



Soil Heat Flux Density Measurements Using Renewal Surface to Evaluate Cultivation Practices in Semiarid Conditions

Rosario Garcia Moreno, Ruben Moratiel Yugueros, Maria Cruz Diaz Alvarez, and Antonio Saa Requejo
CEIGRAM (Centro de Estudios e Investigación para la Gestión de Riesgos Agrarios y Medioambientales). Universidad Politécnica de Madrid, 28040 Madrid, Spain. + 34 914524818

Flux soil energy, determines the potential for future production of soil, as it can serve to evaluate energy transferred from soil to plant. In the case of bare compacted and non compacted soils the balance is quite different because of the pattern of surface energy flux. This behaviour is conditioned by the erosion condition of the soil. In order to evaluate the relation between erosion and energy balance on soils, the authors monitored from fall to spring two different levels of compacted soil conditions based on tillage and soil surface roughness (SSR) in semiarid climatic region during fall and winter of 2010-11. From each site 6 plots were monitored. The final results showed greater SSR level and soil energy flux in non compacted plots versus the compacted site. Although further research would help to understand transit of energy in relation to other physical soil properties.