

Interactive comment on “Water Vapor Retrieval using the Precision Solar Spectroradiometer” by Panagiotis-Ioannis Raptis et al.

Anonymous Referee #2

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The manuscript entitled "water vapor retrieval using the precision solar spectroradiometer" by R Panagiotis-Ioannis et al., describes a detailed validation of the new procedure to derive the integrated water vapor content in the atmosphere, including the sensitivity to some selection of methods and wavelengths, and including a multi-instrumental comparison with other well know methodologies. The study is considered excellent and very detailed, and also its presentation is considered very good, with no important typos or grammar errors found. Therefore only minor changes are suggested:

- p3, l15: the number of current stations is much higher, please update the figure (currently over 500).
- p4: a slightly more in depth description of new PSR would be good, including a scheme or image.
- p5, l29: "calculationsin"
- p12, figure 3: figure could include not only the average for all the wavelengths but also the IWV for the

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reference wavelength 946nm.

- p13, figure 4: the limits of the bands could be included for a better illustration
- p15, figure 6: the minimum wavelength results 934nm but following the plot, other wavelengths such as 930-935 could be also possible. Please state the specific reason to select 934nm. Is it based on the absolute differences between the different techniques? As this plot is specific for the two year database analysed, perhaps channel 932 or 933nm could be more robust as it is situated on the center of the optimum region (however I acknowledge that little effect is expected).
- Tables: please include the units in all the correspondent columns.

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