Low-Cost GNSS for Geodetic Applications

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SUMMARY

GNSS is used for many purposes in surveying and geodesy such as cadastral surveys, engineering surveys, navigation or machine control. Traditionally, the geodetic multi-frequency GNSS receiver are used to get an accuracy of several millimeter. However, the geodetic receivers are quite expensive. In the recent years, low-cost single frequency GNSS receivers (e.g. from u-blox), which is are developed for the mass market, have been proved that they reach almost the same accuracy as geodetic ones. Examples of geodetic applications (static and kinematic) using low-cost GNSS receivers will be introduced. Experiences, challenges and limitation up to now as well as the possibilities for the applications in the near future will be discussed in this presentation.

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