Positional Accuracy Assessment

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What is ArcGIS Data Reviewer?

Data quality management for ArcGIS

• Provides
  - Rule based workflows
  - Interactive tools
  - Track errors

• For individuals and enterprise
  - Saves time/money
  - Less rework

• Standard extension
  - ArcGIS for Desktop
  - ArcGIS for Server

Opportunities for individuals and enterprise:

- Saves time/money
- Less rework

Trusted data through improved quality management
Geospatial Data Accuracy

- Spatial (positional, geometric)
- Spectral (band depth)
- Thematic (classification)
- Temporal (appropriate date)
- Radiometric (capture piece of electromagnetic spectrum)
- Attributional (types of attributes for intended purpose, correctness of attributes)
Positional Accuracy

• Data needs to be in the “right” place for intended purpose (fitness for use)
• All else being equal, less accurate is less valuable
• Products usually need to conform to a specification
• Usually scale-dependent to some degree
• How to quantify?
• CE, LE, RMSE
Positional Accuracy Assessment Tool (PAAT)

- Part of GIS Data Reviewer
- Created with requirements gathered from NGA through the Esri’s CRADA with NGA
- Determine accuracy of imagery, rasters, vectors
- Quantitative value
Accuracy Reporting

- NGA standard or USGS standard
- CE 90, 95, 99
- LE 90, 95, 99 (for DEMs or TINs)
- RMSE
- Absolute or relative
PAAT Outputs

- Text report
- Metadata
  - Xml format
  - ISO
  - PMAA (NGA)
- Accuracy attribute (if assessing vectors)
- Shapefile of point reading locations
Positional Accuracy Assessment
Resources

- **Product page**
  - www.esri.com/datareviewer

- **Resource Center**
  - http://resources.arcgis.com/

- **Training**
  - www.esri.com/training

- **Questions & comments**
  - datareviewer@esri.com

- Questions?
Thank you...

• Please fill out the session survey:

   Offering ID: 1855

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Paper – pick up and put in drop box