

Interactive comment on “The importance of Atmospheric Correction for Airborne Hyperspectral Remote Sensing of Shallow Waters. Application to Depth Estimation” by Elena Castillo-López et al.

Anonymous Referee #4

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Review of the manuscript amt-2017-37 “The importance of Atmospheric Correction for Airborne Hyperspectral Remote Sensing of Shallow Waters. Application to Depth Estimation” by E.Castillo-López, J. A. Dominguez, R. Pereda, J. M. de Luis, R. Pérez, F.Piña.

Author presented their research on applying airborne remote sensing imagery for water depth estimation. They show some interesting results, however, the quality of manuscript requires quite substantial improvement before it can be adequately peer-reviewed. The manuscript is in very rough shape and is not suitable for detailed sci-

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entific and technical review in its present form. Also, it does not really present, in my opinion, any significant novel scientific results related to atmospheric measurement techniques, i.e. the major subject of the AMT journal. My recommendation is to return manuscript back to authors for further improvements and possible re-submission to another journal focused more on the bathymetry measurement techniques.

Major comments:

- 1) English style and grammar, as well as clarity of presentation must be improved. Manuscript generally does not follow the style required for AMT publication.
- 2) The math expressions contain misprints (errors). Not all notations are properly introduced and explained, they are not always properly formatted and consistent throughout the text. I would suggest to use the Math Editor for equations rather than regular text.
- 3) References are placed in somewhat arbitrary way. Some references are cited (such for example Pereda et al. 2016) but not included in the text. Some references are misleading. For example, Vahtmäe et al. (2006) and Castillo et al., (2011) are not authors of 6S radiative transfer code. Authors of 6S code (Vermote et al) are not cited in the text. Mishchenko et al. (2004) work deals with analysis of measurement requirements for monitoring of aerosol forcing of climate from space, not with the issues “raw data and raw data minus band 34” as described by the authors.
- 4) Figures are generally of low quality. Not all figures are properly discussed in the manuscript.
- 5) Discussion of reflectances is somewhat confusing. Numbers looks strange -1200-1800 etc. NNDD notation is not explained.
- 6) Sections “Discussion” and “Conclusions” do not look very strong and convincing.

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