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What Is Geographic Data and Where Can I Find It?

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Agenda

- What is Geographic Data?
 - Basic
 - A notch or two above basic
- Where can I find it?
 - Online
 - Downloadable
 - GPS
 - Make it ...

Data – the building blocks of information

Summer 2011 films 🤇	Gross
Pirates of the Caribbean: On Stranger Tides	\$987,111,968
Fast Five	\$596,925,140
The Hangover Part II	\$528,577,688
Kung Fu Panda 2	\$505,908,427
Rio	\$469,495,385
Thor	\$437,003,116
X-Men: First Class	\$321,812,269
Rango	\$242,421,099
The Green Hornet	\$227,817,248
Just Go with It	\$214,945,591

Worldwide Gross



Pirates of the Caribbean: On Stranger Tides
Fast Five
The Hangover Part II
Kung Fu Panda 2
Rio
Thor
X-Men: First Class
Rango
The Green Hornet
Just Go with It

Geographic data



http://www.nytimes.com/interactive/2010/01/10/nyregion/20100110-netflix-map.html

Integrating data

Summer 2011	films Dir		
The Green Horne	et Mich	el Gondry	
	Director	Feature	Year
	Michel Gondry	The Green Hornet	2011
	Michel Gondry	Be Kind Rewind	2008
	Michel Gondry	The Science of Sleep	2006
	Michel Gondry	Eternal Sunshine of the Spotless Mind	2004

Integrating data





Two primary models

- Vector
 - Points
 - Lines
 - Polygons
- Raster
 - Images
 - Multi-spectral
 - DEMs
 - Categorical

Discrete



Vector data (aka feature classes)



Raster data



How is it made?

Vector

- Digitized from paper maps or from imagery
- Survey data, GPS, ranging
- Converted from imagery or scanned maps
- As output from geoprocessing
- Raster
 - Aerial cameras/scanners
 - Classification from imagery
 - As output from geoprocessing

More complex GIS data

- Annotations
- Dimension features
- Raster catalog
- Raster mosaic

Even more complex GIS data

- Geometric networks
- Network datasets
- Parcel fabrics
- Relationships
- Terrains
- TIN
- Topologies



Key factors for usefulness

Format

- Scale
- Spatial resolution (raster)
- Accuracy
- Attributes

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Online

Eric

ulton County Dept. of Health and Wellness/District 3, Unit 20









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Download

Eric

Demo Summary

- ArcGIS Online Content
- Use Search Engine
- Find pre-made lists of data sources
- Consider non-spatial types of data
- Examples of State and Local Government interfaces for downloading

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GPS Eric

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Demo Summary

- Captured GPS data as a table of XY
- Used Display XY to turn into spatial data
- Saved as a feature class
- Finished map with ArcGIS Online topo map

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Make your own

Paul









Demo Summary

- Created an empty polyline feature class
- Added a new feature to the feature class
- Edited an existing polygon feature class to create a new feature

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Addresses

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Demo Summary

- Convert table of Starbuck addresses to points by geocoding
- Added ArcGIS Online basemap
- Create layer package
- Share layer package at ArcGIS.com

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Enrichment

Paul

Eric

Demo Summary

- Performed Spatial Join (output enriched data)
- Performed tabular join (added augment existing data)

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Value added

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Questions







