Geophysical Research Abstracts, Vol. 9, 05752, 2007 SRef-ID: 1607-7962/gra/EGU2007-A-05752 © European Geosciences Union 2007



## Feedbacks between climate, land cover, and carbon cycle on centennial to millennial timescales

V. Brovkin

Potsdam Institute for Climate Impact Research, Germany (victor.brovkin@pik-potsdam.de / Fax: +49 331 2882570)

Earth system model of intermediate complexity, CLIMBER-2, is applied for evaluation of future dynamics of  $CO_2$  and climate under different scenarios of anthropogenic  $CO_2$  emissions and land cover changes. Strength of climate-carbon cycle feedback in the future simulations is compared with model results for the last glacial maximum and with feedback analysis of ice core data. Results of integration of coupled climate-carbon cycle system through the next 50,000 years will be presented.