

## ***Interactive comment on “Evolution of hydrological sciences from dimensions of object, discipline and methodology” by L. L. Ren et al.***

**L. L. Ren et al.**

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This paper aims to demonstrate the evolution of hydrological sciences from three dimensions: object, discipline and methodology. The topic is meaningful, which attempts to provide systematic knowledge of the evolution. However, lack of clarity in explanation and organization issues make this article difficult to follow. It fails to provide a comprehensive overview also because of the limited literature it covers.

Referee comment 1: Section 2: this part talks about “approaches of hydrology”. However, if methodology is one dimension you meant to discuss in section 3, what’s the purpose of this part?

Author Response: “Approaches of hydrology” of hydrology approach summarizes the  
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evolution course of the past to the present, it is narrower; and the methods on phase partition, it is broader.

Referee comment 2: Section 3.1: discussion in this part depends on one literature in 1987; it would be helpful to find more up-to-date papers to support your theory.

Author Response: We find this aspect of the up-to-date papers is very few, but we will pay more attention to this aspect.

Referee comment 3: Page 7, line 26: “people will be one of the biggest agents: : :” Suggest revision.

Author Response: Page 7, line 26: It has modified to “people will be the biggest agents: : :”

Referee comment 4: Page 8, line 7: the first three terms are not even defined. Assuming they are all important stages in the evaluation process, explanation is expected.

Author Response: Yes, the first three terms, viz. deterministic hydrology, stochastic hydrology, and isotope hydrology, were not defined owing to the limited space and hydrologists’ familiarity. We will give some explanation in the manuscript.

Referee comment 5: Section 4: in the end, many questions are listed as suggestions for future work. However, many of those have been studied at different scales (such as “what crops should be planted within a catchment”). It should be mentioned that most of the questions don’t have a universal answer but differ by case. Suggest revision.

Author Response: We have added that most of the questions don’t have a universal answer but differ by case in the manuscript.

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