Geophysical Research Abstracts
Vol. 12, EGU2010-164, 2010
EGU General Assembly 2010

Preferential transport of carbon materials in rain-impacted flows

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Sheet and interrill erosion removes soil surface materials that are rich in nutrients and carbon. Depending on the size and density of the particles involved, the transport processes in sheet and interrill erosion result in particles travelling across the soil surfaces at velocities that vary from that of the flow to near zero. The effect of this on the rate of discharge of carbon materials is illustrated through the use of a compute model simulating the detachment and transport mechanisms that operate in rain impacted flows.

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