- **Response to Referee 1**

We thank Dr. Holzbecher for his careful and useful review of our manuscript. **Below we respond (in bold type) to Dr. Holzbecher's specific comments** (in normal type)

RC1: The paper is an excellent study in which different methodologies (hydrogeological,physical and geochemical) and data are combined to obtained a coherent view of thesystem. I suggest few technical corrections, which I list here:

Line 94: Table 1, do not justify text within table cells

Yes, we will make the suggested change

Line 272: Table 2, use centered format in all cells, including header

Yes, we will fix this

Line 294: Table 3, do not justify text within table cells

Yes, we will correct that

Line 346: leave blanc between number and unit, 69 m h-1

Thank you for catching that, we'll fix it

Line 368: Figure 5, the 2x2 sub-figure design extends outside of the page margins; as the reader may want to see the details, I suggest to put sub-figures a-d vertically in a 4x1 design

We agree with the comment and we'll make the suggested changes

Line 450: use italics for ffresh and fsalt, in order to match with format in the equations

Thank you, we'll fix that

Line 528: use italics for the f-factors, in order to match with format in equation 3

Yes, we'll use italics for consistency

- **Response to Referee 2**

We would like to thank Referee 2 for the constructive feedback and the suggestions to improve the manuscript. Below are our responses (in bold type) to the referee's specific comments (in normal type)

RC2: Authors used multi-tracer approach to understand occasional saltwater intrusions in a karst coastal aquifer in southern France. The topic fits with the journal scopes. In general the paper is well written.

Thank you for this positive feedback

My major concern is the novelty of this work. The methodology and approach are standard. From this point of view, the paper does not present any novelty. However, the novelty relies on the study area. But this point is briefly discussed in the paper. I am suggesting minor revision. I

would like to ask the authors to revise the introduction to point out the novelty of this work by discussing more previous studies on understanding occasional saltwater intrusions in the study area and some previous works related to the methodology.

We will revise the introduction to better reflect the novelty of our work, as suggested by Referee 2. As pointed out by Referee 2, the novelty relies in the study area. To the best of our knowledge, the literature on occasional saltwater intrusions through a submarine karst spring is very limited. Our work stands out from the previous studies in the study area in part because our multi-tracer approach includes more tracers and consider multiple inversac events since 1967. Also, previous studies in the Thau basin focused on the hydrochemistry while our work is the first to combine a multi-tracer approach with hydrogeological data to fully describe this phenomenon. Our comprehensive approach was helpful in developing a new conceptual model of the site and provide insights on the management of the groundwater resources.