Abstract

The object of this thesis is to propose the method of location accuracy improvement and longitudinal profile of watercourses using the data of airborne laser scanning. In the thesis the watercourses are seen as valley lines where i tis possible to use the method of terrain brek-lines detection to determine their location. The proposed method processes DMR in the formo f filter point swarm and i tis based od the intersection of planes approximation the slopes adjoined to the watercourse. Primarily the thesis focuses on narrow watercourses in deeply placed valleys and the method is adapted to it. At the same time the proposed method successfully deals with the different accuracy of the primary estimation of the explored watercourse. The end of the work presents and evaluates the results of the used method and the obtained data of the Labe spring region in Krkonoše mountains.