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Persistent behaviors in SPOT-VEGETATION NDVI data for the Italian Mediterranean ecosystems

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Temporal series of satellite SPOT-VEGETATION Normalized Difference of Vegetation Index (NDVI) data from 1998 to 2003 were exploited for studying persistence in Italian Mediterranean ecosystems of southern Italy. We used Multiple Segmenting Method (MSM), which is well suited to analyze scaling behavior in short time series, and the Detrended Fluctuation Analysis (DFA), which permits the detection of persistent properties in nonstationary signal fluctuations. Our findings point out to the characterization of Italian Mediterranean ecosystems as governed by persistent mechanisms.