



Potential of long time series of SeaWiFS FAPAR products in vegetation modeling

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Estimates of the photosynthetic activity of land surfaces (FAPAR) can be retrieved from optical remote sensing data and are now available for at least 6 years over the main CarboEurope IP sites. In this contribution we present initial findings of an inter-comparison of FAPAR estimates derived from optical remote sensing data with actual field measurements and radiation transfer (RT) simulations carried out with a detailed 3-D RT models. Various in-situ measurements, both spectral and geometrical, have been taken over two experimental sites in the Ticino region, Italy, and can be used to perform radiative transfer simulations that account for the 3-D nature of the target under study. These 3-D simulations, in turn, may prove essential in the analysis of scale issues when comparing information at different spatial resolutions, and provide the high accuracy levels that are needed to address carbon sink issues.