Geophysical Research Abstracts,
Vol. 10, EGU2008-A-03405, 2008
SRef-ID: 1607-7962/gra/EGU2008-A-03405
EGU General Assembly 2008

Land surface sensitivity studies with a coupled climate model

D. Putt, K. Haines, C. Liu

Environmental Systems Science Centre, University of Reading (djp@mail.nerc-essc.ac.uk)

There has been little work on the sensitivity of fully coupled models to land surface initial conditions. Properties that are particularly relevant are soil moisture content and snow which are often poorly represented. Ensemble coupled model runs with HadCM3 provide simple memory and prediction sensitivity experiments for land surface conditions. In this work, links between these land surface storage variables and climate indices such as ENSO and the AO are found, and compared with observations. The results of forecast runs are then used to indicate whether these land surface variables can be used as climate predictors.