

Kentucky from Above!

The Kentucky Aerial Photography &
Elevation Data Program
(KYAPED)

Kentucky Geological Survey Annual Meeting
May 16, 2014

What is KyFromAbove?

A Program that . . .

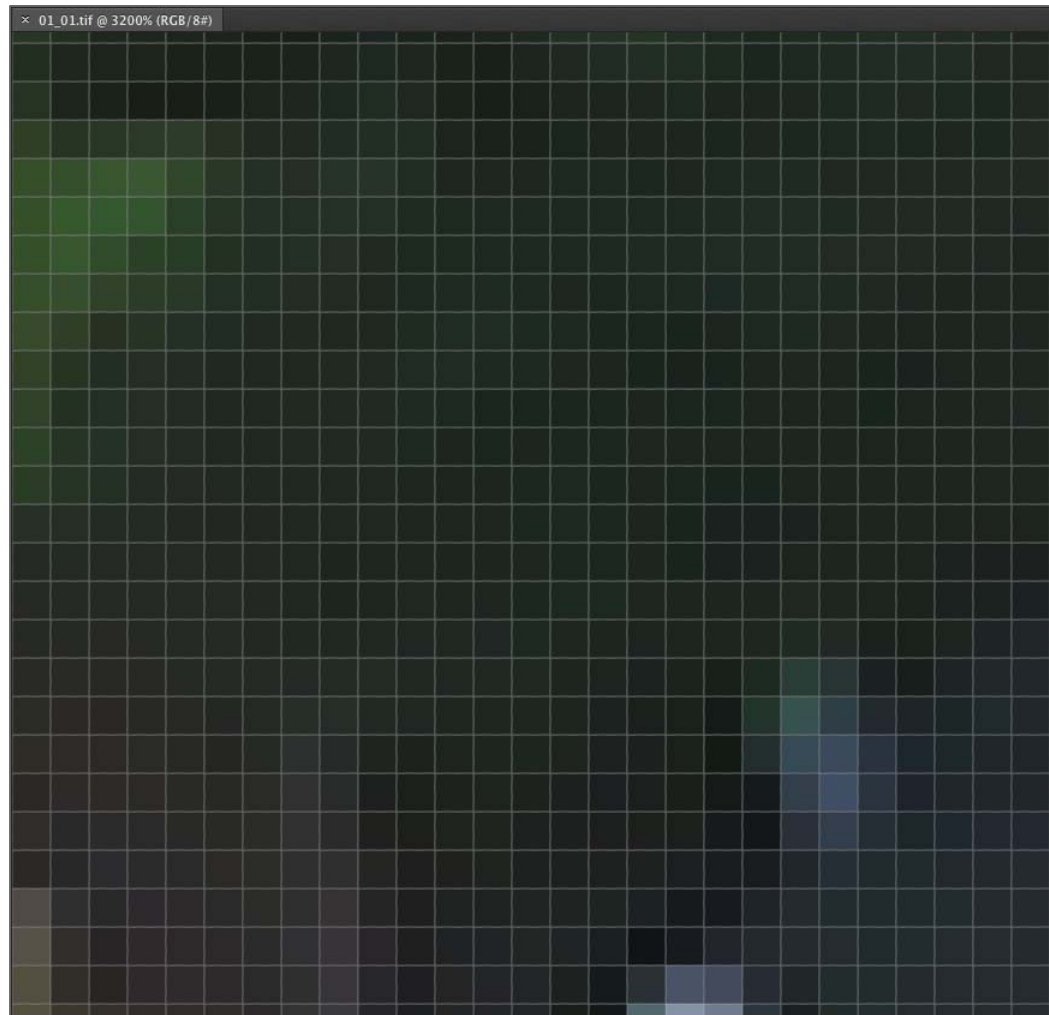
- Acquires current leaf-off color aerial photography for the entire Commonwealth
- Acquires current elevation data for the entire Commonwealth
- Partners with entities at all levels of government (economies of scale)
- Distributes most base data to state agencies and in the public domain
- Utilizes Kentucky-based firms for acquisition and control work

What is Aerial Photography?

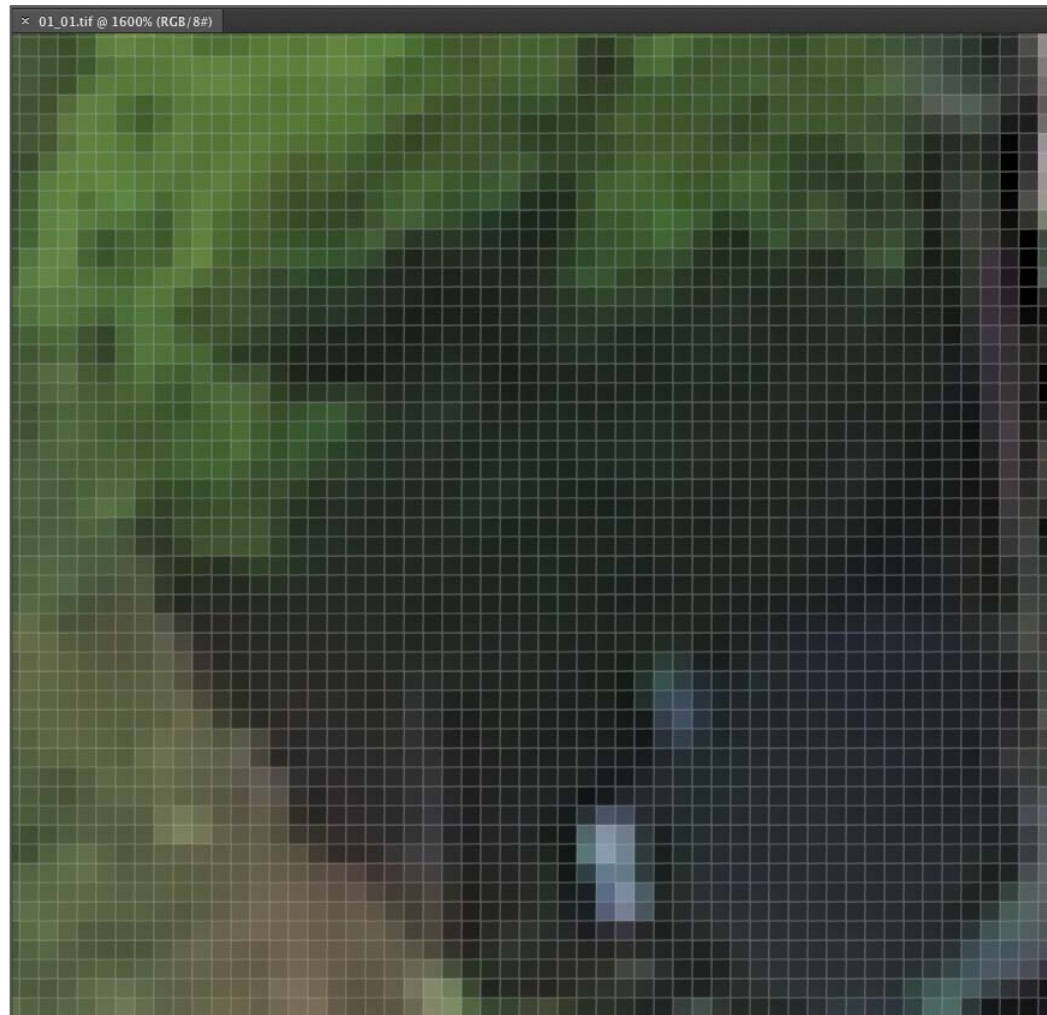
And why do we need it?

