

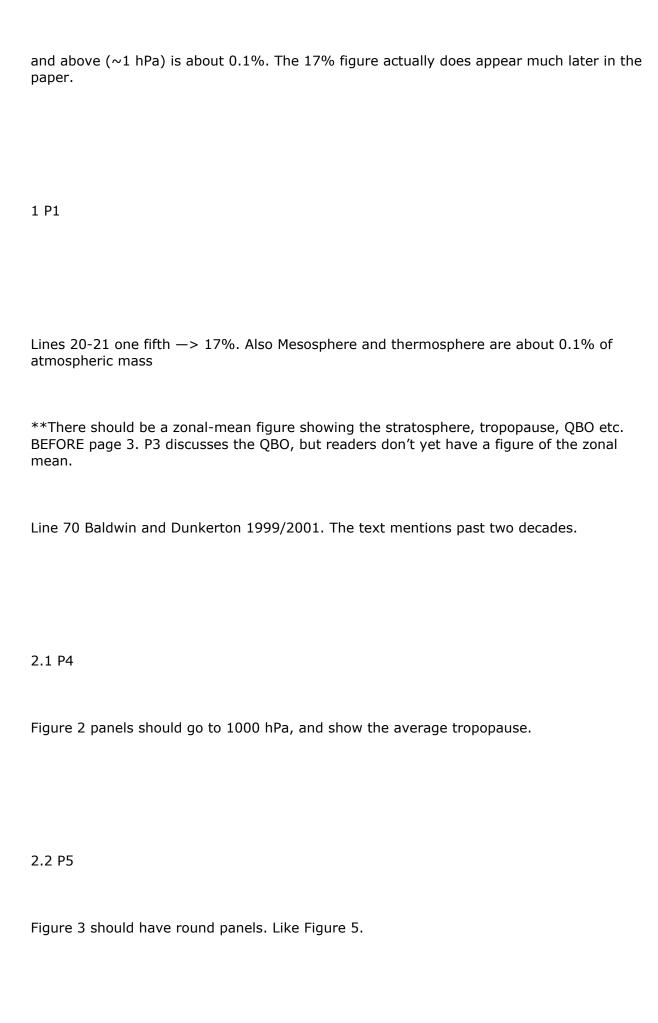
Weather Clim. Dynam. Discuss., referee comment RC1 $\,$ https://doi.org/10.5194/wcd-2022-34-RC1, 2022 © Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.

Comment on wcd-2022-34

Anonymous Referee #1
Referee comment on "The stratosphere: a review of the dynamics and variability" by Nea Butchart, Weather Clim. Dynam. Discuss., https://doi.org/10.5194/wcd-2022-34-RC1, 2022
Major comments:
This is an excellent, in-depth review, and I recommend that it be published after minor revisions, detailed below. There are some questions of scope — topics that are not included but could be. I think this is largely up to the author.
Minor comments:
Abstract

Line 7 and other places. Baldwin et al. (2019) established that the mass of the

stratosphere (and above) is \sim 17% of the total mass of the atmosphere. The mesosphere



Line 154. What is "the advective component of the Brewer-Dobson circulation"?
Line 170. I suggest explaining what a critical layer is.
2.3 P8
Line 188. Is the exclamation point part of the quote?
Figure 6. The panels are slightly different sizes and the (a) and (b) are not the same.
2.4 P10
I suggest deleting the paragraph from l211-217. It does to add much.
2.5 P13
Line 277. It is worth adding to 1979 that satellite observations began then, and before that the data were unreliable.
3 P15

