Data Interpolation and Extraction
Using ArcGIS 10
Data Types
Vector Data

- Polygons
Vector Data

- Polygons
- Lines
Vector Data

- Polygons
- Lines
- Points
Raster Data
TIN Data
TIN Data
Data Interpolation

Methods
Inverse Distance Weighted

Estimates the value of a cell based on the value and distance of nearby data points and is weighted so that nearby data points have a greater influence on the value.
Inverse Distance Weighted
Natural Neighbors
Natural Neighbors
Kriging
Data Manipulation

Methods
Raster Calculator
Data Extraction Methods
Extract Values to Points

![Diagram showing data interpolation and extraction process]

<table>
<thead>
<tr>
<th>OID</th>
<th>x</th>
<th>y</th>
<th>geology</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>503212</td>
<td>496955</td>
<td>37</td>
</tr>
<tr>
<td>1</td>
<td>503707</td>
<td>497121</td>
<td>36</td>
</tr>
<tr>
<td>2</td>
<td>50257</td>
<td>497077</td>
<td>18</td>
</tr>
<tr>
<td>3</td>
<td>502961</td>
<td>497170</td>
<td>38</td>
</tr>
</tbody>
</table>