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Features of high optical resolution image registration based on the high-climbing method

P. Ts. Liui, D. G. Denisov, A. A. Sakharov, I. V. Zhivotovskii and V. E. Karasik

Bauman Moscow Technical University
5 2-nd Baumanskaya st., Moscow, 105005, Russia
E-mail: denisov_dg@mail.ru

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Modern domestic and foreign adaptive optoelectronic systems for various tasks of adaptive optics, using the methods of phase conjugation and aperture sounding, have been compared and analysed. The new approach for designing adaptive optoelectronic systems of the atmospheric type for correcting distortions of laser radiation forms an optical image is proposed. Prototyping of a laboratory setup was carried out to test the proposed circuit solutions. Criteria for assessing the quality of an optical image are proposed and a semi-natural study of their performance is carried out.

Keywords: adaptive optics, optical image correction, atmospheric optics.

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