

P1, L20: flown under not correct, I guess you mean flown "on". Aren't these instruments mounted on the balloon?

P1, L24-25: "for a flight which flew" -> this sentence makes no sense. Rephrase it to "for a flight performed" or "for a flight made".

P1, L26: What do you mean with "variabilities according to the flight"?

P1, L20-27: The abstract still needs to be improved, especially the result part and implications of this study. The last sentence of the abstract is really a bit poor. It sounds like that waves are only important for the measurements on balloons although the observations of these waves are important to understand atmospheric processes related to water vapour.

P3, L86: Acronym MLS has not been introduced.

P3, L98: two first -> first two

P4, L108: Add "the" -> the stratospheric water vapour budget

P4, L109: What do you mean with "five flights have been already released"? Shouldn't it rather read "five flights have already been performed" although I think that "already" is generally obsolete in the sentence.

P5, L122: Delete "used" and consider even renaming the section to just "Instruments and Datasets".

P5, L124 and following subsections: 3.1. -> 3.1, the dot after the second number is obsolete

P5, L142: space between number and unit missing.

P8, L215 and throughout the manuscript: In many occasions there is a double space between "correlation" and "coefficient" -> one space should be removed.

P8, L215: to water vapour -> of water vapour

P10, L262-263: from 800 m to 1.5 km is an increase and not a drop of the balloon altitude.

P10, L270: wave -> waves

P11, L274: Remove full stop at the end of the subsection header.

P12, Figure 5 caption: "for each flight" misplaced? Doesn't this hold for both values and thus this should appear at the end of the sentence?

P14, Figure 6 caption, last line: Shouldn't "respectively" rather appear at the end of the sentence? However, I would rather suggest to omit using "respectively".

P15, L333: Here 0.65 written, but in the table (Table 2) 0.64 listed.

P15, L339: fight -> flights

P15, L340: In this sentence something is missing. What is the case for the other two flights.

P15, L350: stands in -> is in

P15, L350: observed in the -> obtained from

P15-16: Following your discussion on the results is really difficult. More guidance to which table you are referring to would maybe be helpful and generally improving the structure and better motivate for what you actually do which analysis.

P16, L380: To which table are you referring here to? What about Table 3? This table is only shortly mentioned, but not further discussed.

P17, L397: Rai is one -> Rai was one

P18, L417: If you cannot derive the anomalies, which anomalies are then plotted in Fig. 8? How have these been derived?

P18, Figure 8: Hard to see here a quasi-linear relationship. What may help is if you would adjust the y-axis of panel a and b to the y-axis of panel c. Since the black dots overlay over all other coloured dots it is quite hard to follow your discussion later on. It would help if you would use a different colour than black for the data of this date. Further, what date is plotted with the black dots is missing in the legend of panel a and c.

P19, L425: Shorten section title? Thus, skip "Isentropic level"?

P19, L432: Add "the" before "balloon".

P19, L438: Add "the" before "amplitude".

P20, L485: was fed -> was run or was driven

P21, L490: What is meant with signature? Do you mean the structure in the anomalies? Do you mean "positive anomalies"?

P22, L493: The blue dots are hardly visible in the figure.

P22, L497: Strateole is written in at least three different ways throughout the manuscript. Decide for one way of writing and do this consistently throughout the manuscript.

P22, L508: are limit cases to the -> are limiting cases of the

P23, L533: I suggest to rename "Conclusion" to "Summary and Conclusion" since you also provide a summary of your results.

P23, L535: under -> on

P23, L545: flight -> flights

P24, L569: Change "More generally" to "To summarize" or "To conclude".

P24, L578: bias -> biases

P24, L579: If -> Although

P25, L606: robu**st**ness -> robustness

P26, L607: There is no next section!

P26, L608: Change TTL2 to the full flight name.

P25 and P26, Figure A1 and A2 caption: Blue text should be black text.

