ABSTRACT

The paper is about the performance of neural networks to perform nonlinear spectral unmixing when applied to hyperspectral data. A pixel-based classification algorithm is considered and implemented via a Multi-Layer Perceptron (MLP) neural network scheme. The experimental set-up consists of multi-temporal and multi-angular CHRIS-PROBA satellite imagery. The results obtained have been compared with those yielded by Linear Spectral Unmixing (LSU), up to date one of the most frequently used approach for dealing with the unmixing problems.