Esri Pacific User Meeting
CA / HI / NV
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Imagery Management with ArcGIS

Katja Krivoruchko

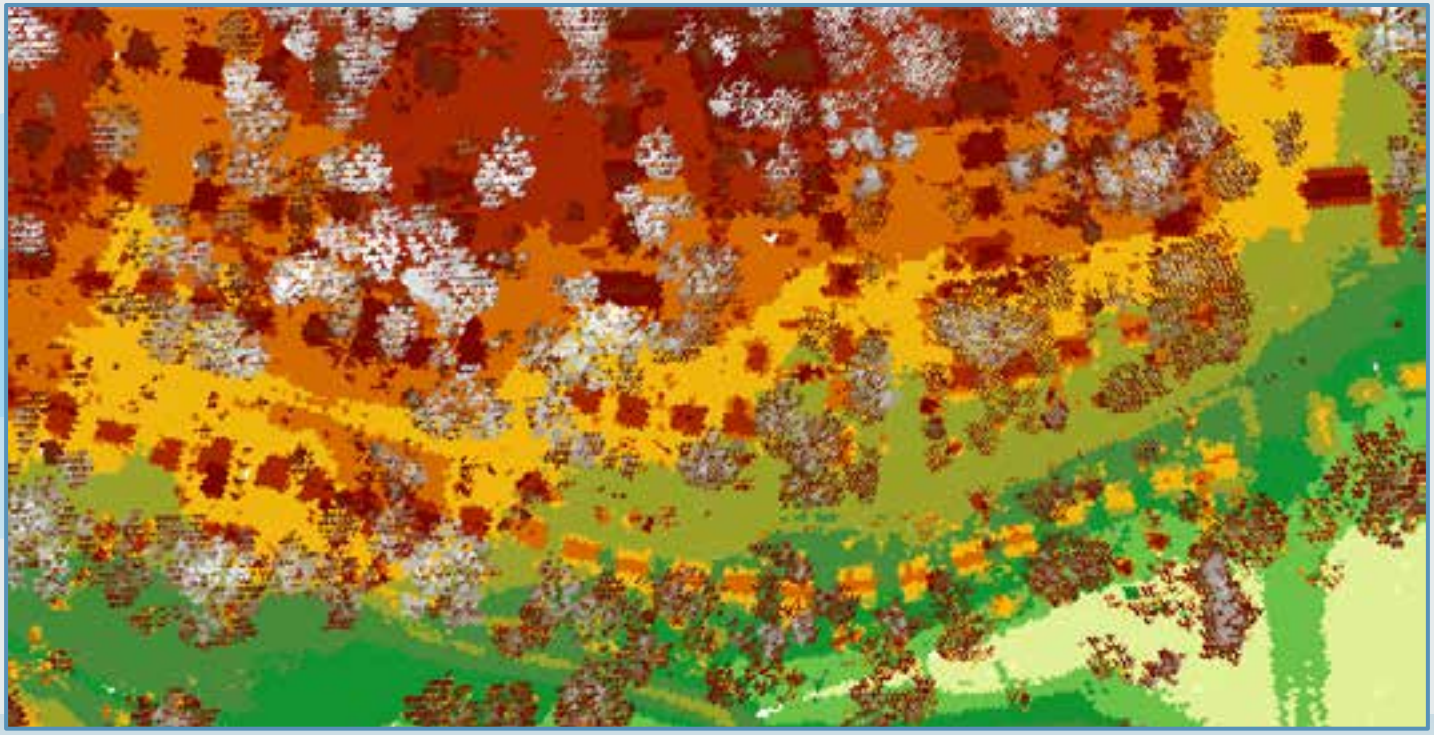
Agenda

- Uses for imagery
  - Analysis
  - Visualization
- Mosaic datasets
- Using imagery on the web

Why do we use imagery?

