

Visualising the hydrological signature of an unsteady land cover – an application to deforested and afforested catchments in Australia, the USA and France

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Abstract This paper describes a method enabling the representation and visualisation of the hydrological signature of a hydrologically unsteady catchment. Based on the analysis of catchment pairs, the method is illustrated with examples of deforested and afforested catchments. With application of this approach, the decrease of water yield during forest regrowth is shown to be a common occurrence, observed in Australia as well as in the USA and in France.

Key words paired catchment experiments; forest hydrology; afforestation; deforestation