AN UNSUPERVISED SEGMENTATION−BASED CODER FOR MULTISPECTRAL IMAGES (WedAmPO3)

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Abstract :

To fully exploit the capabilities of satellite−borne multi−hyperspectral sensors, some form of image compression is required. The Gelli−Poggi coder, based on segmentation and class−based transform coding, has a very competitive performance, but requires some a−priori knowledge which is not available on−board. In this paper we propose a new version of the Gelli−Poggi coder which is fully unsupervised, and therefore suited for use on−board a satellite, and presents a better performance than the original. Numerical experiments on test multispectral images validate the proposed technique.

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