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Land use changes and soil erosion in the Central Spanish Pyrenees. The Aísa Valley Experimental Station

A. Cerdà (1,2) T. Lasanta (1)

(1) Instituto Pirenaico de Ecología. Consejo Superior de Investigaciones Científicas. Campus de Aula Dei. Apartado 202. 50080-Zaragoza. Spain

(2) Departament de Geografia. Universitat de Valencia. Blasco Ibáñez, 28, 46010- València. Spain

Land use has suffered fast changes in the Spanish Pyrenees throughout the 20^{th} century. Land abandonment resulted in an increase of shrubland and woodland, and a reduction of ploughed land. Due to the increase in biomass, wildfire is being more recurrent. These land use changes have induced changes in the sediment and water release at plot and slope scales. The Aísa Valley Soil Erosion Experimental Station is currently reproducing the most commons land managements: Scrubland, Cereal, Fallow, Burnt, Meadow, Control and Shifting agriculture, called here Artica,. The measurements carried out during 9 years (1991-1999) shows that the annual soil losses are always lower than 2 Mg ha^{-1} year^{-1}, and in average values for the study period do not exceed 1 Mg ha^{-1} year^{-1}. Fallow, Artica and Cereal land management induce the largest soil erosion rates ($>$ 0.2 Mg ha^{-1} year^{-1}) meanwhile the Abandoned, Burnt, Control and Meadow resulted in very low erosion rates ($<$ 0.2 Mg ha^{-1} year^{-1}).