Abstract:

Classification process in hyperspectral images has been a complicated task in remote sensing area. For this reason, it is essential to take into account the special characteristics of hyperspectral images such us spectral unmixing. This study is based on developing the bridge between these two fields of investigation in hyperspectral image processing. In spite of their potential for synergies, these two fields are the more often considered separately. However, the experimental results reveal that it can be used in supervised, semi-supervised and unsupervised classification process and the obtained improvement is highly significant.