Geophysical Research Abstracts, Vol. 9, 01430, 2007 SRef-ID: 1607-7962/gra/EGU2007-A-01430 © European Geosciences Union 2007



Behavioral trends observed in pre- and post-fire satellite NDVI time series

A. Lanorte (1), R. Lasaponara (1) and L. Telesca (1)

(1) Istituto di Metodologie per l'Analisi Ambientale, CNR, C.da S.Loja, 85050 Tito (PZ), Italy

Pre- and post-fire vegetational dynamical behaviour in a shrub-land site of Sardinia (Italy) was investigated, using the 1998 to 2005 time series of Normalized Difference Vegetation Index (NDVI) from SPOT-VEGETATION sensor. The detrended fluctuation analysis (DFA) was used to identify persistent behaviour, in order to characterize the stability/instability properties of vegetation dynamics. Our analysis points out to the following results: i) both pre- and post-fire vegetation dynamics are persistent; ii) post-fire dynamical behaviour is characterized by a larger degree of persistence; iii) a link between persistence and resilience can be identified.