Interactive comment on "Vegetation dynamics and climate seasonality jointly control the interannual catchment water balance in the Loess Plateau under the Budyko framework" by Tingting Ning et al.

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This paper investigated the influence factors on the annual trend of ET in the LP, and present a equation to calculate the parameter in Budyko frame. Generally, this paper is well written and easy to follow. The equation between parameter w and M, S presented in this study is interesting. I believe the data and results are solid and reasonable. My main concerns are about the discussion section. It would be better to add some discussions on the uncertainties of the method in this study:

In the attribution equation (6), the impact factors are precipitation, ET0 and w. In equa-

tion (7), the authors further present that w is the function of M and S. S is a function of precipitation and ET0. Thus, in equation (6), precipitation, ET0 and w are not independent. This independence could have impacts on partial derivatives. This uncertainties could be added and presented in the paper.

Additionally, the impacts of interannual changes of water storage could also be discussed in the paper. The traditional Budyko frame, i.e., equation (1), is conducted on average annual timescale. Therefore, delt_s can be ignored. In this study, the timescale is interannual and delts_s could be discussed in the uncertainty section. It would be better to add some reference to show that delts_s can be ignored on interannual timescale in the LP. The LP is a sub-arid and sub-humid area and delts_s may be relative small on interannual timescale.

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