

## ***Interactive comment on “Turbidity in the fluvial Gironde Estuary (S–W France) based on 10 year continuous monitoring: sensitivity to hydrological conditions” by I. Jalón-Rojas et al.***

**Anonymous Referee #2**

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This article represents an important contribution to our understanding of the evolution of turbidity maxima in macrotidal estuaries under varying fresh water flow and tidal range. It is well laid out and clear, with a good structure. It is most useful to present a long term, high resolution data set in this way and to alert readers to the possibilities afforded by such a level of monitoring. Thus, I fully support publication.

My comments are generally minor and relate to the way in which the arguments are presented. I think readers will primarily be interested in the question of what the results mean for the future of the estuary and for management regimes. So, Section 5.3 on 'has the turbidity intensified' is important here and should be referred to in the abstract

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and aims.

I am not in favour of the use of the terms 'installation' and 'expulsion' as, in my experience, these terms are not well known. Can I suggest 'Upstream migration' and 'downstream flushing'?

Please be aware of the following paper on the Thames which I believe to be relevant:

Mitchell S.B., Uncles R.J. and Akesson L. 2012. Observations of turbidity in the Thames estuary. *Water and Environment Journal* 26, 511-520

I have tried to attach it to this comment, hopefully I have succeeded

Please ensure to provide a clear key (legend) in Fig.15 to help interpretation of this figure

Please also note the supplement to this comment:

<http://www.hydrol-earth-syst-sci-discuss.net/12/C1447/2015/hessd-12-C1447-2015-supplement.pdf>

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Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 12, 2843, 2015.

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