




Introduction to GIS Short Course

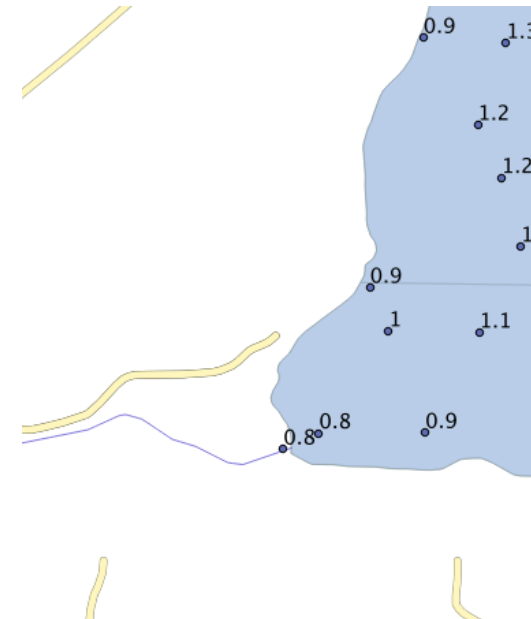
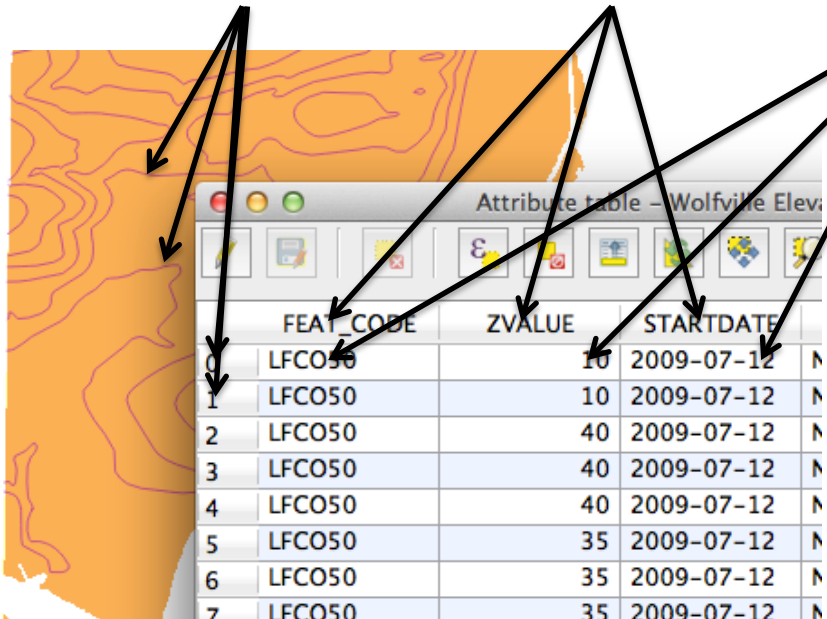
January 16th & 17th, 2015

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 can put on a map
- (and *want* to)

