

Interactive comment on “Developing a hydrological monitoring and sub-seasonal to seasonal forecasting system for South and Southeast Asian river basins” by Yifan Zhou et al.

Anonymous Referee #1

Received and published: 21 August 2020

This study develops a sub-seasonal to seasonal drought forecasting system for South and Southeast Asian river basin based on climate forecast and hydrological modeling. The performance of the forecasting initialized at May 1 for an 18-year period is evaluated against satellite retrievals and case studies. Overall, this is a well-crafted study with clear structures. I have some minor comments as follows.

Line 46-49: Repeated statements

Line 167: "2000-2018" and later in line 183 "from 2000 to 2017". Please double check.

Line 275: For forecast results of multiple members, the ensemble mean is based on standardized values of each member? Please clarify

C1

Lines 286-293: It seems the correlation is particularly high in northwestern regions of the study area even after 3-6 months. Could you please explain this?

Section 3.4 "Case study of the 2015 South and Southeast Asia drought" and section "3.5 Application to drought". The "case study of 2015 drought" is not an "application to drought"? Please think about this and revise them accordingly if needed.

Line 472-474: This overestimation of drought area from August is due to the low performance of precipitation forecast during the monsoon season? Please clarify this overestimation.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2020-362>, 2020.