

INVESTIGATION OF STATISTICAL PROPERTIES OF SPECTRAL CHARACTERISTICS OF VEGETATION. NON-PARAMETRIC APPROACH

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When interpreting multi-zone satellite images, the isolation of vegetation is the most difficult task. To automate the decryption of their types, the theory of pattern recognition and methods of mathematical statistics are used. Nonparametric approach to decoding satellite images helps to take into account the statistical properties of vegetation and other types of objects. This approach helps to find the distribution function and density function of probability distribution, and to determine the criteria of similarity functions based on the data of reference sites of images. The article considers the results of construction of both functions on the reference areas of the Iconos image. As the criteria of similarity is proposed the criteria based on the calculation of linear distances between functions, and for the probability distribution density function is proposed the correlation coefficient.

Key words: statistical properties, vegetation types, nonparametric approach, distribution function, probability distribution density function, interpretation of aerial images, reference plot.

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