

The author has evaluated the operational flood forecast of Mekong River for the recent thirteen years by using variety of performance measures. The topic is interesting and should find a relatively wide audience. However, the review has listed several comments which require the attention of the author.

1. The reviewer`s main concern is the innovation and the scientific importance of this work. In the reviewer`s opinion, the research question of this work (i.e. evaluation of operational flood forecast performance) is bit too general and therefore hard to focus on a specific point. I feel the author need to better justify in what sense his/her study is innovative from the other studies on this topic as well. Maybe to put in an inappropriate way, the article in this current form looks more like an evaluation report for Mekong River Commission rather than a scientifically sound paper. Therefore, the reviewer recommends the author to specify the innovation of this study by highlighting its contribution to the science in the introduction and conclusion.

2. The author has provided quite positive conclusion of the evaluation (line 492 to 496). In the review`s opinion, this conclusion might be a bit too optimistic. Indeed, the error looks low. How good a flood forecasting system is might also depend on the scale of the river, flood frequency, the topography feature of floodplain, shape of the valley and user requirements (e.g. different vulnerability depending on local land use near the river reach, GDP per capita etc). Therefore, it is difficult to draw positive conclusion by only looking at the skill scores without considering the above mentioned aspects. The conclusions need more justifications and the appropriateness of the flood forecasting performance should be (at least qualitatively) discussed by taking account the characteristics the study area.

3. In addition to Comment 2, the evaluation is done by using the average performance measure of the operational forecasting (e.g. standard deviation of 2.5 m upstream of Phnom Penh, Line 383 to 393). How useful are those generalized numbers? There should be more discussion regarding this point.

4. The reviewer doubt the use of ISIS model (1D hydraulic model) from Stung Treng to the ocean, where the area is characterized by flat river delta and floodplain, meaning that the flood pattern and local hydraulics are hard to fulfill the assumptions of de Saint Venant equations. More justification is needed on adopting ISIS model in the Mekong flood forecasting system.

5. In flat delta and floodplains like Mekong delta, small increase of water level might potentially lead to massive flood inundation extent. Those forecasted water levels might be misleading in this circumstance. Therefore, in order to conduct a comprehensive evaluation, the performance measures mentioned in the paper might not be enough. I understand flood extent evaluation might be hampered by the lack of flood extent data and the difficulties of implementing 2D flood modelling in the operational forecast. But those points might worth to be mention in the recommendations.

6. Satellite data is used in the flood forecasting to supplement the gauge data (line 145 to 150). The satellite data is usually associated with low accuracy and low resolution, depending on the cost. How the bias was removed from the satellite data? What is the uncertainty associated to those satellite data?

Minor comments:

1. Line 64: Sentence might be grammatically incorrect.

2. Line 187 to 191: I doubt those technique details in terms of data-preprocessing (in Excel or scripts) are really necessary.
3. Line 232 to 233: Maybe I did not fully understand, it is not clear to me why 32% of forecasts were excluded.
4. The title of Section 3 (i.e. Forecast Methods) and Section 6 (i.e. Methods) might be bit misleading. Maybe revise 'Methods' of Section 6 to 'Evaluation Methods'.
5. Line 448: Why was 70th percentile used? Was there any special reason? Why not 95th or 90th percentile were used?
6. Figure 1: Legend including basin shape, rivers network (lakes), gauge stations etc should be shown in the figure.