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Photosynthetic activities using remote sensing data over CarboEurope IP sites

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The biophysical activities on land surfaces are documented from spectral measurements made in space. Advances in the understanding of radiation transfer and availability of higher performance instruments have led to the development of a new generation of geophysical products able to provide reliable, accurate information on the state and evolution of terrestrial environments. Specifically, a series of optimized algorithms have been developed to estimate the Fraction of Absorbed Photosynthetically Active Radiation (FAPAR) for various instruments. Such an approach allows the synergistic use of FAPAR products derived from different sensors and the construction of FAPAR time series independent from the life time of these specific sensors. European map and seasonal cycle of vegetation activity over the main sites of CarboEurope IP are presentd.