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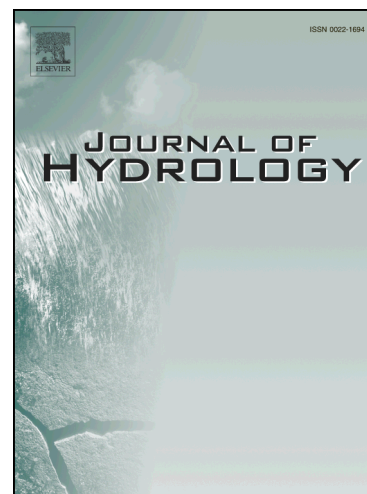
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**Water fluxes between inter-patches and vegetated mounds in flat semiarid landscapes**

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**Abstract**

It has been assumed that bare soil (BS) inter-patches in semi arid spotted vegetation behave as sources of water to near vegetated soil (VS) patches. However, little evidence has been gained from direct measurements of overland and infiltration water fluxes between bare soil inter-patches and shrub mounds at a scale compatible with available high resolution imagery and hydrological modeling techniques. The objective of this study is to address the thin scale internal redistribution of water between BS inter-patches and vegetated mounds at relatively flat spotted semiarid landscapes. The relation between plant cover, topography and runoff was inspected with non-parametric association coefficients based on high resolution remotely sensed imagery, ground truth topographic elevation and spatial-explicit field data on potential runoff. Measurements of advective flows at the same spatial scale were carried out at micro-plots of BS and shrub mounds. Water fluxes between BS inter-patch and a shrub mound were simulated under varying typical Patagonian rainfall

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