



# Technical Specifications

## Geomatica® 9 Georeferencing Formats

### GEOREFERENCING OVERVIEW

Raster or vector data that has been corrected to overlay a ground measurement coordinate system. This enables inferring ground coordinates to the different features in the dataset. If the map projection (and map projection parameters) of the ground coordinates are known, equivalent geographic coordinates (degrees of Latitude and Longitude) can be produced which enables putting the features of the coverage into a World context. Once it is in the World context, this enables the means to merging other datasets that exist in an overlapping area and /or different map projection.

### GEOREFERENCING IN GEOMATICA

Earth Models are used in Geomatica to correct raster and vector data to overlay specific ground measurement systems so that the dataset coverage is related to a World context.

#### Earth Models Supported by Image Processing Features:

- Ellipsoid, Datum: Clark 1866; NAD27; WGS 1984; GRS80; NAD83;
- Other commonly used Ellipsoids and Datums
- User-Defined Ellipsoids and Datums.

Map Projections in Geomatica allows merging other raster and vector datasets that exist in overlapping areas and/or different map projection.

#### Map Projections Supported by Image Processing Features:

- Albers Conical Equal-Area
- Azimuthal Equidistant
- Cassini (used in Malaysia)
- Equidistant Conic
- Equirectangular (Plate Carree)
- Gnomonic
- General Vertical Near-Side Perspective
- Goode Homolosine
- Integerized Sinusoidal
- Krovak
- Krovak Negative
- Lambert Azimuthal Equal-Area
- Lambert Conformal Conic

- Longitude/Latitude (Geographic)
- Miller Cylindrical
- Mercator
- Modified Stereographic Conformal
- Orthographic
- Oblique Mercator
- Polyconic
- Polar Stereographic
- Robinson
- RSO (Rectified Skew Orthomorphic)
- Stereographic
- Stereographic Double (used in New Brunswick Canada)
- Sinusoidal
- Space Oblique Mercator
- State Plane Coordinate System
- Transverse Mercator (Gauss- Kruger)
- Universal Polar Stereographic
- Universal Transverse Mercator
- Van der Grinten

Coordinate System referencing in Geomatica reference features in the raster or vector dataset to equivalent coordinates systems supported.

#### Coordinate Systems:

- Pixel, Local
- UTM
- Long. / Lat.
- State Plane



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