

Identification of maximal complex boundaries on the basis of subregion description with directed graphs (digraphs)

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Abstract

The objective of the present study was to develop a method for automatic identification of boundaries of maximal complexes on the basis of boundary points of subcomplexes. According to the method proposed, regions are to be presented by means of geometric cyclic digraphs. The data on these digraphs are to be recorded in a neighbourhood matrix. The matrix notation, containing supplementary data, provides information sufficient to determine complexes according to the criteria adopted. The paper presents simple algorithms for data processing, enabling to detect data inconsistency.