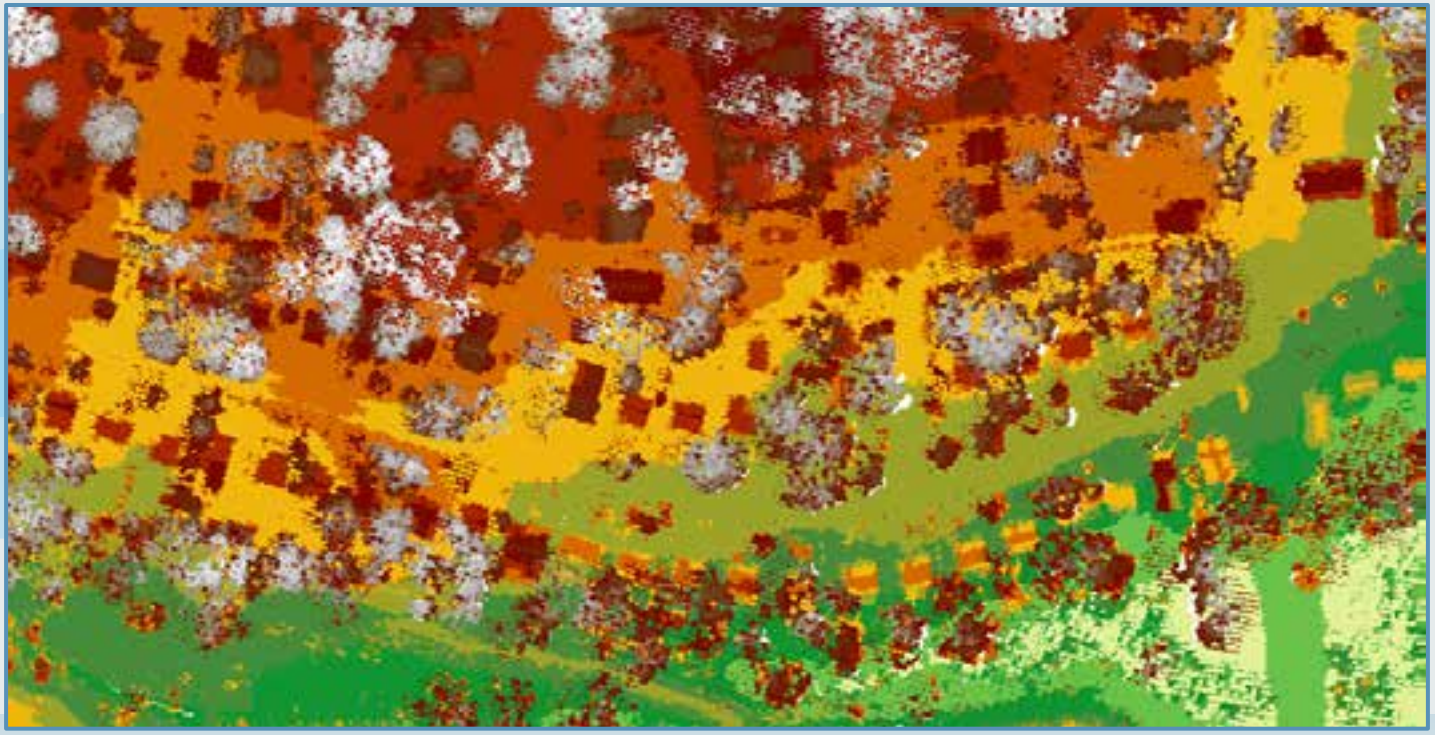
Analysis

2008 LiDAR Data



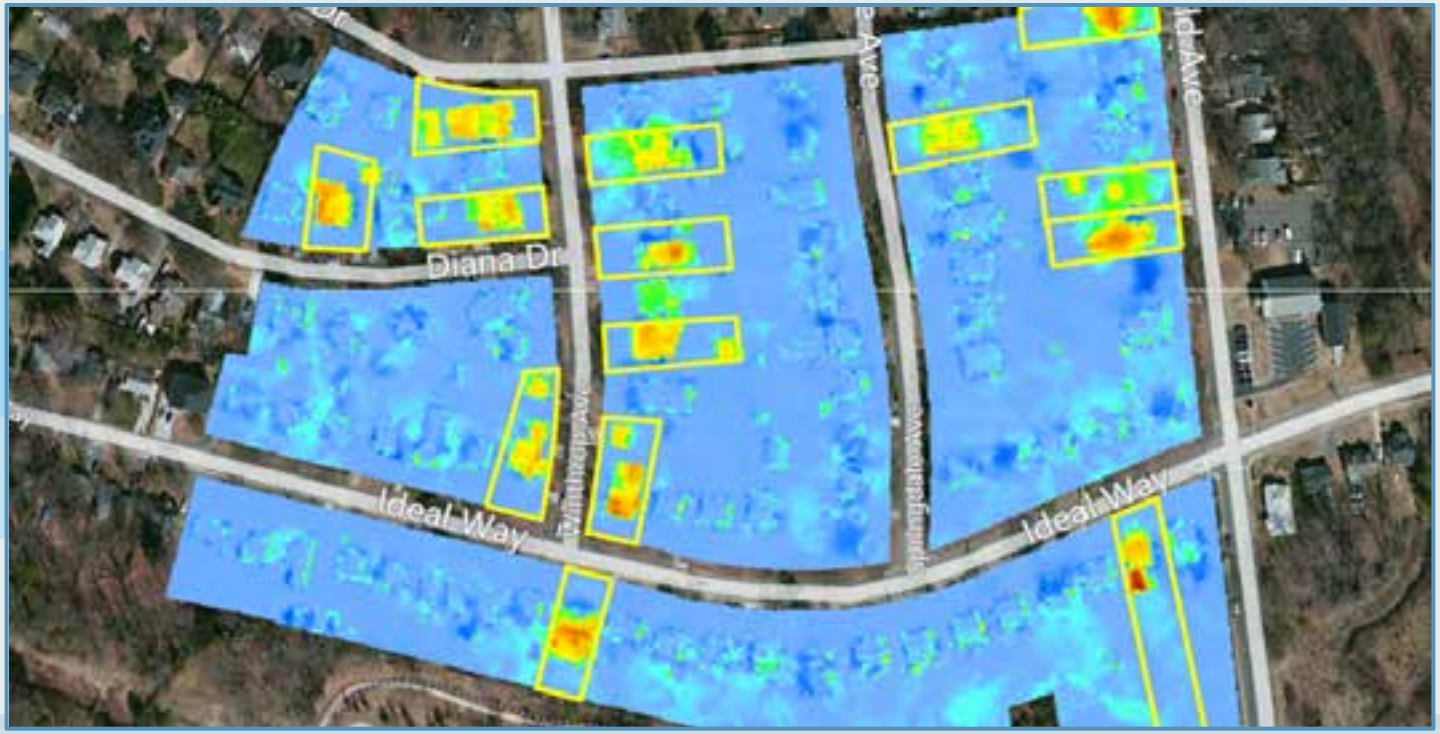
Analysis

2012 LiDAR Data



Visualization