- How do you think it is captured? *Satellite?* *Airplane?* *Drone?*
- Why is “leaf-off” important?
- Which agencies need this stuff for their business processes?
- How is it distributed?
- How do we express its resolution?

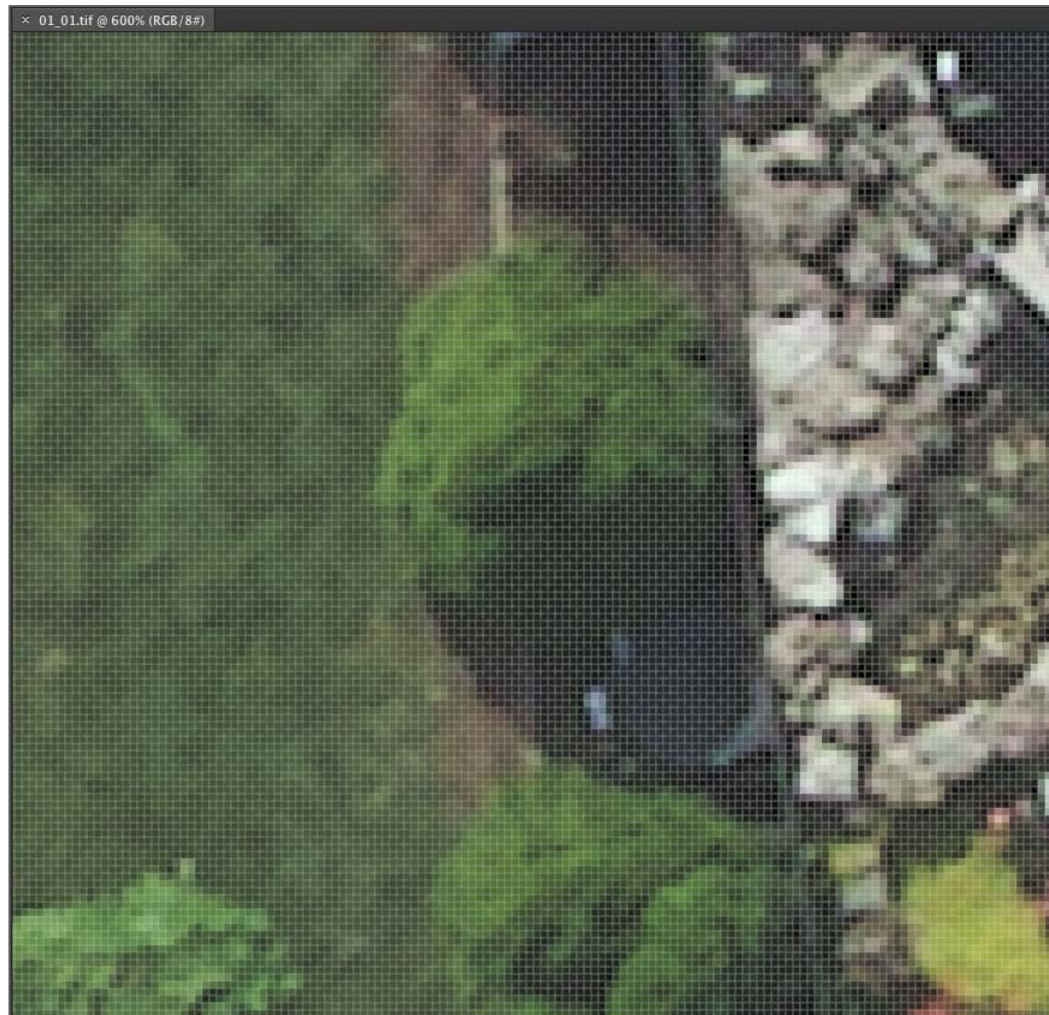
Resolution?



