

## ***Interactive comment on “Influence of environmental factors on spectral characteristic of chromophoric dissolved organic matter (CDOM) in Inner Mongolia Plateau, China” by Z. D. Wen et al.***

**Anonymous Referee #1**

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This is an interesting paper that investigates the environmental factors that may mediate the spectral properties of CDOM in Inner Mongolia Plateau, China. The spectral differences of two different water types, i.e. terminal waters and river waters, are also addressed. The paper is well written and the work is well conducted, but some MODERATE REVISIONS would be needed to improve clarity in some parts. Recommendations are given below.

General and specific remarks: 1) Define abbreviations at their first mention there. For example, EC and TDS in the Abstract of this manuscript, is not clear and common word. Please redefine this. 2) The path length of cuvette mentioned in the text is

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only 1 cm. As the authors have mentioned that solar exposure in the plateau waters may result in strong photobleaching for the CDOM samples collected. From this point of view, the spectral measurements may result in a relatively high noise/signal ratio. Please fix this. 3) RDA in this study is chosen to investigate the relationships between environmental variables and light absorption-related parameters. What about CCA? Is there a possibility that CCA in this study may provide better results than RDA as RDA is a linear-based model while the other is not?

Minor issues 1) Page 5914, Line 21. "paddy filed" should read "paddy field". 2) Name of rivers and lakes should be given in Figure 1.

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