

Interactive comment on “A comprehensive observational filter for satellite infrared limb sounding of gravity waves” by Q. T. Trinh et al.

Anonymous Referee #1

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Observations of gravity waves (GW) on a global scale are necessary both as input for models and for evaluating model results, and their knowledge and understanding are, as they constitute one of the primary processes to couple atmospheric layers, crucial for atmospheric sciences in general. Global fields of GW activity can be obtained from satellite observations. It has long been recognised, however, that these measurements do not capture the whole spectrum of GW and, depending of the specific measurement and geometry, reduce the amplitudes and shift the spectrum with respect to the real one.

There are several aspects of this observational filter, which have partly been described and quantified in the literature while, however, a complete analysis if the filter is missing. This paper for the first time in a comprehensive manner discusses all of them

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and describes their role and importance. This makes this paper very valuable for atmospheric research. I did not find major points to criticise regarding the content. The paper is well written, important literature is referred to, and the figures are of good quality and helpful. I recommend publication of the paper as is.

Interactive comment on Atmos. Meas. Tech. Discuss., 7, 10771, 2014.