Extended Local Histogram Modification A Novel Method for High Quality Image Presentation

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Abstract

Nowadays, using of remote sensing data is critical for various applications. In this case, representation of these data are of great importance in two forms of *Hardcopy* and *Digital*. Representation is expensive and needs special equipments In digital format, meanwhile the abovementioned problems don't exist in hardcopy format and it's usage is easier and more common. The major problem with hardcopy representation is the limitation of spectral details exhibition in remotely sensed images. *Global* and *Local Histogram Modification* are two conventional methods for solving above problem but former one doesn't have high performance and the latter has artifacts. Accordingly, this paper investigates on a novel method named, *Extended Local Histogram Modification* that is flexible for hilighting of spectral detailes without artifacts. Therefore, after this modification, spectral details of remotely sensed images will not be lost and the huge cost and processings will be conserved. The results of proposed method clearly indicate its improvement related to the conventional methods. The software is implemented and executed in PCI-XPACE environment.