

## **Map Projections**

### **Mercator Projection**

- **Cylinder Projection (Wrapping a paper around a globe)**
- **Shapes are accurate**
- **Size of landmass and distance distorted (especially high latitudes)**
- **True direction shown-good for sea navigation**

### **Conic Projection**

- **Visualize a cone placed over the globe**
- **Distances and directions are accurate**
- **Good for showing mid-latitudes and east-west**
- **Only half the world can be shown at a time**
- **Distortion occurs as one moves away from standard parallel**

### **Sinusoidal Projection**

- **An equal Area projection**
- **All Parallels are straight lines**
- **All meridians curved (except Prime)**
- **Shapes in low latitudes fairly accurate**
- **Shapes in higher latitudes distorted**
- **No true distance**

### **Azimuthal Projection**

- **Also known as a polar projection**
- **Size and distance is distorted as one moves towards lower latitudes**
- **Distances and direction are true when line passes through poles**
- **Often used in air navigation**

### **Goode's Interrupted Homolosine Projection**

- **An equal-area projection**
- **An combination of Sinusoidal (equator to mid-latitudes) and Mollweide (mid-latitudes to poles) projections**

- Shows true size and shape of land masses
- Distances are not accurate
- Usually used as a special purpose map

### **Robinson-Projection**

- Designed by Rand McNally for visually correct projection of earth
- Most distortions are minor
- Lands Area near poles appear flat

### **Gall-Peter-Projection**

- Land mass size are accurate
- Shapes are distorted
- Distances are inaccurate

### **Lambert Equal Area**

- Based on a plane touching a point
- Distances are true close to where plane touches
- Land masses are in correct proportions
- Shapes away from center become distorted

### **Miller Cylindrical**

- A Modified Mercator
- Useful in showing the world in rectangular form
- M\Land shapes And sizes inaccurate

### **Mollweide Homolographic Projection**

- An Equal Area Projection
- Least distortion near center of projection
- Distance distortion occurs as one moves towards outer edges

- **Specialization map-often used for depicting world distribution**

### **Bonne Projection**

- **Equal-area projection**
- **Distances true along all parallels and central meridian**
- **Used to project small areas in mid-latitudes**