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 → 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.