Technology for determining reconstruction filter and processing large images

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Abstract

One of the important stages in imaging of the underlying Earth's surface based on the aerospace monitoring data is the image processing aimed at quality improvement. In this case, at least two problems arise: generation of structure and parameters of the restoration filter and organization of processing of large images.

In this work, these two problems are solved within the framework of the end-to-end automated technology developed by the authors. The underlying idea of this solution was published in [2]. Then it was applied to the problem of assessing the resolution of a video path based on the fragments of the recorded images [3]. In this paper, this scheme is applied to solving the problem of improving the quality of large images processed by a computing cluster.

Keywords: processing large image, filter, Earth's surface, aerospace monitoring, restoration filter, computing cluster.

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