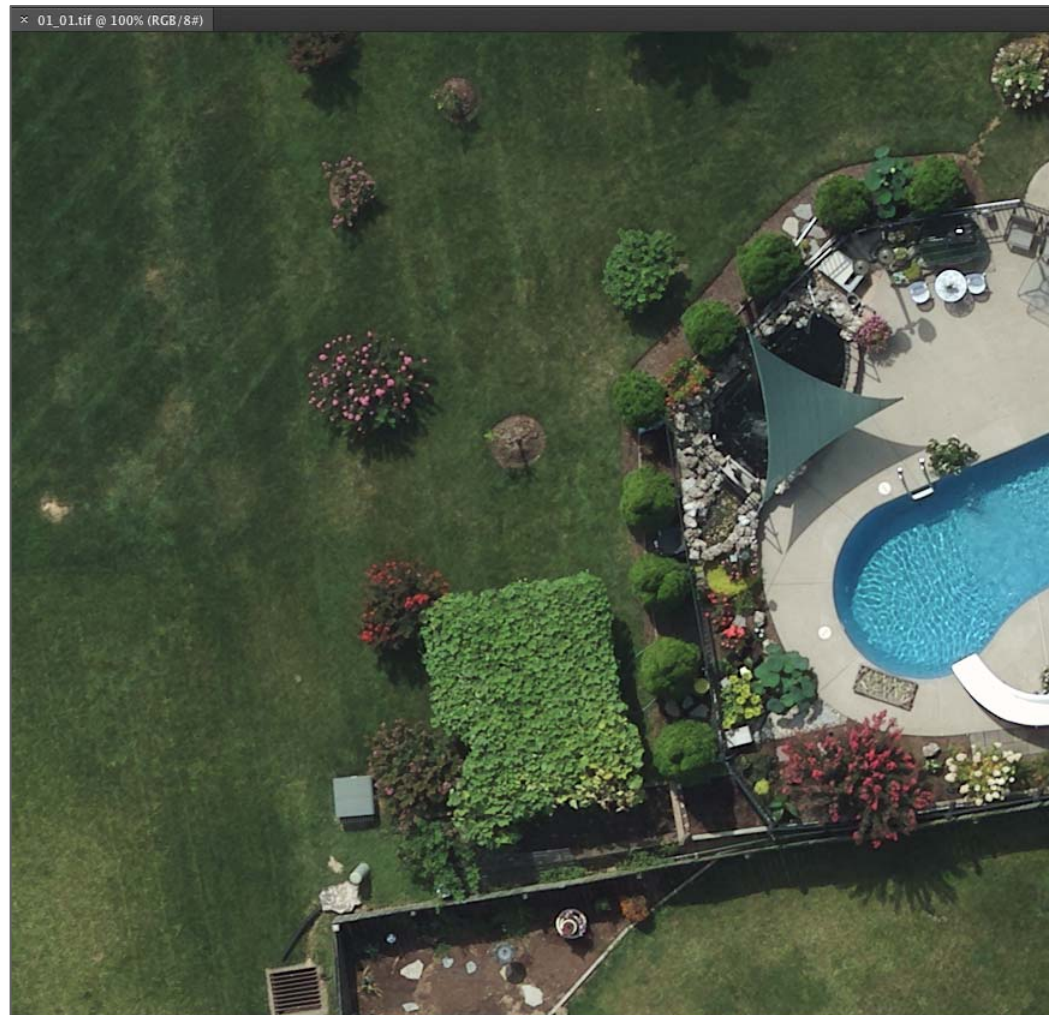
Resolution?



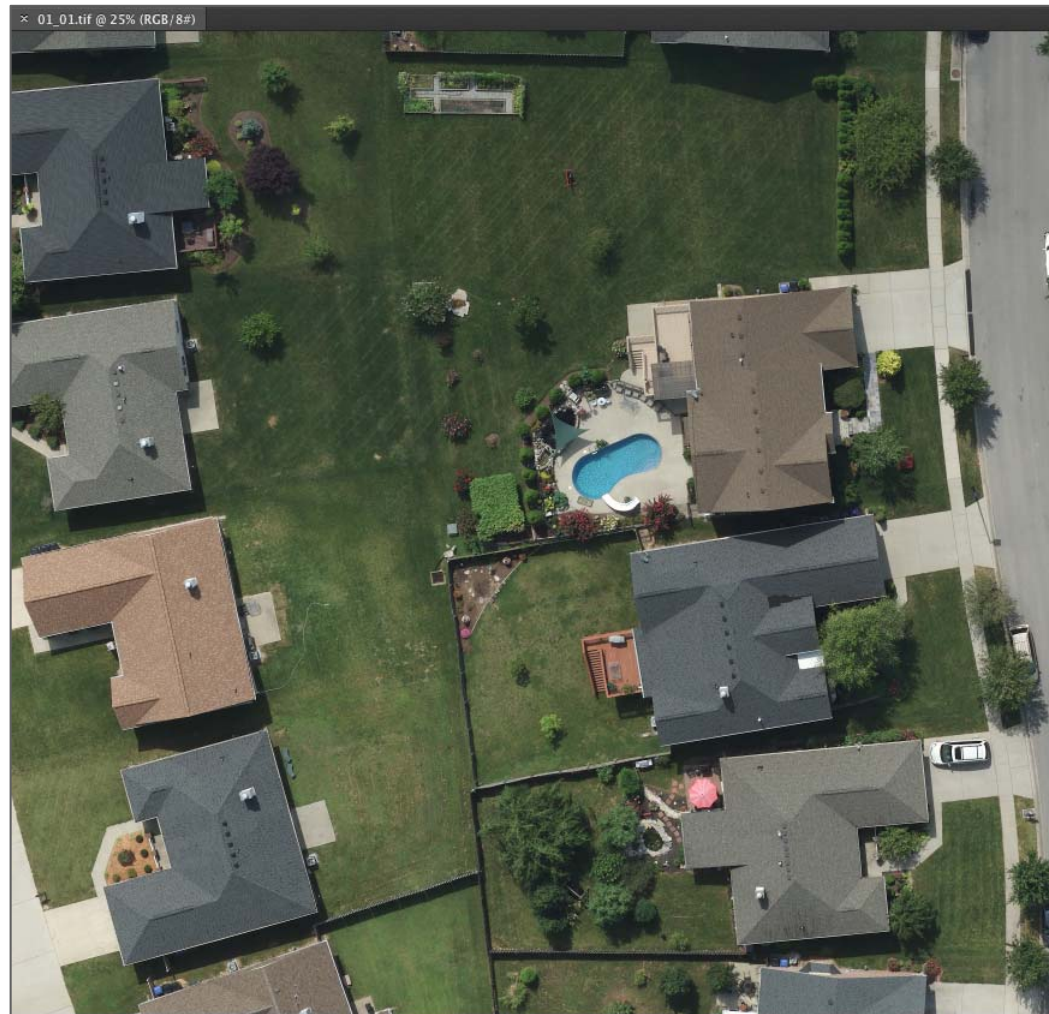
Resolution?



Resolution?



Resolution?



