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OSD

Interactive comment

## Interactive comment on "Sensitive dependence of trajectories on tracer seeding positions – coherent structures in German Bight surface drift simulations" by Ulrich Callies

## **Ulrich Callies**

ulrich.callies@hzg.de

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## Dear Rodrigo Duran,

thanks your comments on this manuscript. I fully agree with your statements that "attraction does not imply convergence" and also that additional computations are required "to diagnose whether the attraction detected through FTLE is due to divergence-free confluence or convergence". Indeed these additional computational computations were already conducted in this study, computing the Finite-Domain Lagrangian Divergence (FDLD) (see section 2.5). Corresponding results are shown in Fig. 1b. You probably missed that when reading just the discussion (see your disclaimer). Which

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means that the issue should be addressed more clearly in the discussion section.

In conclusion, the error you mention does not really exist. However, in the revised manuscript, the fact that generally attraction does not imply convergence will be stated more clearly. It will be emphasized that convergence along FTLE ridges is an extra outcome of this study rather than something that must necessarily occur.

Best regards
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**Ulrich Callies** 

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