

Coordinate transformation program "TKY2JGD" for Japan Geodetic Datum 2000

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One of methods to replace the existing coordinates with new coordinates in Japan Geodetic Coordinate System 2000 is coordinate transformations with many local parameters. We use a two-step algorithm to realize the local transformation. The first step is to calculate parameters at grid points from old and new coordinates of about 38,000 control stations. The second step is to interpolate parameters from parameters of 4 nearby stations. The author is making parameters using Kriging gridding method with a high-powered computer as the first step. In the second step GUI should help users and transparent algorithm is required. To realize the second step, the author is developing TKY2JGD for Windows95/98. We plan to evaluate errors by comparing the estimates with the original data.