Terrain Breakline Detection Using Sky-view factor

Abstract

The subject of this diploma thesis is to propose the procedure of detecting of terrain breaklines using Sky-view factor. The theoretical part of the diploma thesis first introduces the issue of terrain breaklines detection, which presents the methods known to date and Sky-view factor, which is the focal point of the proposed method. Implementation over real data takes place at four locations in the Czechia (Vítkovice, Hradiště, Strnady and Velenka). Data in the form of raster format is tested. At the end, the results of the proposed method and its verification using two selected methods of field edge detection are presented and evaluated. Achieved results point to Sky-view factor for terrain edge detection.

Keywords: terrain breakline, digital terrain model, Sky-view factor, detection terrain breaklines methods