

Interactive comment on “Maximum power of saline and fresh water mixing in estuaries” by Zhilin Zhang and Hubert Savenije

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Received and published: 27 December 2018

1. The paper presents interesting view for saline intrusion in estuaries. It deserves a publication after some revisions. 2. For salt intrusion in estuaries, the driving agents are diverse, rather than the gravitational circulation only. As mentioned in the manuscript, tidal mixing is another key element. Even in the upstream part of an estuary, the gravitational circulation is still not the main driver, other processes like tidal pumping, tidal trapping are more important. How to ensure the validity of your concept? 3. I have not got any expression of the Mex in your manuscript. How the Mex is expressed and how it can reach a maximum? 4. The dispersion of salinity is rather a very ambiguous term, what is its physical meaning? how to define and describe it?

C1

Interactive comment on Earth Syst. Dynam. Discuss., <https://doi.org/10.5194/esd-2018-78>, 2018.

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