Difference between 2008 and 2012 datasets



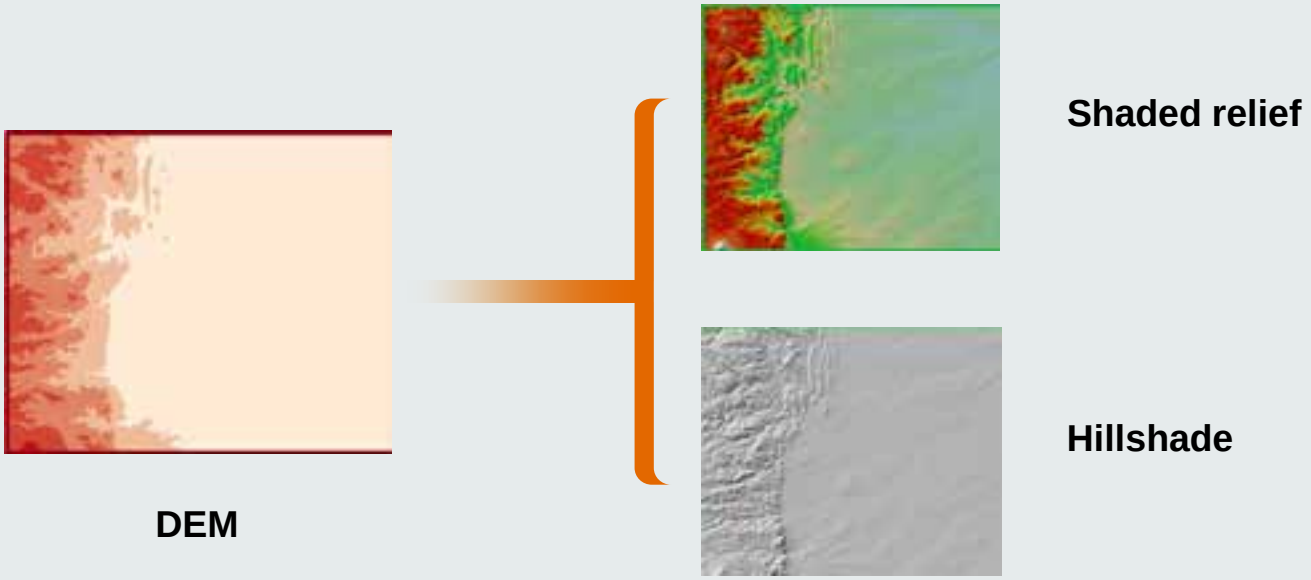
Mosaic Dataset

Optimum Model for Image data Management

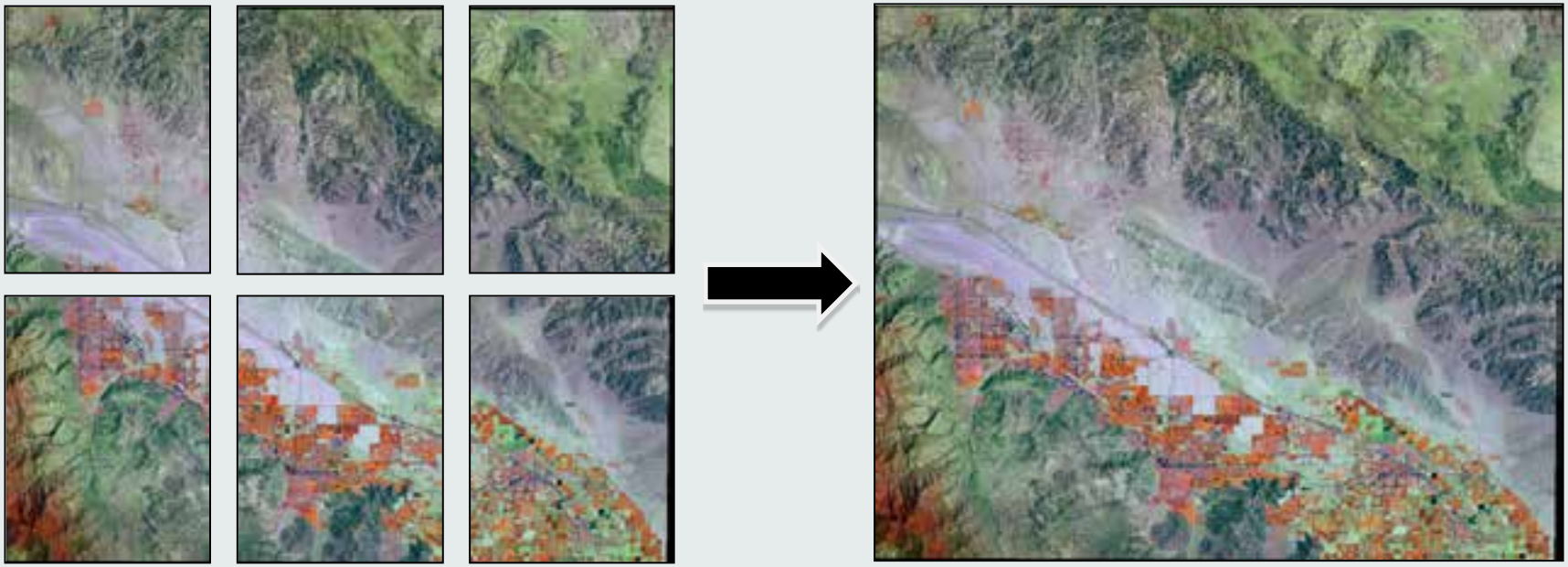
- Catalog imagery from different sensors
- Dataset processing rules stored in geodatabase
  - Imagery remains in place
- Apply one or many functions to a dataset

