

Quick Notes on Map Projections in ArcGIS

- Minimal Distortion
- Distortion is moderate for most of the area
- * Distortion is minimal in certain directions or at particular points

Adapted from USGS Map Projections poster.

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Projection	Type	Conformal	Equal Area	Compromise	Equidistant	True Direction	Straight Rhumbs	Interrupted	Shows the entire world	World	Hemisphere	Continent/Ocean	Region/Sea	Large Scale	Equidistant	Other
Adams square II	Modified azimuthal	•							•	•						
Aitoff	Modified azimuthal			•					•	•						
Albers equal area conic	Conic		•						•			•	•	•		
Aspect-adaptive cylindrical	Cylindrical			•					•	•						
Azimuthal equidistant	Azimuthal				•	•			•	○	•	•	•	•	•	
Behrmann equal area cylindrical	Cylindrical		•						•	•						
Berghaus Star	Faceted					○		•	•	•						
Bonne	Pseudoconic		•						•			•	•			
Cassini	Cylindrical (transverse)				•									•	•	
Compact Miller	Cylindrical			•					•	•						
Craster parabolic	Pseudocylindrical		•						•							
Cube	Faceted							•	•	○						
Cylindrical equal area	Cylindrical		•						•				•	•	•	
Double stereographic	Azimuthal	•				•						•	•	•	•	
Eckert I	Pseudocylindrical			•					•	○						
Eckert II	Pseudocylindrical		•						•	○						
Eckert III	Pseudocylindrical			•					•	•						
Eckert IV	Pseudocylindrical		•						•	•						
Eckert V	Pseudocylindrical			•					•	○						
Eckert VI	Pseudocylindrical		•						•	○						
Eckert-Greifendorff	Modified azimuthal		•						•	○						
Equal Earth	Pseudocylindrical		•						•	•						
Equidistant conic	Conic				•				•			○	•	•		
Equidistant cylindrical	Cylindrical				•				•				•	•	•	
Fuller	Faceted							•	•	○						
Gall's stereographic	Cylindrical			•					•	○						
Gauss-Krüger	Cylindrical (transverse)	•											•	•	•	
Geostationary satellite	Azimuthal										•	•	•		•	
Gnomonic	Azimuthal					•							○	○	•	
Goode homolosine	Pseudocylindrical		•					•	•	○						
Hammer	Modified azimuthal		•						•	•						
Hotine oblique Mercator	Cylindrical (oblique)	•											•	•	•	
IGAC Plano Cartesiano	Modified azimuthal													•	•	
Krovak	Conic (oblique)	•											•	•		
Laborde oblique Mercator	Cylindrical (oblique)	•											•	•	•	
Lambert azimuthal equal area	Azimuthal		•			•			•		•	•	•		•	
Lambert conformal conic	Conic	•										•	•	•		
Local Cartesian	Azimuthal													•	•	
Loximuthal	Pseudocylindrical			•			•		•	•						
McBryde-Thomas flat-polar quartic	Pseudocylindrical		•						•	○						
Mercator	Cylindrical	•				•	•						•	•	•	
Miller cylindrical	Cylindrical			•					•	○						
Mollweide	Pseudocylindrical		•						•	○						