Comments on Revised Manuscript titled "Fast local warming is the main driver of recent deoxygenation in the northern Arabian Sea" by Zouhair Lachkar et al.

General comments

I find that the revised manuscript has undergone extensive changes and has significantly improved in its scientific content, with much cleaner analyses and illustrations compared to the original version. The authors have carefully addressed all my comments on the original version. While some improvements are still required in writing (presentation), I would recommend the manuscript be considered for publication after addressing some minor issues listed below.

Minor comments

1. P6 L1: It should be S3 instead of S2.
2. Fig S1: Change 76W to 76E.
3. P9 L13: change "three" to "four".
4. P9 L14-24: Mention or mark the region over which the heat fluxes are set to climatological in S_{hclim} and S_{hclim_AG}. I presume (as inferred from your answer to my earlier comment # 3) that Gulf warming is not included in S_{hclim}. Similarly, provide precisely the region over which the winds have been modified in S_{wclim_JJAS} and S_{wclim_DJFM}.
5. What are the 0 contours in Figure 4b in most of the regions? The consistency between contours (last minus first five years) and color shading (trend) is unclear.
6. P15 L10-12: "This is as oxygen…" - Not clear
7. P17 L11-13: I find that summer wind intensification occurs mainly south of 20^{o}N in the AS (Figures 2c, S17d). Then how does the wind intensification drive shoaling of thermocline depth in the northern AS? This needs clarification.
8. P17 L31-32: Is it referring to Oschiles et al. (2019; Loss of fixed nitrogen causes net oxygen gain in a warmer future ocean)? May cite the paper.
9. Fig S13: How are the trends computed with gaps in the data?
10. Fig S14: Which box is referred to in the caption?
11. Fig S16 vs S8: Why different (SeaWiFs/OC-CCI) products are considered, though both are available during the period considered?
12. Fig S18: Mention it for the AS.