Aerial Photography – 1 Meter



Aerial Photography – 2 Foot



Aerial Photography – 1 Foot



Aerial Photography – 1 Meter



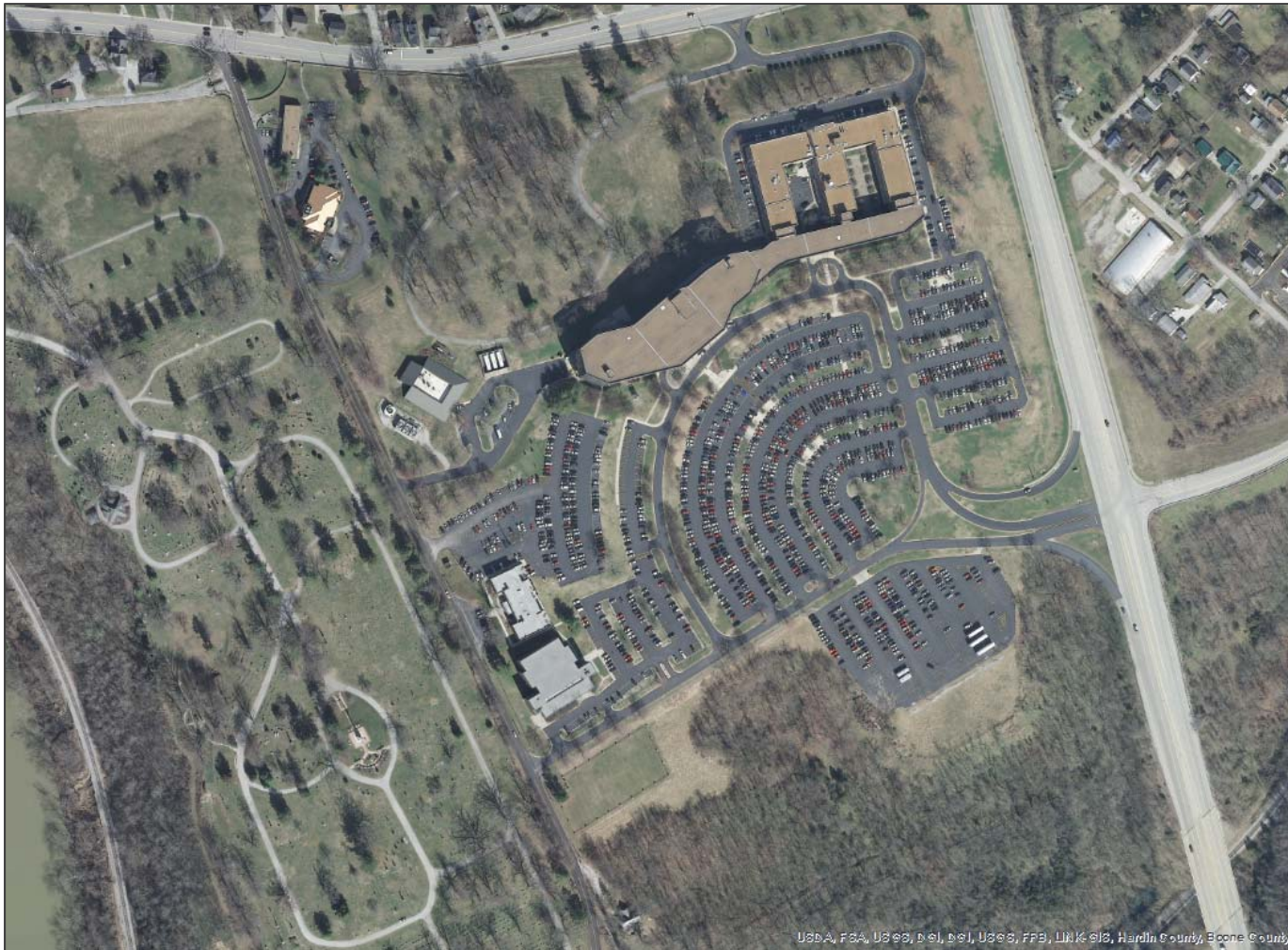
USDA, FSA, USGS, © 01

Aerial Photography – 2 Foot



USA, FAA, USGS, etc

Aerial Photography – 1 Foot



USA, FSA, US99, D91, D91, US99, FFB, LNK 913, Hardin County, Boone County

What is Elevation Data?

And why do we need it?

- How do you think it is captured? *Satellite?* *Airplane?* *Drone?*
- How often does the earth's surface change?
- Which agencies need this stuff?
- How is it distributed?
- Why is having a good elevation model important for aerial photography?

Why we need new Elevation Data . . .



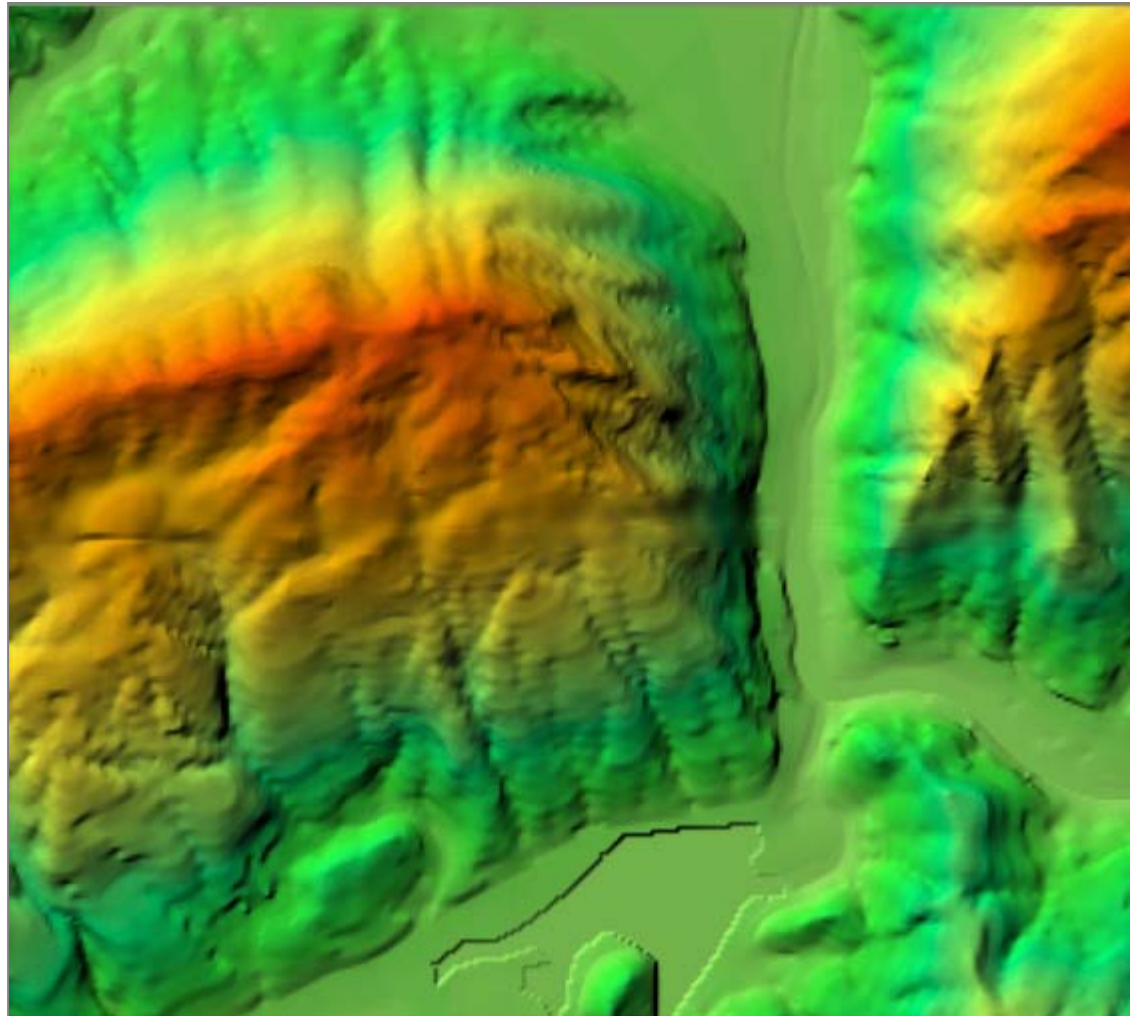
Why we need new Elevation Data . . .



