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The relaxation and contour method to determine the direction of water vapor wind based on the analysis of a series of satellite images is proposed. The method is based on the identification of the fuzzy contours as isotherms concentrations, followed by tracking the displacement of similar contour parts (tracers) on two images. The main criterion in tracers identification is the shape of the contour, which can be fuzzy but identifiable, that allows to create a set of tracers. Then a method of relaxation marking is applied to select the best tracers. The advantage of the method is that it allows using correlation and other criteria in tracer identification and can be incorporated into the existing schemes. Comparative analysis showed the advantages of the proposed method both in quantity of the generated speed vectors and in their accuracy.

Keywords: satellite imagery, wind vectors, isotherms, correlation.

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