

Role of evaporation pathways in surface energy balance and atmospheric boundary layer diurnal cycles

D. Entekhabi (1)

(1) 48-216G, Massachusetts Institute of Technology, Cambridge, MA 02139, USA

Evaporation from exposed soil medium and evaporation through vegetation transpiration have distinct impacts on the diurnal amplitude and phase response of the surface and the atmospheric boundary layer to daytime solar forcing. In this paper field observations and numerical experiment data are used to establish some of the major distinctions. The implications for the interpretation of remote sensing measurements will be also addressed.