Hydrology and
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Discussions

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Interactive comment on "Indicators of Necessary Storages for Flood and Drought Management: Towards Global Maps" *by* Kuniyoshi Takeuchi and Muhammad Masood

Anonymous Referee #1

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General comments 1. Impact of climate change on necessary storages is assessed based on assumed target QT = Qmean, 3Qmean, 0.5Qmean. How can be applied for realistic conditions of the basin? If storage from 75 artificial dams in the Ganges are included as flood detention capacity or flood channel capacity, what will be necessary storage during flood?

Specific comments 1. P5 L2:"... = AOEB" should be "...= ADEB". 2. P5L9: not found "...discussed in 5.1". 3. P5L19: if m' = 150 days, it is not consistent with the location of it on horizontal axis in Figure 3, where m' should be less than 50 days. 4. P5L30: "...= A'OEB' " should be "...= A'D'EB' ". 5. P9L29: what is the duration (m) for the results in Figure 7. 6. P10L5: "...in Fig. 5." should be "...in Fig. 6." 7. P11L9-10: "...in

Fig.9a" should be "...in Fig. 10a", "...in Fig.9b" should be "...in Fig. 10b". Define (a) and (b) in Figure 10. 8. P11L20: what is the Hurst coefficient for GBM? 9. Figure 1: include legend for 5 10 20 50 years and long-term mean discharge. 10. Figure 3: if m' is on the left of m, the value of m' < 50 days. 11. Figure 6-8, 10-11, what is the unit of both axis? Basin boundary presented by green and/or red line make confusion with color legend of necessary storages. 12. Table 2: there is no comment and discussion for the result in this Table.