

## ***Interactive comment on “A method to calculate Finite-Time Lyapunov Exponents for inertial particles in incompressible flows” by D. Garaboa and V. Pérez-Mu nuzuri***

**Anonymous Referee #2**

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This paper introduces a novel methodology to compute FTLE for inertial particles in an incompressible flow, where the dependence of the initial velocity of the particles is taken into account.

The paper introduces original material which is for sure interesting for the study of inertial particles in flows, and in my opinion it deserves publication after the authors have improved the writing of some parts of the manuscript. These are the abstract and the methods section. For example, in the abstract it is not properly mentioned/defined the iFTLE and in the methods section there are some magnitudes not defined and others not clearly explained (why  $\Gamma_2$  does not appear in the equations?). Also, some misprints in the manuscript can be corrected with a careful reading by the authors

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of the draft.

Thus, when the abstract and methos section have been improved, this paper will be ready for publication in NPG.

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Interactive comment on Nonlin. Processes Geophys. Discuss., 2, 989, 2015.