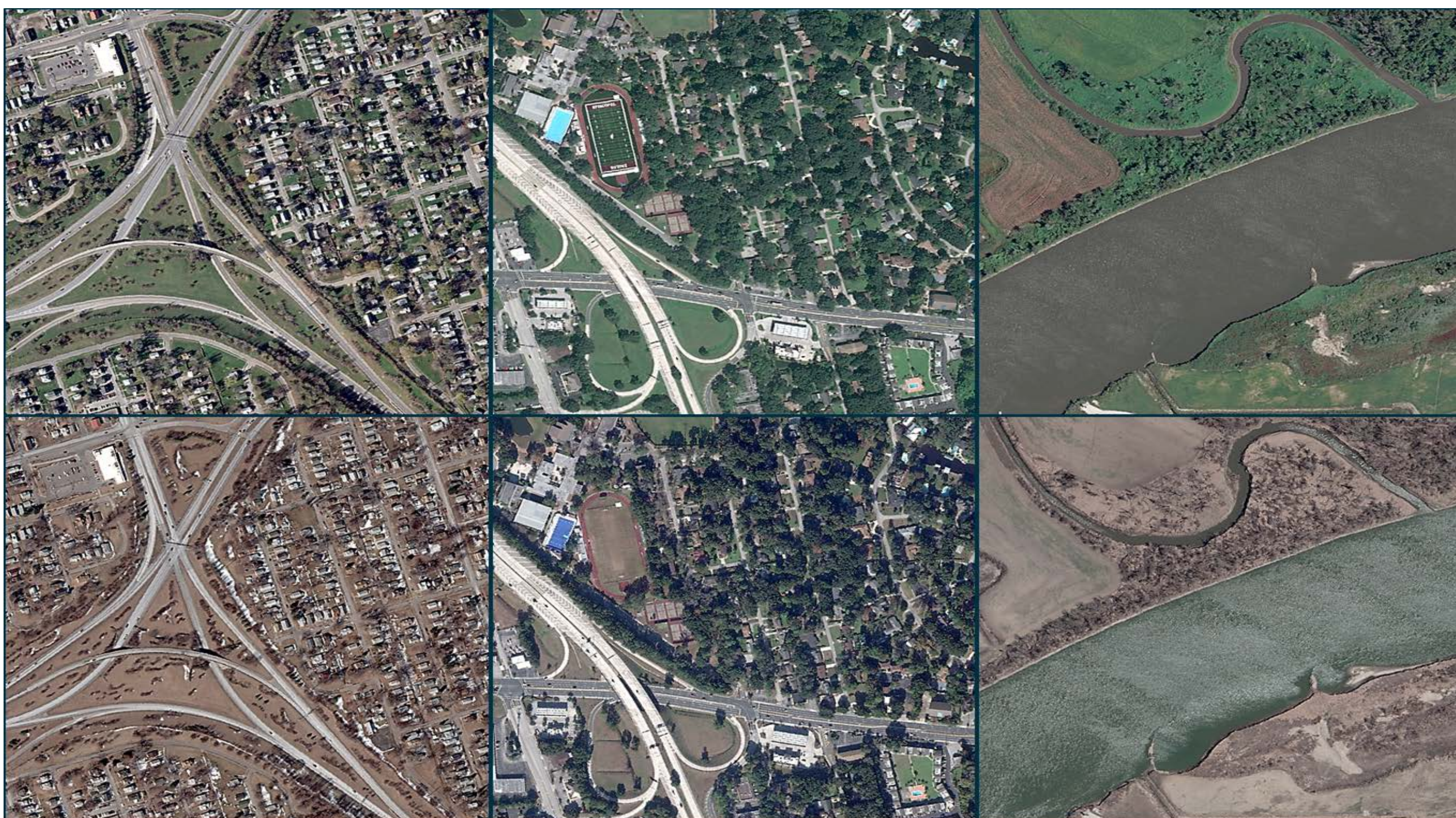


## Public Contest with Four Tracks: Opens 7 Jan

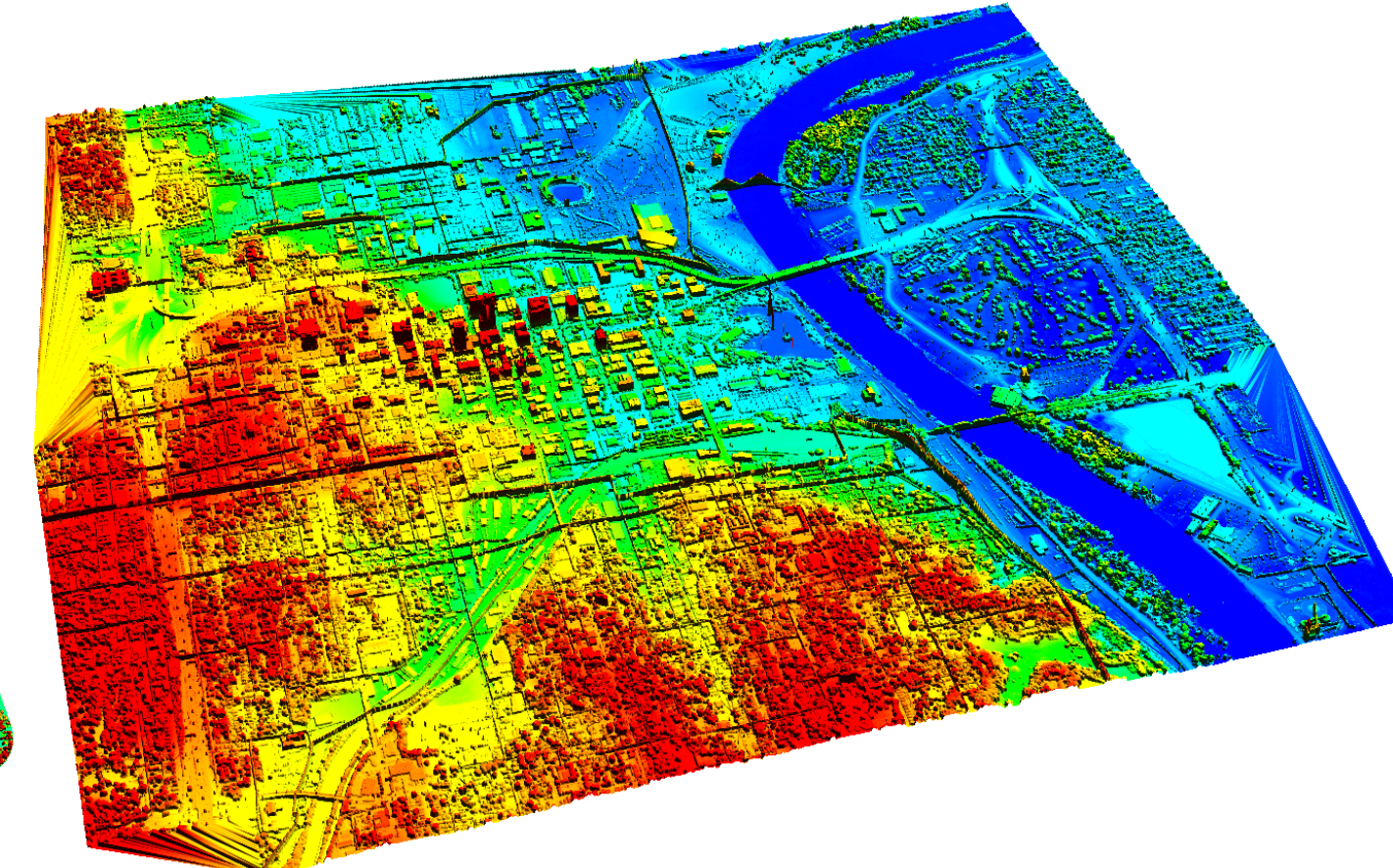


