Evapotranspiration estimates using NOAA AVHRR imagery in the Pampa region of Argentina.

C. M. Di Bella, C. M. Rebella and J. M. Paruelo.

Abstract. We used multiple regression analysis to relate evapotranspiration (ET), computed from a water balance technique, to both thermal infrared and normalized difference vegetation index data obtained from the Advanced Very High Resolution Radiometer (AVHRR) sensor on board on the National Oceanic and Atmospheric Administration (NOAA) satellite. This approach, based on only remotely sensed data, provided a reliable estimate of ET over the Pampas, the main agricultural region of Argentina. The relationship between spectral data and ET was more sensitive to the dates than to the sites used to generate the models.