Interactive comment on “Stochastic modeling of Lake Van water level time series with jumps and multiple trends” by H. Aksoy et al.

Anonymous Referee #1

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General comments: The paper "Stochastic modeling of Lake Van water level time series with jumps and multiple trends" by Ph.D Aksoy, Ph.D Unal, Ph.D Eris, and Ph.D Yuce, presents a very useful study on the stochastic modelling Lake Van in Turkey and the authors achieve quite important conclusions for the stakeholders. The article is well-developed and it is clearly presented. However, some minor changes, especially technically should be done. They are listed in the 'Specific comments'.

Specific comments: 1. page 3, line 2: instead of 'up to' should be 'til'; 2. page 3, line 10: instead of 'demand; the' should be 'demand, the' 3. page 3. line 20: change 'all the time' with 'always'; 4. page 3, line 20: change 'expansive nature' with 'maintenance costs'; 5. page 4, lines 21-25: the fragment 'The lake water level time series is divided into homo- geneous periods by using a segmentation software (SEGMENTER
by Gedikli et al., 2008, 2010a,b). With SEGMENTER, up to four trend lines were fitted to the existing data instead of adopting one single tendency as usually used in previous studies (Sen et al., 2000).’ should be moved to the methods presentation. 6. page 5, line 20: change 'the increasing gradual trend' with 'a gradually increasing trend'; 7. page 5, line 26: change 'water level is' with 'water level was' 8. page 7, line 10: put '.' between 'variance' and 'The'; 9. page 7, line 15: put ',' between 'AR(2)' and 'which'. 10. in the text is Vaziri, 1994, but in the reference list the source is cited as Vaziri, 1997. Please clarify it.

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