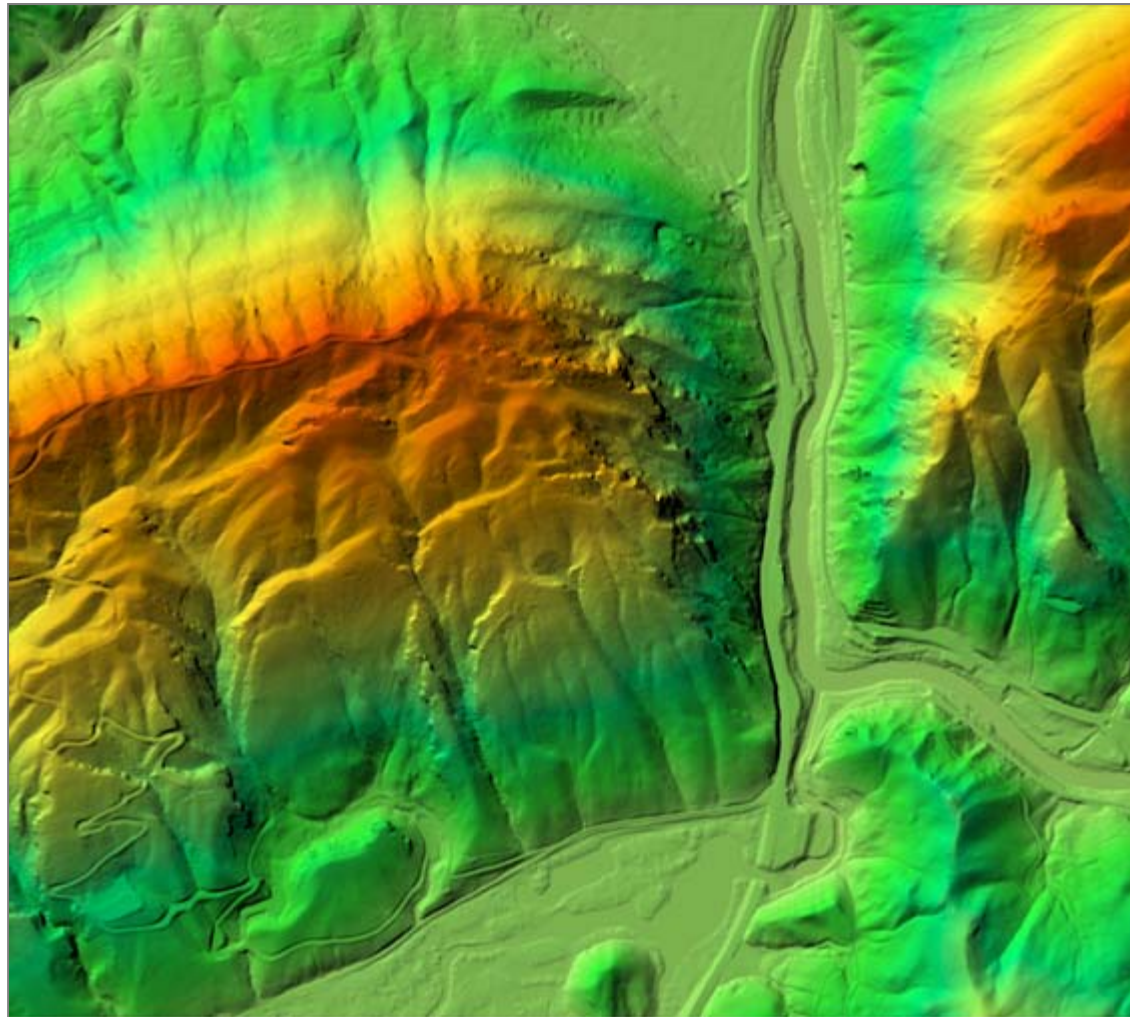
Why we need new Elevation Data . . .



