

Referee comment on “On the hiatus in the acceleration of tropical upwelling since the beginning of the 21st century” by J. Aschmann, J. P. Burrows, C. Gebhard, A. Rozanov, R. Hommel, M. Weber, and E. Serrano

The authors thoroughly addressed the points raised by the reviewers and, in my opinion, the manuscript has clearly improved. In particular, I like the discussion about the structural change in the Brewer-Dobson circulation, showing how the acceleration of the shallow branch above 70 hPa has ceased while the strength of the transition branch below increased.

I regard the paper as almost ready for publication in ACP, but still have three minor comments:

1. I also see that the correlation between increasing upwelling and decreasing ozone, which even holds for the trend change around 2002, provides a strong argument for the upwelling change causing the ozone change. However, a correlation is no proof and from my point of view the authors cannot ultimately rule out an impact of changes in tropics–extratropics mixing, as long as they do not explicitly calculate this term and show its effect on tropical ozone. Therefore, I think it would be good to clearly state this, perhaps at the end of Sect. 3.1 or in Sect. 3.2 (e.g., *Although we cannot ultimately rule out an effect of mixing ..., the most probable explanation ...*).
2. (P6/L3ff) Why should a high bias of vertical transport cause a high bias in the relative upwelling trend (which is here given in %)? Please clarify.
3. (P6/L6) *After 2002 ..., around 2002 ...* remove the *around 2002*.