Review of MS egusphere-2023-208R

This new version is acceptable for final publication in BG provided that the following corrections are made, none of them being of major importance.

Page 3 – line 26: "The observations in these studies show higher autumn and winter COS molar fractions in the Netherlands than those at Gif-sur-Yvette and Trainou"... and than those at Mace Head too! It is worth mentioning that autumn and winter COS molar fractions in the Netherlands are higher than in the other European countries (or regions) where COS is monitored in the lower atmosphere.

Page 9 – Figure 2d and page 12 – lines 10-13: Panel 2d identifies the sources influencing Lutjewad in the Ruhr area only during period 4 (see Fig. 4). However, COS enhancements during periods 1, 2 and the last of period 3 were attributed to industry in the Antwerp-Rotterdam region. I think than an illustration targeting the last episode of period 3 should be provided in the main text or in the supplements.

Page 14 – Figure 6: The periods of interest highlighted in yellow in Fig. 4 should be displayed in Fig. 6 too. Please explain why the dashed red curves in Fig. 4 and the upper right panel in Fig. 6 don't look the same.



The recent efforts to better quantify anthropogenic sources of COS in Europe by Belviso et al. (2023) are not mentioned.

## References

Belviso S, Pison I, Petit JE, Berchet A, Remaud M, Simon L, Ramonet M, Delmotte M, Kazan V, Yver-Kwok C, and Lopez M. (2023) The Z-2018 emissions inventory of COS in Europe: A semiquantitative multi-data-streams evaluation. Atmos. Environ. 300. https://doi.org/10.1016/j.atmosenv.2023.119689