Elevation Data – 10 Meter



Elevation Data – 5 Foot



Elevation Data – 10 Meter



Elevation Data – 5 Foot



Notable Landscape Features

What we can “see” by looking at elevation data

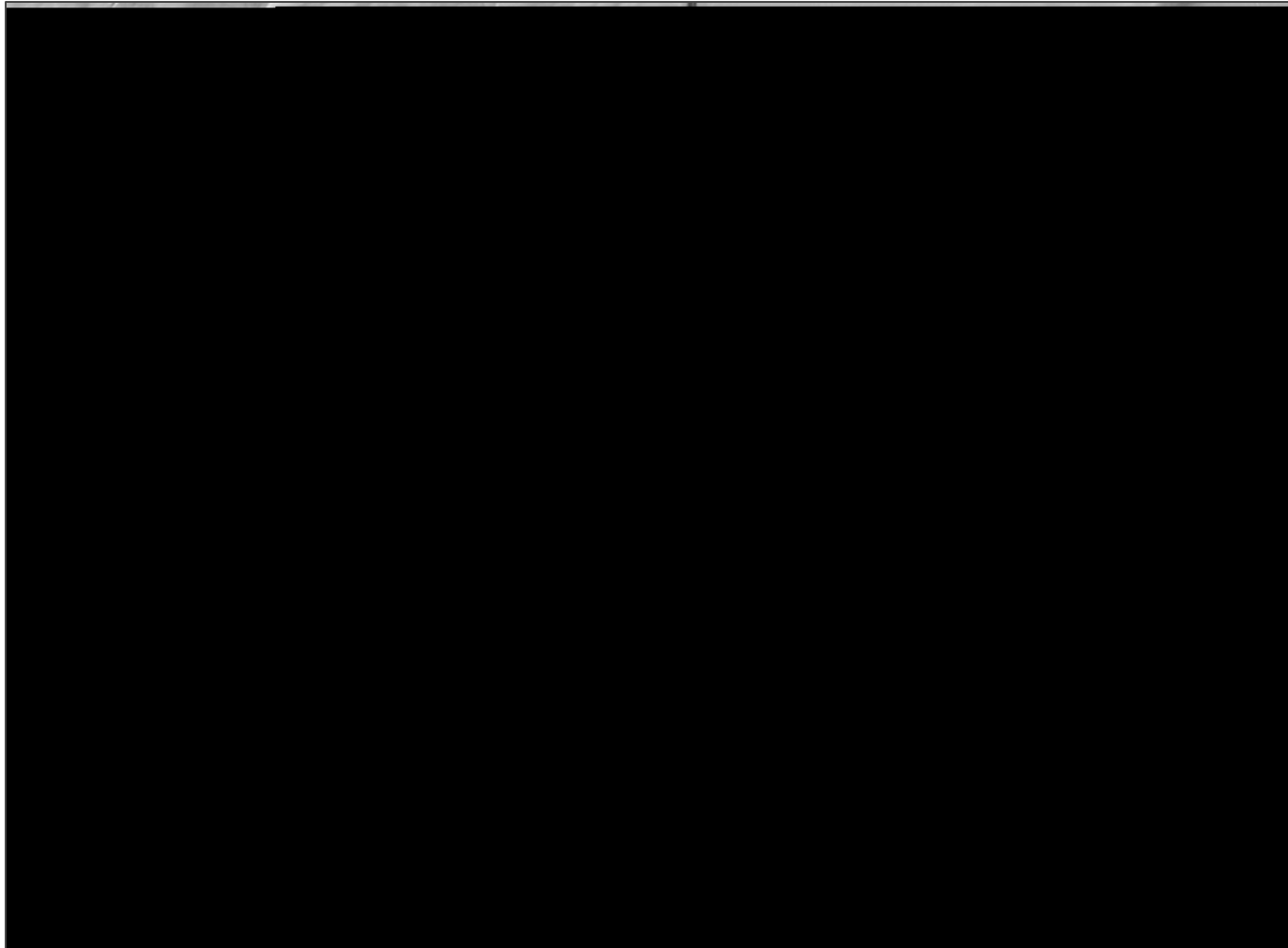
- Products are derived from the Digital Elevation Model (DEM)
- DEMs can be rendered as Shaded Relief (color ramp)
- DEMs can be rendered as Hillshade
- DEMs can be rendered as Percent Slope, Aspect . . .

Central Kentucky Elevation Data (DEM)



DOI & KYAPED Partners, DOI, KYTC, AML, DOW, FEMA, NRCG, USGS, KYAPED

Central Kentucky Elevation Data (Hillshade)



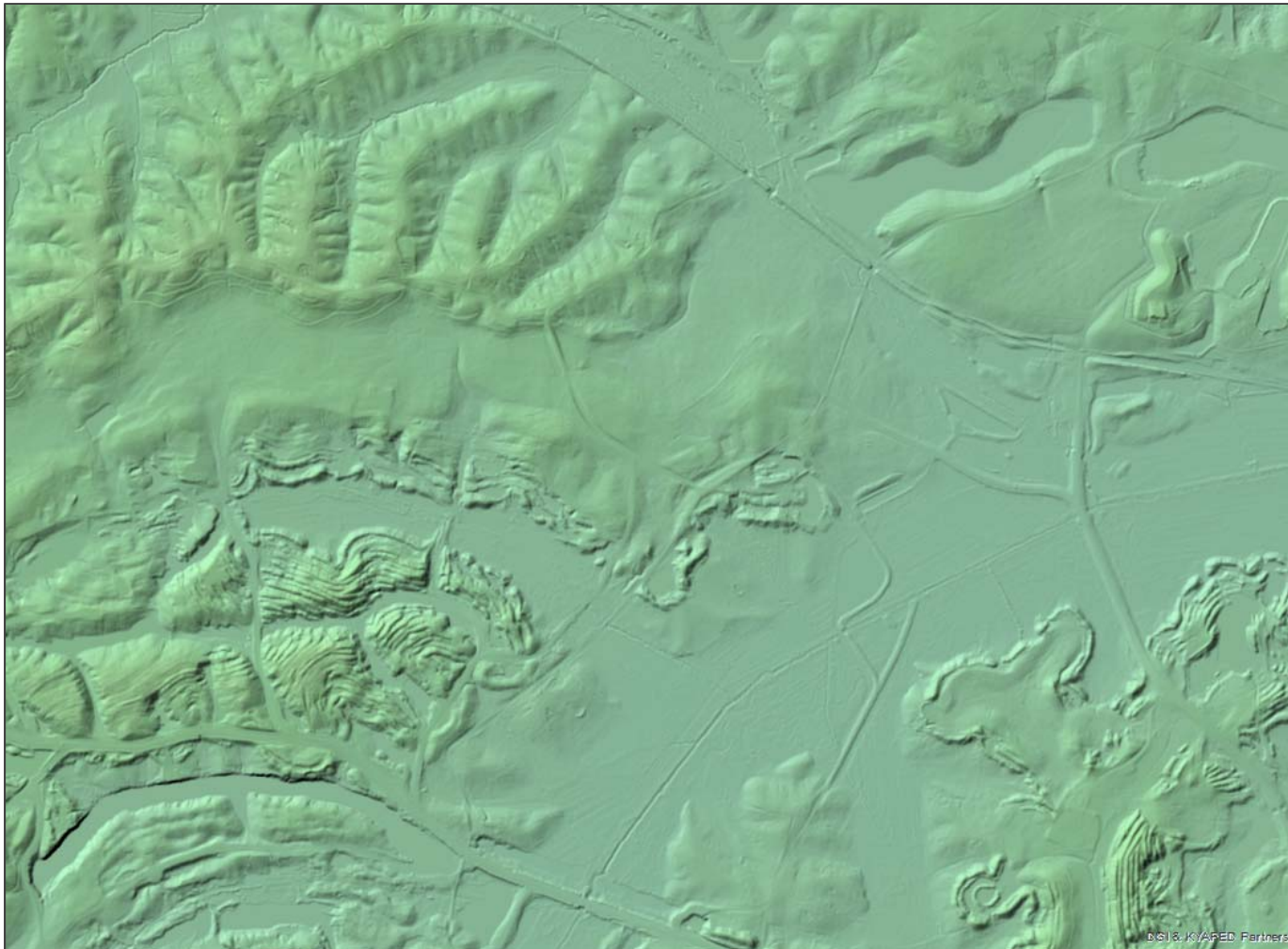
Central Kentucky Elevation Data (Shaded Relief)



