

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.

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Thank you for the comment. Our response to the comments as follow: Response to General and specific remarks: 1) We have defined the abbreviations in the Abstract. TSM is the abbreviation of total suspended matte, and EC is the abbreviation of electrical conductivity (EC). 2) We have used both 0.01 m and 0.03 m path length of cuvette for the spectral measurements, the noise/signal ratio was no obvious distinction, and both could be accepted. Although solar exposure has strong photobleaching for the CDOM in plateau waters, the measured CDOM concentration was not lower than the values in plain waters. This may be related to the DOM constituent through terrigenous

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input. 3) Based on log-transformed matrices, an exploratory detrended correspondence analysis (DCA) was used to determine the gradient length in the pigment data and to choose between unimodal and linear methods for subsequent analyses. Accordingly, RDA was performed to investigate the relationships between environmental variables and light absorption-related parameters. Response to Minor issues 1) Page 5914, Line 21. We have corrected a typographical error, "paddy filed" is substituted by "paddy field". 2) We have added a larger image of sampling sites with the name of Figure1b, and the name of rivers and lakes have be given in the remarks. The river waters are the following: Kerulen River (1, 11), Hailar River (21, 31), Yimin River (22-23), Buir Lake (24-28), Ergun River (29), Moegele River (36), Zhadun River (30, 41), Wulannuor wetland (34), Qingkai River (38), Hulun Lake (5-9). The saline waters are the following: Dalai dongsumu (2), Wulanpao (4), Erdunwula (10), Buerdun (15, 17, 42), Hangwula (16), Chaganbuchu (18), Bayanzhuori (32-33), Huhenuor (19), Bayankuren (37), Harinudun (35), Hari gantingburide (39-40), Harizhuori (3, 43), Haolibaotu (44), Harnuor (45), Beirsumu (46).

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