



Monitoring vegetation post fire recovery by using PCA and SPOT/VEGETATION NDVI time series

R. Lasaponara (1) and A. Lanorte (1)

(1) CNR -IMAA C/da S. Loya Tito Scalco – Potenza, Italy

Principal Component Analysis has been applied to a temporal series 1999 to 2002 of yearly Maximum Value Composite of SPOT/VEGETATION NDVI (Normalized Index Vegetation Index) for the Calabria Region for monitoring vegetation post fire recovery. Both forest and shrub-land areas, have been investigated in order to obtain information on the after fire vegetation behavior. Although, a correct interpretation of PCA results generally requires additional information, such as geographical knowledge, climatological data, field surveys, the main finding of the current investigation suggests that PCA can be a feasible tool to separately map areas showing different degrees of inter-annual variability, so providing valuable information for discriminating unidirectional changes.