Northern Kentucky Elevation Data



Western Kentucky Elevation Data

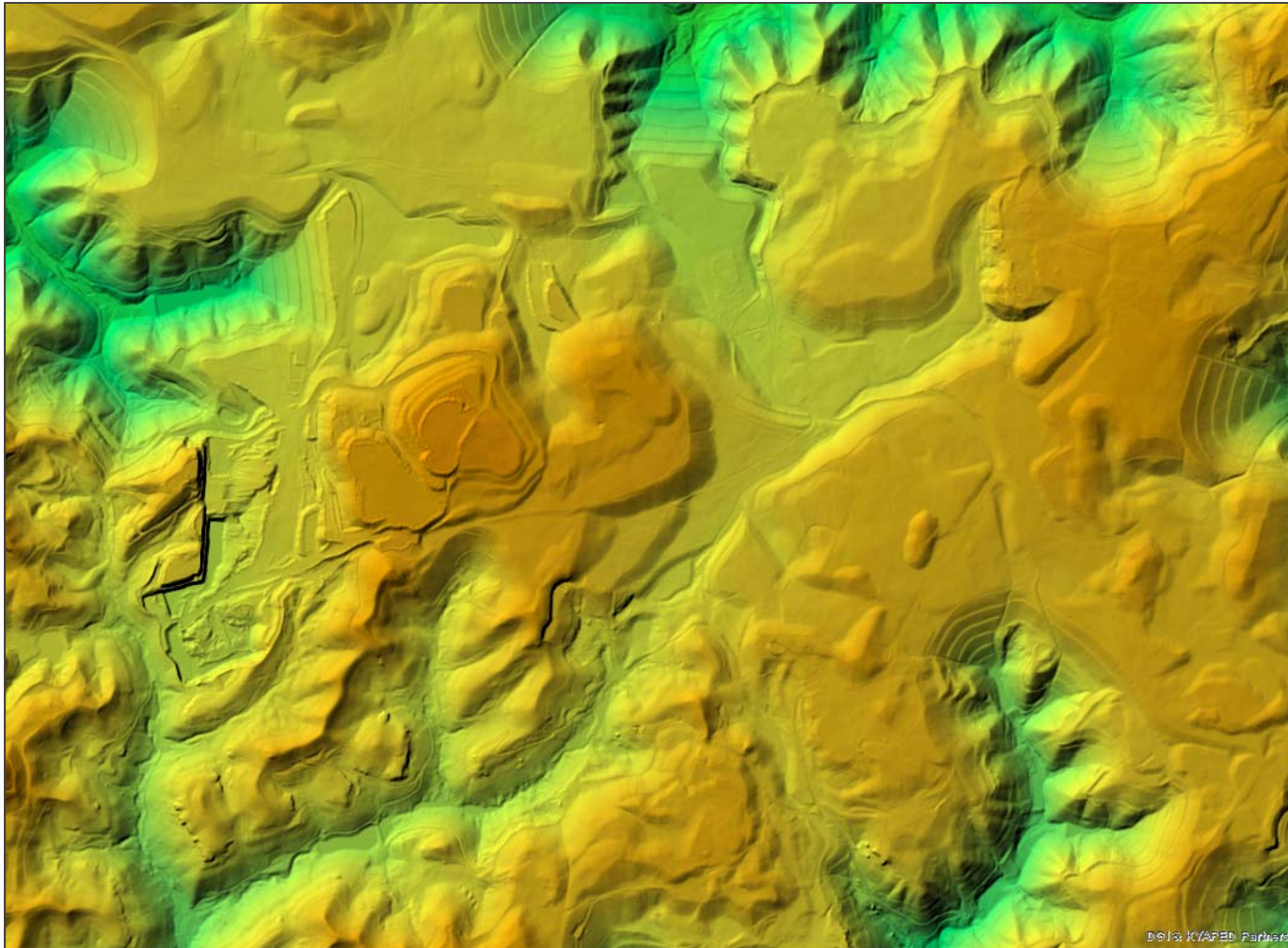


Western Kentucky Elevation Data



© 2013 K/APED Partners

Eastern Kentucky Elevation Data



KyFromAbove Program Status

- 2012 Program focused on “Golden Triangle” area
- 2013 Program focused on “Purchase” area
- 2014 Program focused in Western Kentucky
- All Program Partners are very pleased with the products!

