Positional Accuracy Improvement for Heterogeneous Geodata Integration

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SUMMARY

Integration of multi-origin data, differentiated in spatial reference system, established method, time and precisions, is an unresolved problem in all countries. Positional accuracy improvement (PAI) of objects that have been captured or displayed in geodatabases and maps to match more accurate reference data is a challenge for national mapping agencies.

This paper clarifies the role of positional accuracy improvement in heterogeneous geodata integration in Vietnam and proposes an improvement workflow for cadastral data to fit with more accurate national geographic data using rubbersheeting transformation. Test results of enhancement planar accuracy of cadastral map 1: 10 000 according to national geographic data of same scale and higher accuracy demonstrate that positional accuracy improvement workflow can be used in integrating multi-source data and enabling utilization of map legacy.

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