Geophysical Research Abstracts, Vol. 8, 05385, 2006
SRef-ID:

Remote sensing of soil moisture in Southern Africa

Geoff Pegram, Ntoko Nxumalo

Civil Engineering, University of KwaZulu-Natal, DURBAN, South Africa
(pegram@ukzn.ac.za / Ph: +27-31-2603057)

From May 2005 the University of KwaZulu-Natal (UKZN) has been receiving METEOSAT-8 data directly from EUMETSAT under the MTAP project. In collaboration with the Institute of Photogrammetry and Remote Sensing of the Vienna University of Technology, UKZN has won a TIGER Innovator contract with ESA called SHARE to estimate soil moisture using scatterometer data as they become available; SHARE will complement the MTAP project in the estimation of soil moisture. In an associated endeavour, a grid of soil moisture probes managed by the South African Weather Service is being deployed for ground validation purposes. The presentation highlights progress made so far in the combined projects, emphasizing the linking of early morning temperature gradients with soil moisture variability range, taking cloud, fire, ground-cover and open water into account.