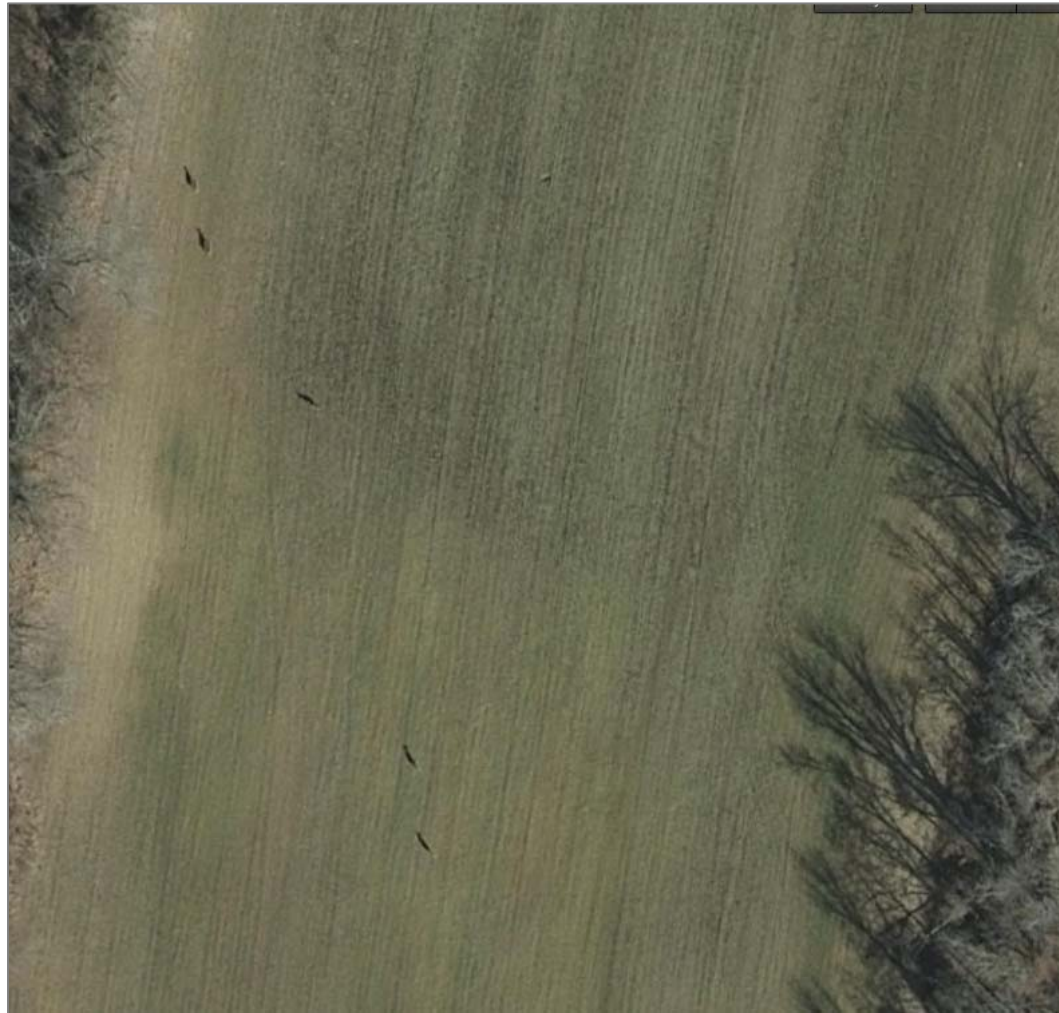
Fun Stuff!



Fun Stuff!



Fun Stuff!



Fun Stuff!



Fun Stuff!



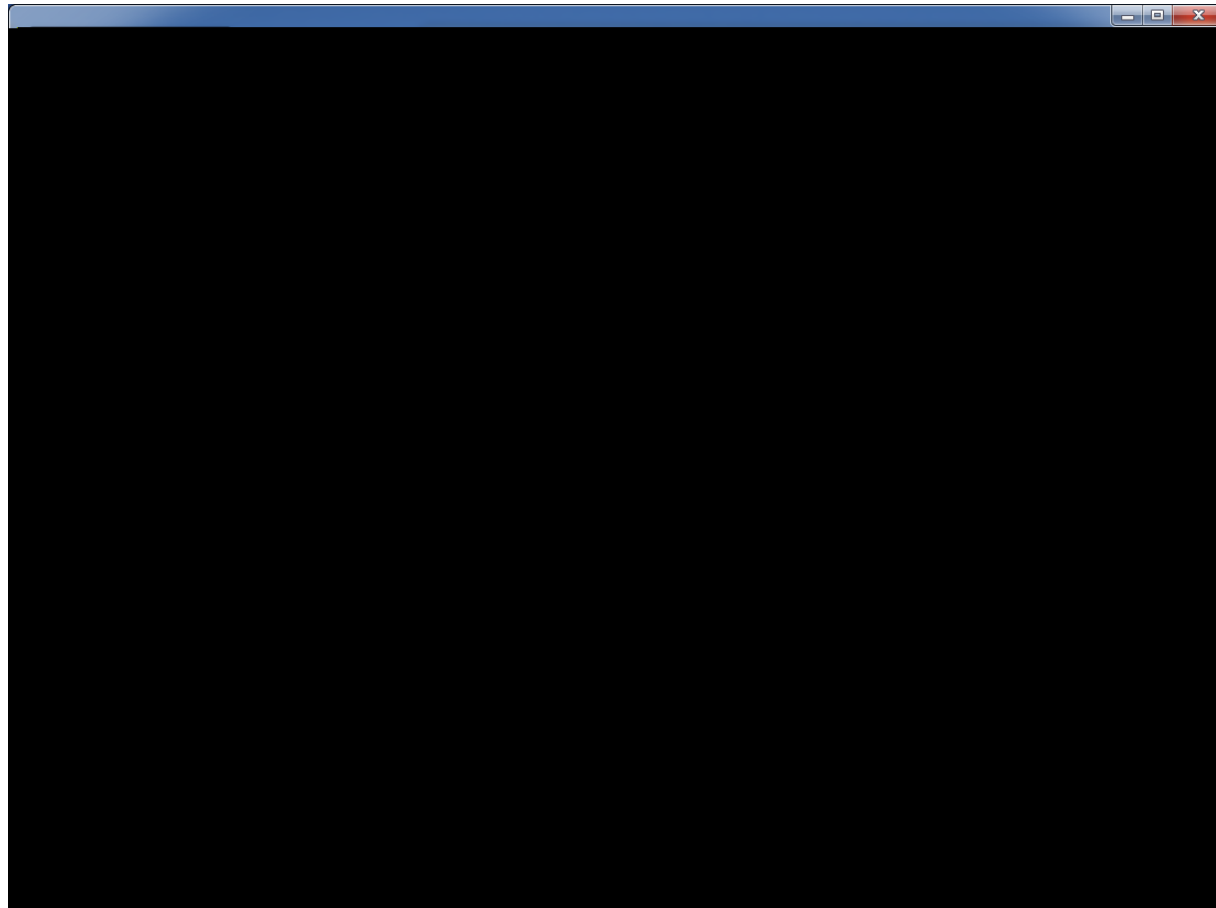
Fun Stuff!



Fun Stuff!



Website



<http://kygeonet.ky.gov/kyfromabove/>

Questions?

Kent Anness
GIS Manager
Division of Geographic Information (DGI)

Kent.anness@ky.gov

Website: <http://kygeonet.ky.gov/kyfromabove/>