Imagery Management: Mosaic Dataset

- Store imagery once, create many products
- (Almost) as fast as cache

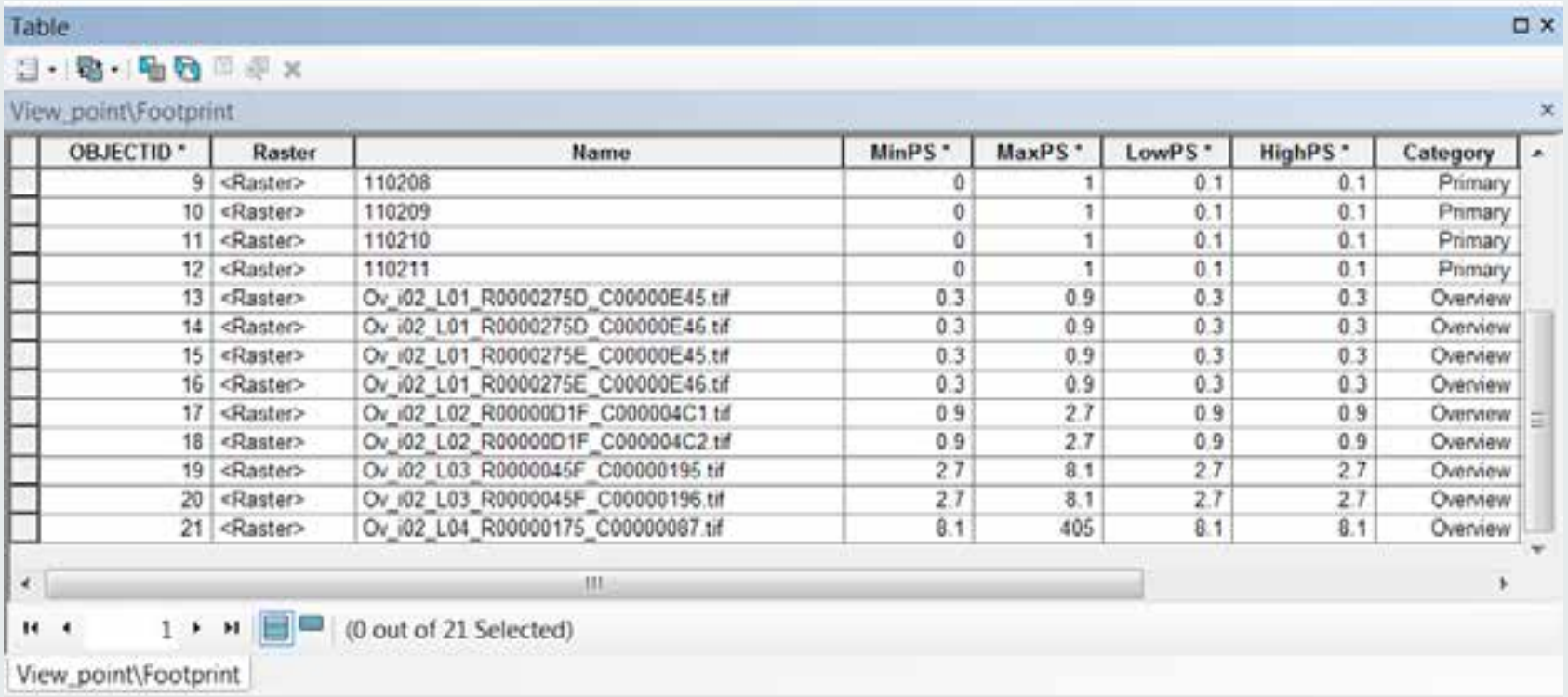


Mosaicking



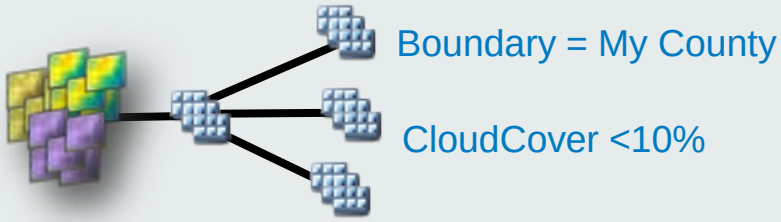
Overviews

- Resampled rasters added in the footprint table
  - Improve display performance at small scales

