

Influence of Replacement used Reference Coordinate System for Georeferencing of the Old Map of Europe

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Abstract : The article describes the effect of the replacement of the used reference coordinate system in the georeferencing of an old map of Europe. In particular, it was the map entitled "Europe, the Map of Rivers and Mountains on a 1 : 12 000 000 Scale", elaborated by professor D. Cipera and Dr. J. Metelka for Otto's Geographic Atlas of 1924. The work was most likely produced using the equal-area conic (Albers) projection. The map was georeferenced into three types of projection - the equal-area conic, cylindrical Plate Carrée and cylindrical Mercator map projection. The map was georeferenced by means of the affine and the second-order polynomial transformation. The resulting georeferenced raster datasets from the Plate Carrée and Mercator projection were projected into the equal-area conic projection by means of projection equations. The output is the comparison of drawn graphics, the magnitude of standard deviations for individual projections and types of transformation.

Keywords : georeferencing, reference coordinate system, transformation, standard deviation

Conference Title : ICC 2015 : International Conference on Cartography

Conference Location : New York, United States

Conference Dates : June 04-05, 2015