




Introduction to GIS Short Course

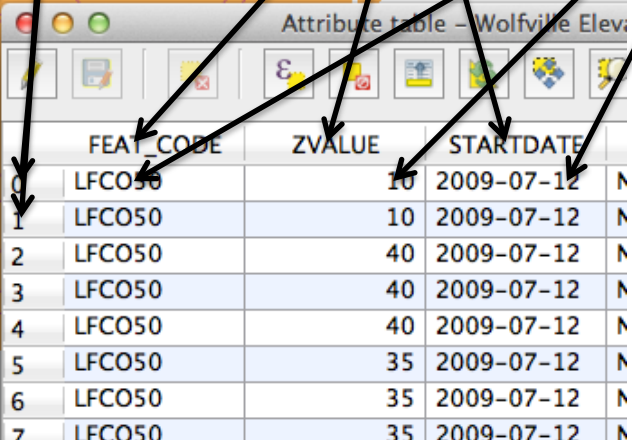
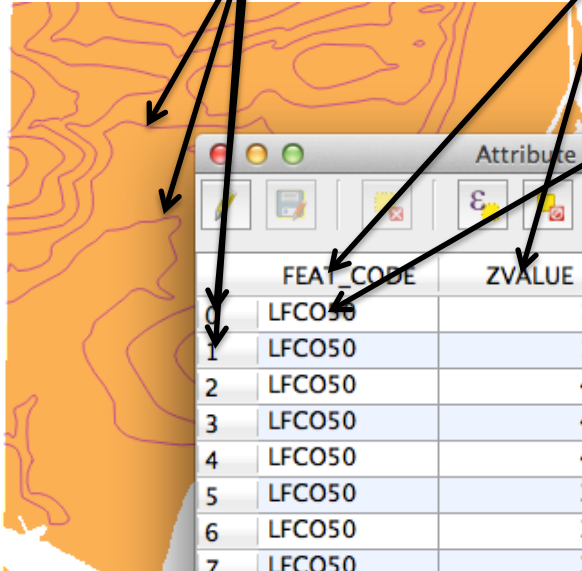
January 4th & 5th, 2015

What is Geographic Information?

- GIS = Geographic Information System(s)
- Geographic Information is any information with a location associated with it (so, everything)
- Any information you want to put on a map.

Vector Data

- Points 
- Lines 
- Polygons 
- Features, Fields, Attributes



	FEAT_CODE	ZVALUE	STARTDATE	
0	LFCO50	10	2009-07-12	M
1	LFCO50	10	2009-07-12	M
2	LFCO50	40	2009-07-12	M
3	LFCO50	40	2009-07-12	M
4	LFCO50	40	2009-07-12	M
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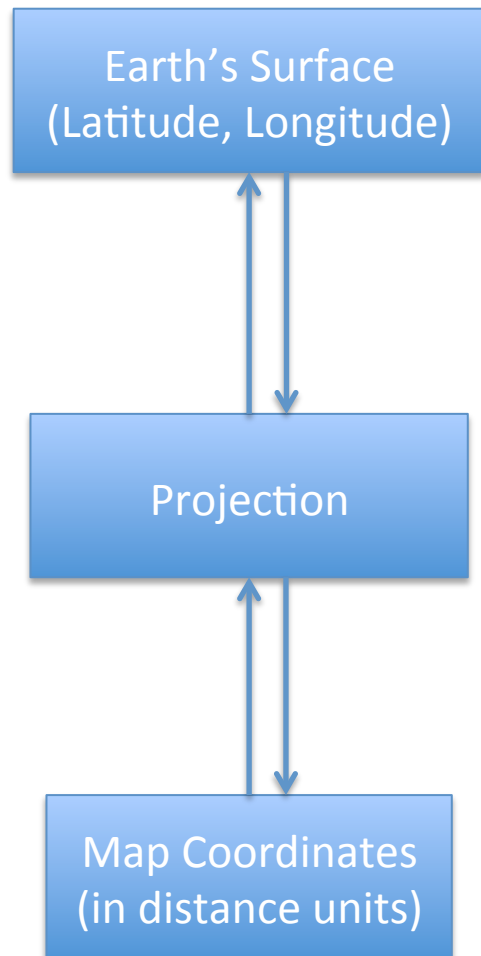


Raster Layers

- Can be displayed in a variety of ways – “color ramp” (shown below), grayscale, several discrete colors.
- For any point on the map, you can obtain a value from a raster.
- Also called a “surface”



Projections



Coordinate Reference Systems

- The XY coordinates of a particular dataset
- Can be lat/lon (positions on the earth's surface) or map coordinates (that can be related to lat/lon using a projection)

What Happened in Day 1

- Adding data into QGIS
- Zoom, pan, navigate around the map
- Changing the layer style (raster and vector)
- Export your map using the print composer

Making A Map

1. Prepare your data
2. Add your data
3. Make sure your data is in the right place
(ensure correct CRS)
4. Change the style of your layers
5. Export your map using a print composer
(ensuring north arrow and scale bar)

Outline for Day 2

- Refresher
- Make a map of Study Sites in Nova Scotia
- Creating and Editing Vector Layers
- Introduction to Vector Processing
 - Selecting vector data, manipulating vector data
- Introduction to Raster Processing
 - Interpolation & contouring
- Your questions/projects!