A modified gray scale watershed image segmentation algorithm suitable for low contrast image has been proposed. Digital images acquired from far away stellar objects (like stars, planets, galaxies, comets etc.) are prone to be severely affected by various types of noises and the contrast of these categories of images are generally found to be low. In present study, a preserving de noising method is presented by a contrast adjustment based on adaptive histogram equalization technique. The proposed method has been found to yield satisfactory segmentation of the stellar images. The entropy of the original and the segmented image is compared and the result confirms to the reality.
A Modified Watershed Algorithm for Stellar Image

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Index Terms

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