

Trends of global photosynthetic activity of land vegetation by NOAA/AVHRR and MODIS/TERRA data

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The most effective way for obtaining of global photosynthetic activity trends of land vegetation consists in using of satellite remote sensing methods. In this work NOAA/AVHRR and MODIS/TERRA data for 20 years (1982-1999) was used. NOAA data was averaged by years and by latitude with step of 5°. The result of processing of this data shows that the global NDVI is increased by 1% for 20 years.

Spatial distribution of NDVI is considered. The result of the work has impotence as input and test data for a low-dimension model. Also this data can be used for estimation of local features of long-term dynamics.

Combination of data of NOAA and MODIS shows further increasing of values of the global NDVI. Obtained results can be important in connection with investigation of global warming.