Overview

• Visualizing Raster Data
• Working with Raster Data
• Demo: Change Colorizers
• Demo: Lock to selected rasters
• Demo: Statistical analysis of scientific data
• Demo: Mask raster
• Information
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Visualizing Raster Data

- **Create Layer (LayerFactory.CreateLayer)**
  - Raster
  - Mosaic
  - Image Service

- **On all layers**
  - Get/Set colorizers
  - Get Raster

- **On Mosaic and Image Service layers**
  - Get/Set mosaic method (Sort) and operator (Resolve Overlap)
  - Get/Set compression method and quality
  - Get/Set processing templates
Visualizing Raster Data contd.

- **Colorizer Definition**
  - Simpler representation of a colorizer
  - Most commonly used properties
  - Easy to setup
  - Use default or customize
  - Create new raster layer with a defined colorizer

- **In what ways can I visualize my data?**
  - GetApplicableColorizers method on layer
Working with Raster Data

- Core Objects to work with raster data
  - Introduced with ArcGIS Pro 2.0

- Raster Dataset
  - Get Properties (Raster Dataset and Band)
  - Get Bands
  - Create Raster

- Raster Dataset Definition
- Raster Band
- Raster Band Definition
Working with Raster Data contd.

- Raster
  - Get/Set Properties
  - Get Bands
  - Pixel To Map and Map To Pixel
  - Create PixelBlock
  - Read/Write/Erase PixelBlock
  - Create Cursor
  - Save As
- Raster Cursor
- PixelBlock
  - Get/Set NoData
  - Get/Set Pixels
Demo: Change colorizers

Ling Tang
Demo: Lock to selected rasters

Prashant Mangtani
Demo: Statistical analysis of scientific data

Ling Tang
Demo: Mask raster
Prashant Mangtani
Information

- Where do I find the Raster and Imagery SDK?
  - https://github.com/esri/arcgis-pro-sdk/wiki/ProSnippets-Raster
  - https://github.com/esri/arcgis-pro-sdk/wiki/ProSnippets-MapAuthoring#create-a-raster-layer
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