Reviewer 1

We thank Referee #1 for his/her comments on the original manuscript.

Reviewer 2

We thank Referee #2 for his/her helpful detailed comments on our original manuscript. We have addressed all the comments to improve the paper. Our responses to the individual comments are as follows:

A. Major drawback

1. The scientific objectives of the paper are now better stated in the introduction. The use of Eulerian and Lagrangian metrics to quantitatively describe surface dispersion is also better motivated.
2. The errors on the MSSD, FLSE and DKPs due to the drifter GPS position error is now discussed in more detail, and relevant references are added. Bootstrapping is used to provide 95% confidence intervals on the mean values involved in the MSSD and FLSE calculations. We do not believe that the agreement with theoretical slopes would be better by fitting the FLSE spectrum. For estimating the DKPs, the DIVA interpolation was used with a S/N of 10 (error of ~1 cm/s on velocities of ~10 cm/s) and decorrelation scales of 1 km. Spatially interpolated values with relative error larger than 50% are excluded.
The errors when estimating the DKPs using the least square approach are not discussed here since this method is not used.

B. Specific comments

1. The Boffetta et al. (2000) has been added and the definition of the FSLE has been expanded.

2. We considered the average growth time rate.

3. Indeed equations 3 and 4 correspond to the first order Taylor expansion. No mean flow is added because, as stated in the text, we consider the flow with respect to the center of mass of the drifters.

4. The CMEMS currents have been added to all panels of Figure 4. Text on the qualitative comparison with the drifter velocities has been added. We have checked that FSLE from CMEMS (actually from AVISO) are too large scale and are not relevant for this study.

5. Each curve has now a different color and the corresponding discussion has been expanded.

6. 95% confidence intervals based on bootstrapping have been added to the FSLE curve. In addition, the estimate using Boffetta et al (2000)'s method has been overlaid for comparison.

7. Figure 8 has been removed because its information content was poor.

8. Figure 9 has been removed because its information content was poor. The figures with the DKPs have been modified (more dates and better graphics). Color scaling was not changed, in particular

the zero values have been kept in green to contrast them with the white areas with no data (outside the 50% S/N level).

9. The use of mixed Eulerian (DKPs) and Lagrangian (MSSD, FLSE) metrics (or statistics) to describe the circulation and dispersion is now better motivated.

10. Indeed, several papers in the literature deals with the comparison, but generally at larger scales than those considered here, and with better success. This has been added in the revised text.

11. The horizontal divergence ranging between these values is a result, showing the significant spatial and temporal variations of the DKPs.

12. We do not understand this comment!

13. ok

14. Several relevant references have been added to support the revised text.