How to Properly Plan the Reduction in the LIDAR Big Dataset?

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Key words: Engineering survey; Geoinformation/GI; Laser scanning

SUMMARY

There are many methods of data collection, which leads to a big dataset (e.g.: LiDAR, bathymetry measurements). Such datasets are difficult or sometimes impossible to rational use. Therefore, in the stage of pre-processing the big dataset is reduced without losing data necessary for the proper implementation of objective study. The process of reducing the big dataset will allow efficient, less time consuming and labor intensive processing. Depending on the purpose of data processing and project requirements the reduction of big dataset must be properly planned. It involves selecting the appropriate method of reducing big dataset, choosing the appropriate tools, criteria and parameters.

The paper presents the stages of proper planning to reduce the size of the set derived from LiDAR. It also presents an original method for reducing called Optimum Dataset.