Comment on egusphere-2022-112
Anonymous Referee #2

Main comment:

The description of the general circulation of the northern area of the Gulf of Cadiz has been described based on data from the cross-border radar network in Spain and Portugal. The study is well founded, various methodologies have been applied and the analysis of the results reaches conclusions consistent with the literature. I strongly recommend the publication of the paper.

Minor comments:

- The surface current velocity is not the same for drifters, ADCPs and HF radars. Considering also that the surface boundary layer varies greatly in the first meters, which water parcel is measured by each instrument must be described, as well as an explanation of the possible discrepancies between one method of measurement and another.

- The drifters measurements do not provide much information to the study even in the validation phase. I would advise removing them from it.

- The text alludes to the low eccentricity of the STD ellipses when the radars are aligned. However, very close to the coast, the high eccentricity is recovered despite continuing with a high GDOP. Any explanation?
Typos:

Line 260, ‘... of low eccentricity’ must say ‘high eccentricity’.

Figure 7, caption: ‘...temporal modes 1 (b: amplitude, c: phase)’ must say ‘(c: amplitude, d: phase)’.