Interactive comment on "Monitoring surface water quality using social media in the context of citizen science" by Hang Zheng et al.

Anonymous Referee #1

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The manuscript by Zheng et al. describes an innovative and interesting citizen science - volunteered geographic information (VIG/CS) project. The project used observational qualitative methods to describe water quality. The project has high potential for success. With additional data, quality control and analysis, the authors will make important contributions to changes in river quality, citizen science in China and the role of cash prizes in VIG/CS engagement. However, at the moment, the results presented are extremely limited, too limited to allow for any significant discussion or analysis. The validation of the method is based on 15 samples taken by experts. The comparison between different indices shows only that some relationship exists between the data and there are not real analysis of the type of the data (normally distributed, significance, ..). It is unclear how the cs based index are related to the national values as they use two different scales, a simple regression is not sufficient. The larger Mode 1 data was

not used, either for single parameter analysis (were blooms reported in the months when blooms occur on the Yellow river)? or in their aggregate index (does the trend reported reflect expected spatial trends?). In general, there are not enough validation data to demonstrate that the method is useful as a tool for river quality analysis. The possibility to show the utility of cash prizes as an engagement approach is valuable, but again, there are not enough data. I suggest that the authors wait until they have enough data or reduce this manuscript into a short communication and concentrating on one robust result.