

Standard Map Projection

The Alaska Albers Equal Area Conic projection is the standard for storing spatial data for the US Mineral Management Service sea ice mapping project. These spatial data sets include AVHRR and RADARSAT imagery and derived data (lead classification and landfast ice.) The Albers Equal Area projection is well suited for large areas that are mainly east-west in extent and that require equal-area representation. This conic projection is mathematically projected on a cone conceptually secant at two standard parallels. The projection was developed by H. C. Albers in 1805. All areas on the map are proportional to the same areas on the Earth. Directions are reasonably accurate in limited regions. Distances are true on both standard parallels. Scale is true along standard parallels.

The Alaska Albers Equal Area Conic projection is the projection standard adopted by many state and federal agencies in Alaska for ease of data integration.

Horizontal Datum

The North American Datum of 1983 (NAD83) and the World Geodetic Survey of 1984 (WGS84) are very similar on the horizontal plane. However, the NAD83 horizontal datum should be used to improve interoperability of datasets. The official datum standard for Federal agencies is NAD83. NAD83 is the datum standard for this project.

Detailed Projection Parameters

Map Projection Name: Albers Conical Equal Area

Standard Parallel: 55.000000

Standard Parallel: 65.000000

Longitude of Central Meridian: -154.000000

Latitude of Projection Origin: 50.000000

False Easting: 0.000000

False Northing: 0.000000

Planar Coordinate Information

Planar Distance Units: meters

Coordinate Encoding Method: coordinate pair

Coordinate Representation

Abscissa Resolution: 0.002048

Ordinate Resolution: 0.002048

Geodetic Model

Horizontal Datum Name: North American Datum of 1983

Ellipsoid Name: Geodetic Reference System 80

Semi-major Axis: 6378137.000000

Denominator of Flattening Ratio: 298.257222