

Automated mapping using multilevel B-Splines

Saveliev A., Romanov A., Mukharamova S.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

This paper describes application of multilevel B-Splines approximation (MBA) algorithm to the SIC2004 exercise as a high performance automatic mapping means in emergency situations. MBA method was compared with kriging, and various flexible MBA method's tuning "controls" were proposed and discussed. Outliers automatic detection and delineation techniques considered could be used to process outliers without the loss in performance. Prior data were used to adjust method parameters and discover the pattern of spatial correlation. The interpolation algorithm development did not assume any information about the phenomena in addition to values given. © 2005 Anatoly A. Saveliev, Andrey V. Romanov, and Svetlana S. Mukharamova.

<http://dx.doi.org/10.2104/ag050017>
