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Atmospheric Measurement Techniques Discussions

Interactive comment on "The Radio Occultation Processing Package ROPP" *by* I. D. Culverwell et al.

Anonymous Referee #2

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General comments:

- In my opinion section 1 (Introduction) should also notice other RO processing systems where ROPP is one of them.
- In addition when mentioning NWP and climate monitoring in section 1 some more references should be added:
  - For NWP mention e.g, some centers which are using RO data in their assimilation procedures (e.g., Cucurull and Derber (2008), Healy and Thépaut (2006), Aparicio and Deblonde (2008)).

  - For climate monitoring cite e.g., Steiner et al. (2011) and/or the RO-trends papers of Steiner et al. (2013) and Ho et al. (2012).
- Regarding the structure of the paper I suggest combining sections 3 to 8 into one section called something like "... detailed view on ROPP ...".
- I suggest integrating section 11 in the Introduction.
- In my opinion section 9 is somehow overrepresented. I suggest either integrating it into the overview section (section 2) or into section 3.

Minor comments:

- Please explain all acronyms at their first occurrence.
- Cite tools which are used by ROPP at their first occurrence, i.e., in the overview section: e.g.: the 2D-Operator (Healy2007), or the different tropopause height definitions (e.g. WMO 1957) and methods and not later in the text.
- p. 162 line 14: I would not state that the ROPP netcdf format is the "general format for radio occultation data" – I strongly recommend removing the "general".
- Thépaut with accent aigu on the é (e.g., page 165 line 21).
- p. 163 line 13, 14: Please rewrite these two sentences.
- p. 165 line 12, 13: Please rewrite these two sentences.
- p. 163 line 21: Please specify more precisely how the combination of GO and WO bending angle is done.
- p. 166 line 16, 17: It would be nice to see the difference between the two forward modeled bending angles in a plot.

- p. 163, line 24, 25: Introduce LC.
- p. 172: last word on line 3: typo: log $\rightarrow$ lot
- p. 189 Figure 5: The top panels do not have upper axis descriptions for specifying the $(o - b)/o$ part of the plot.
- p. 189 Figure 5: Top right panel: add the closing bracket of the unit.

Interactive comment on Atmos. Meas. Tech. Discuss., 8, 157, 2015.