We are grateful to the three reviewers for their helpful and thoughtful comments. The following provides point-to-point responses to the questions from each reviewer.

Reply to Reviewer #2

The majority of this paper focuses on the ozone climatology of this data set but the first application is about the temporal evolution of stratospheric ozone. The authors can also further evaluate the potential of this data set on ozone trends which are of broad scientific interests.

Reply: Thanks—we intend to do so. More discussion in temporal variation of ozone from this study is added into Section 4.2 and Table 4.

P16848 L15: "ozone climatology" -> "ozone date set". *Reply: Changed.*

P16851 L5: "tends unduly to smooth" -> "tends to unduly smooth" *Reply: Changed.*