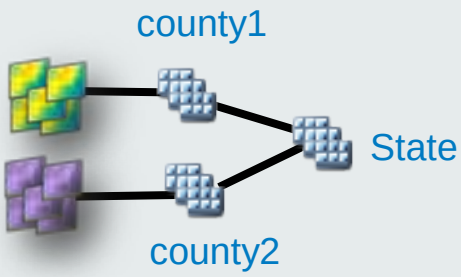


Referenced and Derived Mosaic Datasets

- Referenced Mosaic Dataset



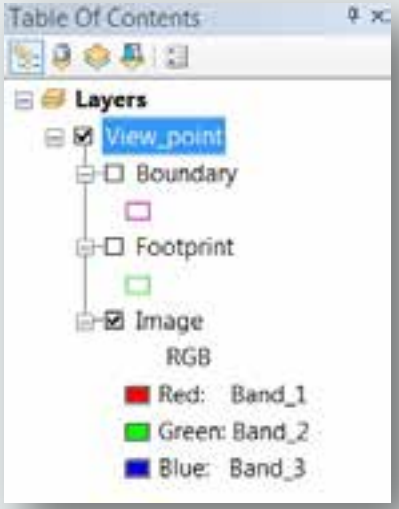
- Derived Mosaic Dataset



With A Mosaic Dataset, You Can:

- Manage and catalog images
  - Query and search
  - Time aware
- Do raster analysis
- Publish imagery as image service for web
  - Seamless mosaic and image catalog
- Publish imagery as cached service for web

Publishing Cached Services



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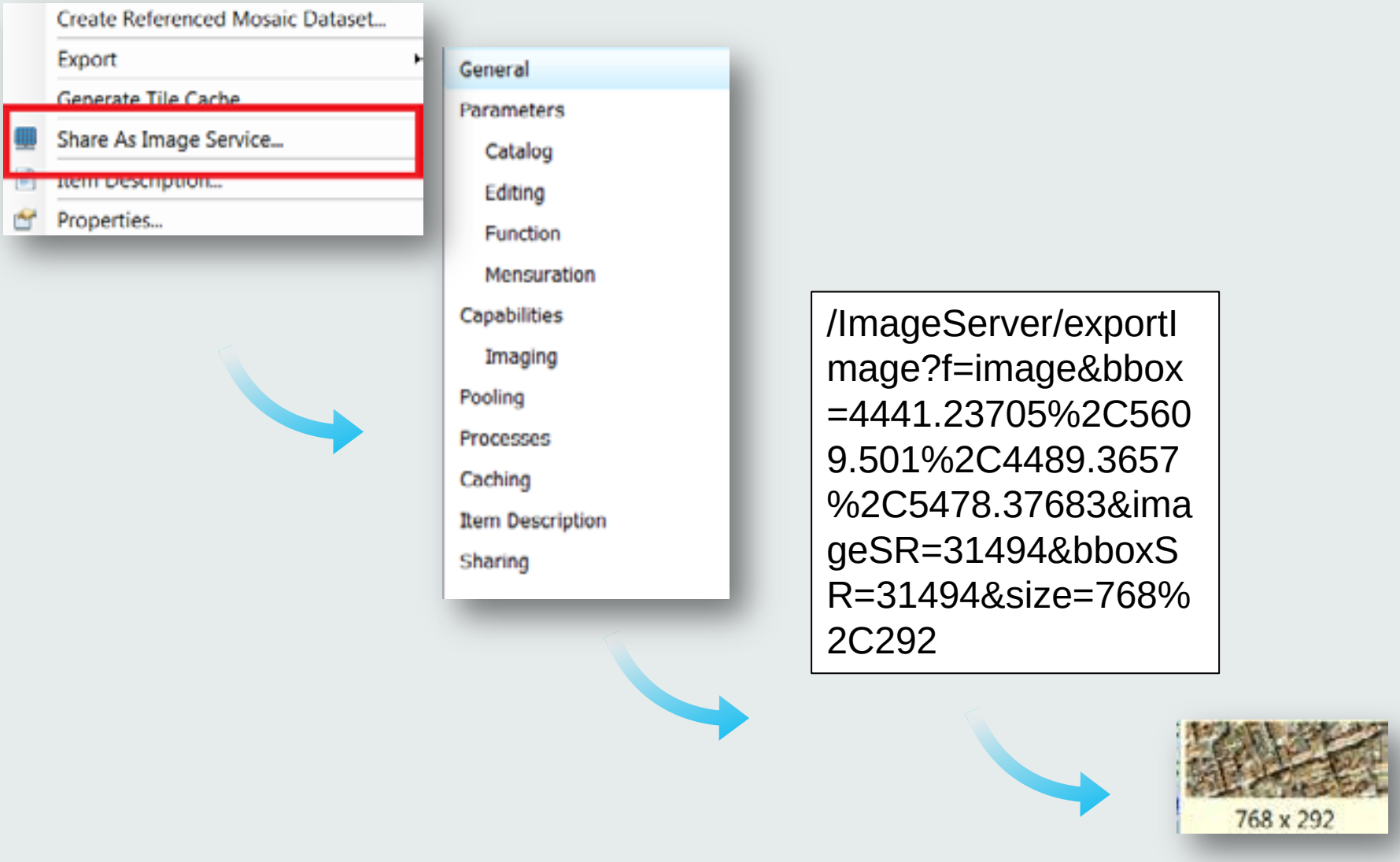
Publishing Image Services



