



Post-fire changes in sediment transport connectivity from pedon to watershed scale. The Navalón wildfire in Eastern Spain

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Wildfire are present in the Earth System since vegetation was present in the continents (Doerr and Cerdà, 2005; Kaiho et al., 2013). Forest fire cause damage in the soil and the vegetation cover (Guénon et al., 2013). The years after a forest fire there is a sudden increase in the soil erosion rates that contribute to connect the pedon, slope tram, tram and watershed with surface flows that results in high erosion rates (Cerdà and Lasanta, 2005; Lasanta and Cerdà, 2005; Cawson et al., 2012; Pérez Cabello et al., 2012; Prats et al., 2015). Although the research on soil erosion after forest fire was carried out at different scales by different authors, there is not information about soil erosion at different scales at the same research site and during the post fire period. After the forest fire of April 2008 in Navalón, Eastern Spain, the Soil Erosion and Degradation Research Group from the University of Valencia initiated the measurement of the soil losses at pedon scale (microplots of 0.30 m²), at slope tram (silt fences of 1.8 m width), at slope scale (abandoned terraces) and at watershed scale, at the bottom of the valley (abandoned terraces). The results show that there is a reduction in the sediment yield from pedon to watershed scale and that the soil erosion took place in the first year after the fire.

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