## Semantic 3D Scene Modeling<sup>3</sup>

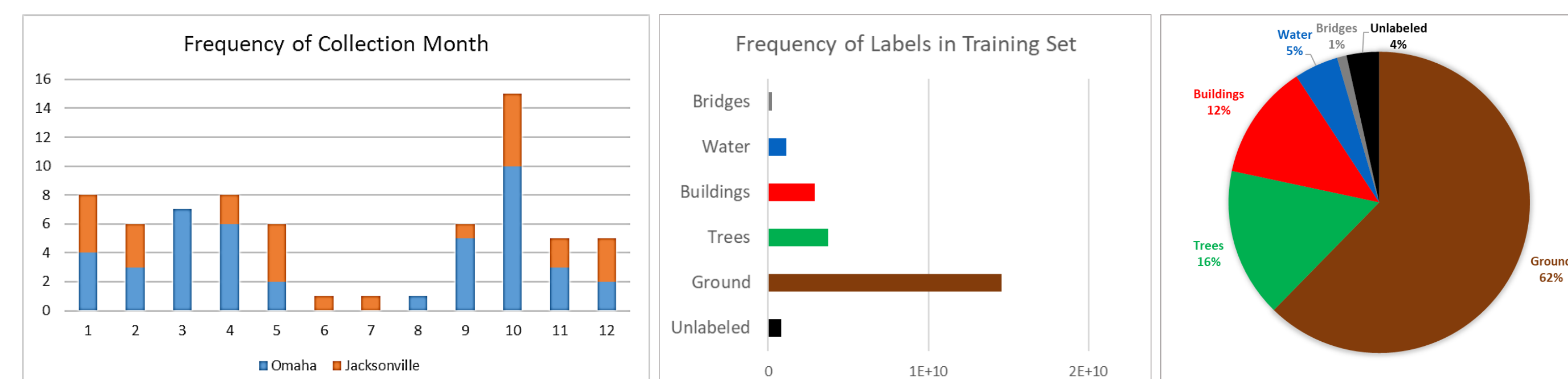
## Appearance Differences for Multi-Date Stereo



