

Interactive comment on “Quantitative contribution of climate change and human activities to runoff changes in the Wei River basin, China” by C. S. Zhan et al.

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The division process of R does not change the relationship of water balance and Budyko hypothesis $E=P \cdot F(E_0/P)$. As we all know, over a long period of time, the water balance equation for a closed catchment can be expressed as $P=E+R$ if change in catchment storage can be neglected. Equation (12) is originated from the water balance equation $P=E+R$, and here R is divided into two parts, the field observed runoff R_{obs} and the disturbed runoff R_H . We agree that water withdrawal from natural streamflow may be used for irrigation and contributes to E , however R_H does not be counted twice. R_H in the paper just is regarded as an imaginary separate component in order to cal-

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culate conveniently, and has participated in the whole processes of catchment water cycle. The part of water R_H affects the local E and E_0 at the same time, and the compositive effect is applicable for Budyko hypothesis and elasticity method.

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