

Interactive comment on “Retrieval of the total precipitable water vapor and cloud liquid water path over ocean from the Feng-Yun 3D microwave temperature and humidity sounders” by Jun Yang et al.

Anonymous Referee #2

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This study provided a method to retrieve total precipitable water and cloud liquid water path over ocean using observations from FY-3D MWTS and MWHS. It was very useful to extend the usage of FY-3D measurements. However, there are still several questions. 1) The major part of this manuscript was to generate brightness temperature of two frequencies at 23.8 and 31.4Ghz. However, as I know, FY-3D MWRI provides vertical and horizontal observations at 23.8Ghz, why not use these observations directly for the retrieval of TPW and CLW? 2)The manuscript said that the mean absolute errors of the two simulated channels are both between 3 and 4K, I want to know how much er-

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rors will be caused in the retrieved TPW and CLW when using the simulated channels. 3)In the cross calibration section, only two days data were used in the cross-calibration between ATMS and CMWS. How the authors guarantee the stability of cross calibration relationship between ATMS and CMWS. 4)There are lots of TPW observations from SuomiNet GPS network and RAOB network on small islands. It will be helpful if these observations were used to validate the retrieved TPW.

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2019-447, 2019.

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