



Assimilation of near-real-time GEOV albedo and LAI products within the ECMWF modelling system

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The vegetation state can prominently influence the global carbon cycle and it has been shown also to affect weather conditions via its control mechanism on evapotranspiration, development of planetary boundary conditions and clouds.

The impact of assimilating a satellite based Leaf-Area-Index products on surface fluxes derived from offline runs of the ECMWF land surface scheme is studied. The near-surface air temperature and humidity derived from coupled runs using the ECMWF Integrated Forecasting system (IFS) will be shown to respond to vegetation changes and the impact of considering both structural changes (LAI) and albedo changes in the vegetation is analysed and compared.