

- I think that this revised manuscript is an improvement, although some things are still not all that clear in terms of the differences between the ground-based and the satellite data, i.e. where the truth lies when the differences in VMR or the day-to-night ratios become larger (and this is difficult to assess, I realize). It is also therefore not obvious that the newer retrieval leads to better results, in terms of biases at least.

- I view this revised version as suitable for publication after some minor/editorial changes, see the suggestions below.

Minor/editorial comments

- Page 1, Line 9 (P1, L1), not clear what "over 20%" really means (larger or better/less than 20%, or about 20%?).

> also, L15, I would reword as "related to the ozone middle mesospheric maximum (MMM)."

- P2, L14/15, "performed an analysis of the ozone diurnal variation and its amplitude (night-to-day ratio) in the middle mesosphere at 0.05 hPa (70 km)." [although since the study was also performed at other altitudes (no?), maybe mentioning just that altitude is not needed].

> L20, I would delete "the" in front of "nighttime".

- P4, L8, I would delete "of the" before "ECMWF".

> L22, I suggest "decrease exponentially with a correlation...".

- P5, L2, I would say "and in the case of version 2021 it is 30 minutes."

> L6, I would say "standard deviations"

> L8, I suggest changing "are ranging" to "range".

> L14, "The left panel shows".

> L32, change "limit" to "limits".

> L33, For technical details and measurement principle...

- P7, L12, For an overview of the differences ...

- P8, L7, I suggest deleting "for the already mentioned time period"

> L9, in order to provide an insight into the observability...