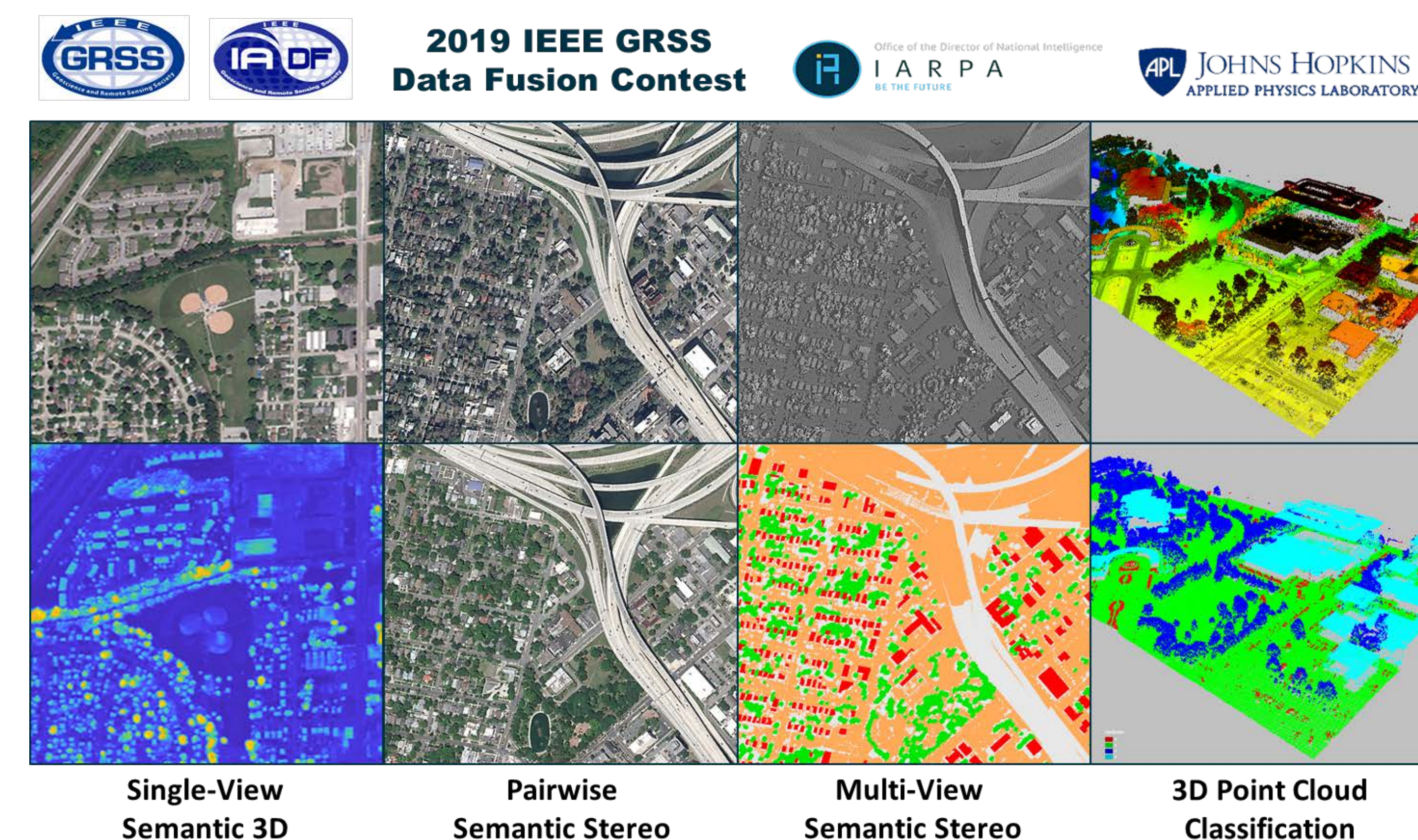
### 43 DigitalGlobe WorldView-3 Images over Omaha, NE



Airborne Lidar from U. S. Homeland Security Infrastructure Program and Geomni\*



\* RGB images shown above are from Google Earth. Lidar shown is from Geomni.



## 3D Point Cloud Classification

**Baselines are on [github.com/pubgeo/dfc2019](https://github.com/pubgeo/dfc2019)**

Track	Approach	mIoU	mIoU-3*
Single-view semantic 3D	U-Nets	0.65	0.43
Pairwise semantic stereo	ICNet & DenseMapNet	0.56	0.52
Multi-view semantic stereo	ICNet & SGBM	0.65	0.55
3D point cloud classification	PointNet++	0.84	N/A

\* True positives have correct semantic label and 3D error less than threshold (1m for heights and 3 pixels for disparities)

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