Manuscript:CSR 299Title:Circulation in a stratified and wind-forced Gulf of Lions, NW Mediterranean<br/>Sea; in *situ* and modeling dataAuthors:Petrenko, A. Leredde, Y., Marsaleix Y.Editor:Collins

Erratum: Abstract and p15 "shallower" should be changed to "deeper"

p14 last line of left column should be: "The modeled thermocline is hence generally shallower (deeper) than the measured thermocline on the western (eastern) side of the gulf » and not the reverse

p17 "eastward" instead of "eastern"

## Answer to the reviewers' comments

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	Sea; in <i>situ</i> and modeling data
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The few typos or English corrections suggested by the two reviewers have been corrected.

## Reviewer M. Jekel

Correlation between the wind and the intrusions:

The authors have corrected their point of view, as asked, page 22 (Section IV. 2 third paragraph).

"In the case of the SARHYGOL 3 cruise, the intrusion at the eastern side of the gulf occurs during weak north-eastern winds and after a strong event of north wind (mistral) that ended on June 9. But the present state of analysis can not prove whether the intrusion is correlated to the mistral event. Indeed, during the 21 days of simulation, no correlation was found between eastern intrusions and periods of strong mistral (J. Gatti, personal communication). Further tests need to be done to check the importance of wind forcing and stratification on the occurrence of eastern intrusions. These tests could not be done here due to the Sarhygol cruise strategy, and hence scarcity of available data on stratification."

As said, the Sarhygol cruise strategy was not the best to study these intrusions. Since then, additional data have been acquired during the Golts project and are studied by J. Gatti, a thesis student. With these new data and simulations, the respective contribution of weather conditions, stratification, and topography will hopefully be estimated.

## Second reviewer

1- The main reason of why the Symphonie model was chosen in preference to the two other models was added page 4.

3- The point about the interpretation of Figure 10 was taken into account (page 16). In fact, it was not possible to make it clear with just one figure without entering into much more details so that Figure 10 was taken out.

5- The changes have been incorporated in the Figure 2 caption.

6- The color code has been mentioned in the figure captions of Figures 4, 6, 8, 9 and 11.

7- Sorry about the omission of the dotted lines that were indeed supposed to be - and now are - on both Figures 9 and 11.