

This paper quantifies the impacts of climate variability and human activity on flow recession in the Jinghe River Basin (JRB) based on the streamflow elasticity method and two process-based hydrologic models (TOPMODEL and VIC). This study is of great interest to the research community, and provides new evidence to understand the impact of climate variability and human activity on hydrological processes. This paper is technically sound and can be easily understood. However, its presentation should be improved. The following minor comments should be addressed before it can be published.

(1) It is assumed that all the model (TOPMODEL and VIC) parameters will not change under climate change only. This assumption should be stated clearly and discussed, and the calibration method, calibrated results and relevant parameter values should be provided and analysed.

(2) Line 8 on page 12750: change “soil and a water conservation project” to “soil and water conservation projects”.

(3) Lines 27-28 on page 12570: check the sentence.

(4) Line 9 on page 12571: delete “areal”.

(5) Line 10 on page 12571: “variability” to “variabilities”.

(6) Lines 12-13 on page 12571: check the sentence.

(7) Lines 1-2 on page 12572: check the sentence.

(8) Lines 13 on page 12572: check the sentence.

(9) Line 9 on page 12574: delete “the equilibrium”.

(10) Lines 8-17 on page 12755: check the sentence, and different scenarios are presented in tables better.