

## **Preprocessing EO-1 Hyperion hyperspectral data**

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### **Abstract:**

Hyperion hyperspectral imager onboard the Eo-1 platform have 242 spectral bands between 400 and 2500 nm. This image have several error that we must correct them before use that for analysis. In this paper we examine preprocessing and noise reduction methods that can be applied post-level 1B1 to provide consistent time series of Hyperion data. The noise management strategy includes recognition of "bad" pixels, reducing the effects of vertical striping and compensation for atmospheric effects in data. Preprocessing which includes fixing bad and outlier pixels, local destriping, atmospheric correction, minimum noise fraction smoothing and effort polishing provide improved results.