

Geophysical Research Abstracts,
Vol. 10, EGU2008-A-01111, 2008
SRef-ID: 1607-7962/gra/EGU2008-A-01111
EGU General Assembly 2008
© Author(s) 2008



NDVI and LST trend line analysis using coarse resolution datasets for the Mediterranean Basin 1981-200

S. Veraverbeke (1), R. Goossens (1)

(1) Geography Department, Ghent University (sander.veraverbeke@ugent.be/ Phone: 0032-9-2644646)

The NOAA PAL dataset, the GIMMS NDVI dataset and MODIS data provide useful information for global change research by means of remote sensing. Key parameters in global change research like NDVI and LST are provided or can be deducted on a coarse resolution for time series starting in 1981. The Mediterranean Desertification issue has been subject for much debate. Time series of July monthly average NDVI and July monthly average LST are analysed using per pixel trend lines for the Mediterranean region. A normalisation between the PAL-derived NDVI and LST and the MODIS NDVI and LST products was necessary for further analysis. The temporal trend of July NDVI and LST was computed for each pixel. This results in a slope and intercept value for each pixel, where the slopes indicated the long term vegetation and surface temperature trends. A high correlation between vegetation changes and LST changes exists. Areas of major changes, interesting for analysis on a higher resolution, can be pointed out.