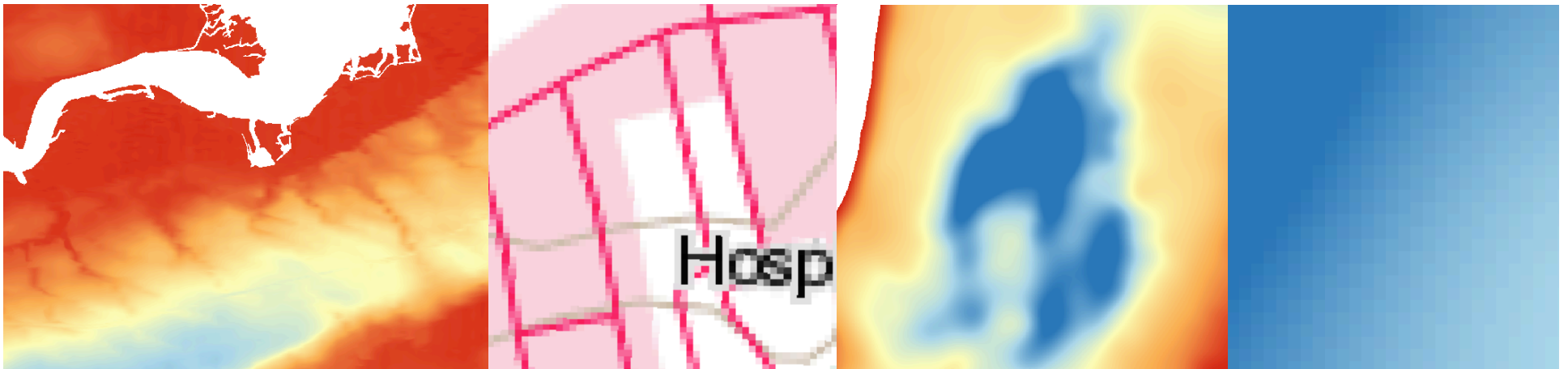
Vector Data

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

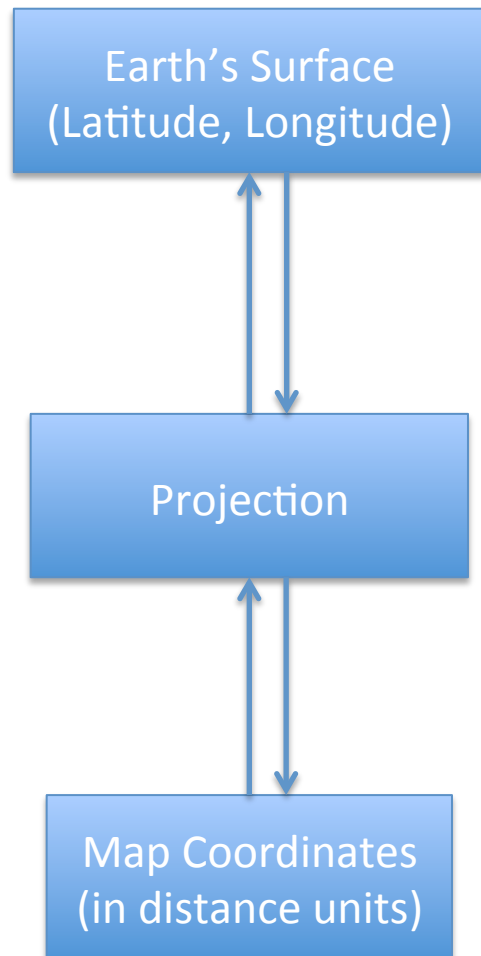


Raster Layers

- 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”



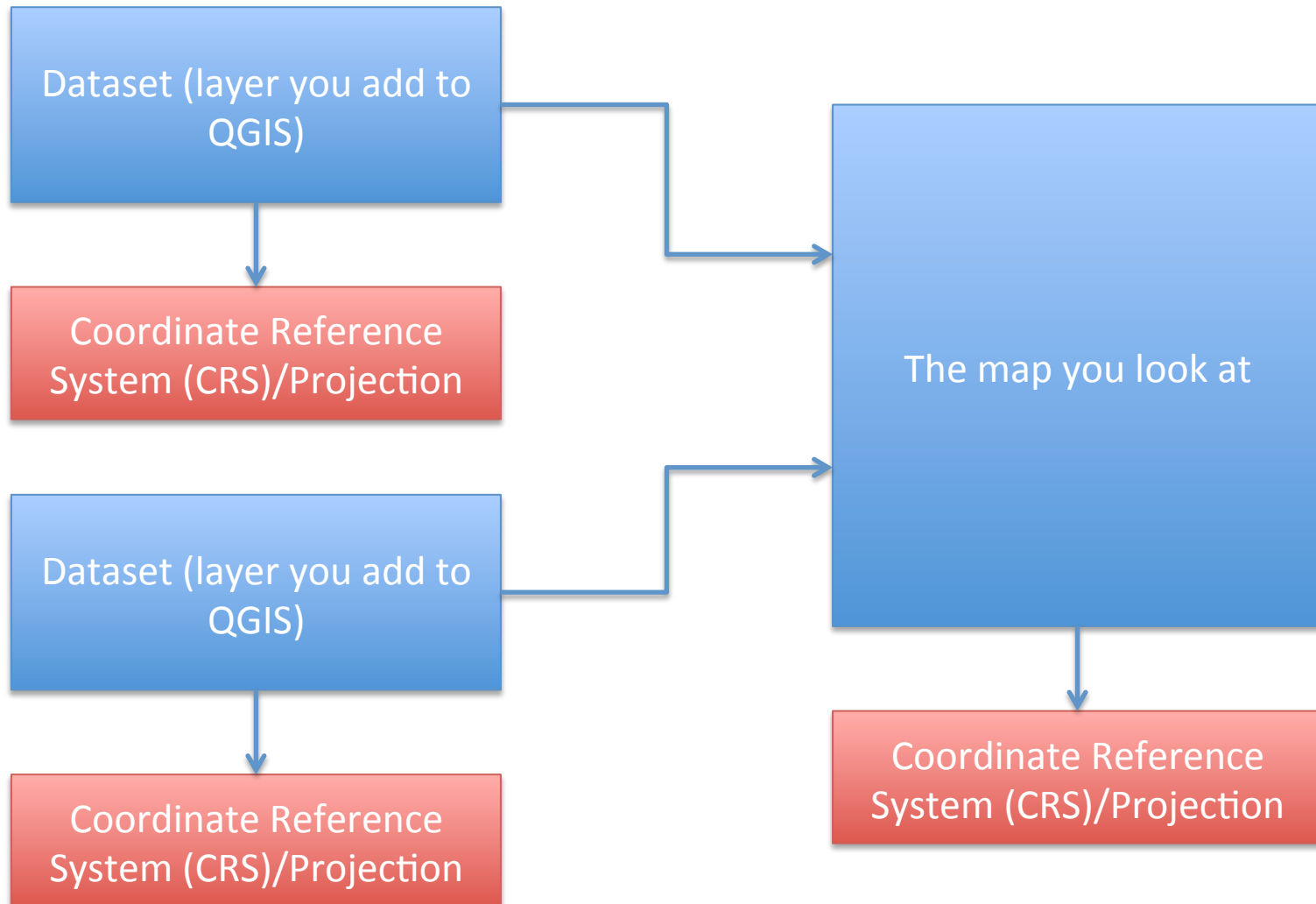
Projections



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)

Projections/CRSs



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 (add
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 Raster Processing
 - Interpolation & contouring
- Introduction to Vector Processing
 - Selecting vector data, manipulating vector data
- Your questions/projects!