

## "Development and Testing of a GPS-based Data Acquisition System with ArcPad"

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**MasterThesis** (Jahr: 2009): Development and Testing of a GPS-based Data Acquisition System with ArcPad

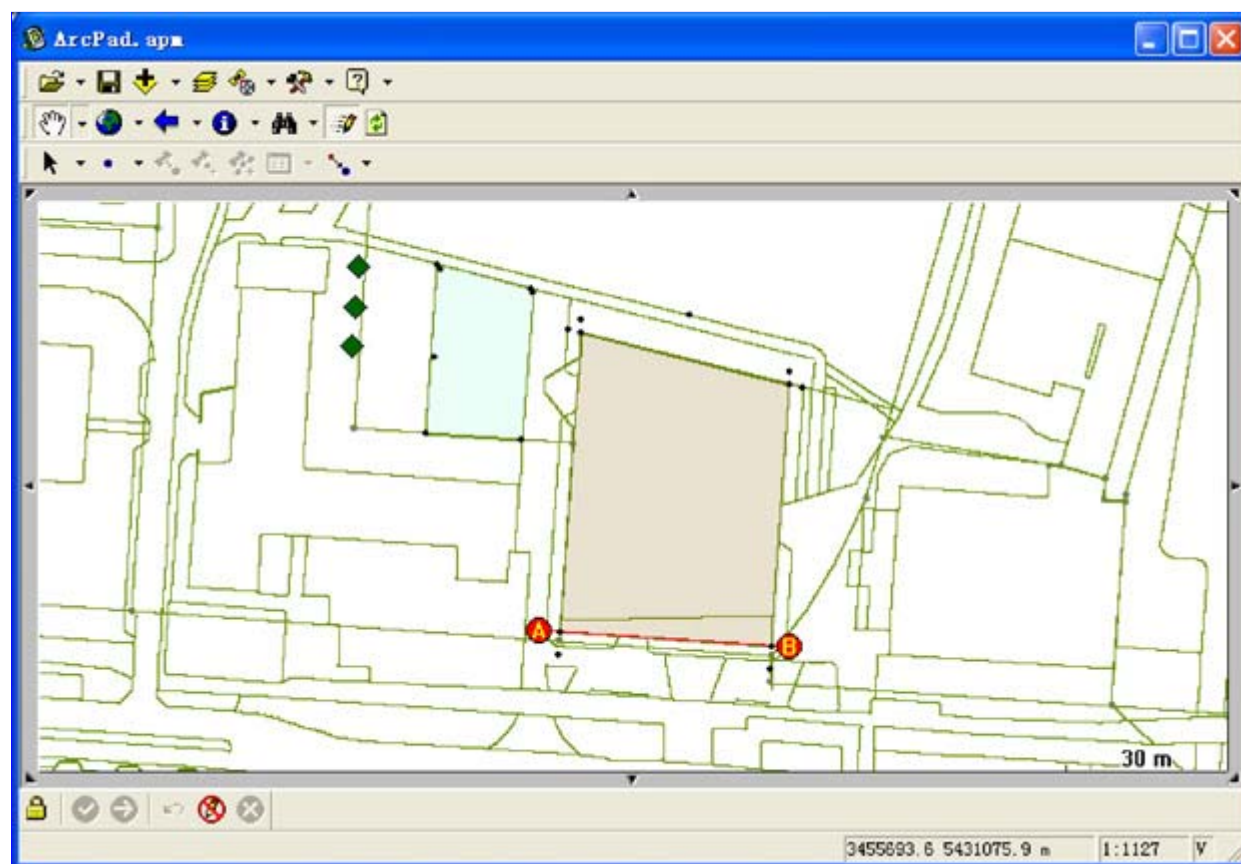
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**Keywords:** Data acquisition, GPS, RTK, datum transformation, ArcPad

### Zusammenfassung

GPS technology is currently widely used for data acquisition in GIS. Presently a GPS-based GIS data acquisition software Gispad 4.0 is applied for the practice of students and also for some small projects in the Faculty of Geomatics. However, it is inconvenient to transfer resulting data from Gispad into the GIS software ArcGIS.

The aim of this study is to develop an application of a mobile GIS software named ArcPad using GPS for the data acquisition in the campus of Karlsruhe University of Applied Science as well as in a field of city Weingarten. The results show that this system is quite satisfactory for data acquisition: the field surveying accuracies of 1-3 cm are achieved; the output data can be directly applied in ArcGIS for the following analysis and management.



The application of GIS data acquisition (point, polyline, polygon) with ArcPad