



Global monitoring of annual vegetation cycles using spectrally resolved UV/vis satellite observations

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Vegetation-cycles are of general interest for many applications. Be it for harvest-predictions, global monitoring of climate-change or as input to atmospheric models. From novel spectrally resolving UV/vis satellite instruments (like GOME of SCIAMACHY) the spectral signatures of different types of vegetation can be identified and analysed. Although the spatial resolution of GOME and SCIAMACHY observations is much coarser than those of conventional satellite instruments for vegetation monitoring, our data sets on different vegetation types add new and useful information, not obtainable from other sources. We present the seasonal variation of vegetation for the time period 1996-2003 on a global scale and compare our results to other satellite data sets. We discuss the average seasonal variations as well as specific anomalies found in different years. Our data set will be extended using measurements of the GOME-2 series; this will allow retrieval of continuous time series for vegetation and land-use applications of more than 12 years.