

## ***Interactive comment on “Effect of Water Surface Area on the Remotely Sensed Water Quality Parameters of Baysh Dam Lake, Saudi Arabia” by Mohamed Elhag et al.***

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Reviewer #2 Remarks for Authors, The implementation of the partition analysis in the current article titled as “Effect of Water Surface Area on the Remotely Sensed Water Quality Parameters of Baysh Dam Lake, Saudi Arabia” is a fairly exercised and presented in a concise but thorough way and gives useful information. In my opinion, the article is worth publishing after the consideration of the following remarks: Major remarks: Why Sentinel 2, please explain. Data availability and the high sensitivity of the central wavelength (nm) of the Sentinel 2 bands excel the sensor to be used in related fields of qualitative and qualitative water studies. Why 2 years only why 1 year

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is not enough or 4 years for example The minimum data input for the temporal analysis to be steady and gives reliable results shouldn't be less than 50 entries according to Psilovikos and Elhag 2013. The current study is taking into consideration the monthly data collection which 52 overall entries in the current study to make sure the results are robust and statically approved Why 1 hidden layer and why 2 nodes, please explain. 1 hidden layer is used to avoid the overfitting of the analysis which may lead to less trustful results. 2 nodes because we have only 3 parameters to consider and number of the used nodes are calculated as the number of the considered parameters -1. Minor remarks: In page 1, line 12, its “of” instead of “on” Acknowledged and corrected In page 1, line 13, its water volume not water amount Acknowledged and corrected In page 1, lines 13-14, please rephrase Acknowledged and rephrased In page 1, line 18, its and monitor instead of record Acknowledged and corrected In page 1, line 20, estimated from Acknowledged and corrected In page 1, lines 23-26, please rephrase to add more results Acknowledged and rephrased In page 2, line 30, please start a new sentence Acknowledged and started In page 2, line 32, please replace the word “big” Acknowledged and replaced In page 2, lines 32-34, kindly rephrase Acknowledged and rephrased In page 2, lines 37-39, kindly rephrase Acknowledged and rephrased In page 2, line 40-43, kindly omit Acknowledged and omitted In page 3, line 50, kindly rephrase Acknowledged and rephrased In page 3, line 51, continuity of Acknowledged and corrected In page 3, lines 52-53, kindly rephrase Acknowledged and rephrased In page 4, line 84, Kilometer is one word Acknowledged and replaced In page 4, line 92, kindly replace “sake” Acknowledged and replaced In page 4, lines 119-122, redundant text, kindly omit Acknowledged and omitted In page 9, line 184, what does it mean “in km” Acknowledged and explained In page 11, line 191, kindly omit “s” confirm Acknowledged and omitted In page 11, line 193-196, kindly rephrase Acknowledged and rephrased In page 12, line 207, is it 51 or 52 Acknowledged and corrected

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