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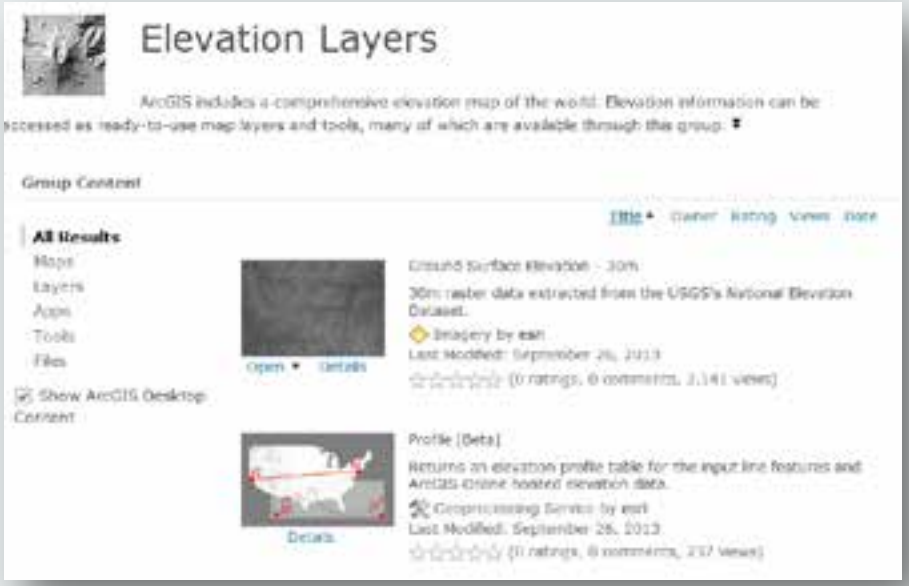
Imagery in ArcGIS Online Services

- World Imagery Basemap
  - 1 ft to 15 m
- Premium services
  - Digital Globe
    - FirstLook (before/after event imagery)
  - AccuWeather
  - RapidEye

World Elevation Services

Currently in Beta

- ArcGIS Online: Elevation Layers Group
- Premium Service
  - Credits will be consumed post-beta



Resources

- Imagery tutorial and management workflows
  - http://resources.arcgis.com/en/communities/imagery/
- Blog:
  - http://blogs.esri.com/Dev/blogs/imagery/default.aspx
- Esri UC proceedings
  - http://www.esri.com/events/user-conference/sessions/uc-proceedings

Understanding our world.