

## ***Interactive comment on “Comparison of UV/Vis and FDOM sensors for in situ monitoring of stream DOC concentrations” by G.-Y. Yoo et al.***

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In this work, the authors examined the possible environmental factors resulting in the changes in the signals produced from in-situ UV-Vis and fluorescence sensors. This kind of effort can make lots of contributions to more accurate estimate of DOC export from ecosystems, particularly from forested watersheds enriched with organic carbon. Overall, the manuscript is well-organized. It is nice to see the suggestions for proper use of the optical sensors in field for accurately monitoring DOC concentrations, which is based on sound experimental data. I have a few comments for the improvement of this manuscript.

(1) It seems insufficient to state the novelty of this work in comparison with the previous similar reports. Is that comparing/testing UV-VIS and fluorescence sensors at the

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same time? More explicit statement about the originality needs to be added in revision. Adding a new table can be an idea for a better comparison between this work and the prior studies with the detailed sensor types and the conditions provided.

(2) Is there any possibility that the sensors manufactured by other companies could produce a little different trends and/or different degree of the sensitivity to temperature and turbidity. The related discussion is needed.

(3) As the authors indicated, the sensitivity of the sensors is likely to be dependent on the dominant components of DOM in water samples, especially for fluorescence sensor. In this regard, this study may be somewhat limited to generalize their findings into other fields (even into other forested watersheds). Please note that the in situ data of this study are produced from a single forested watershed over a limited time period. It would be nice to add the possible limitations or convincing statements over the further applications.

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