

Interactive comment on “Investigation of sources of gravity waves observed in the Brazilian Equatorial region on 08 April 2005” by Oluwakemi Dare-Idowu et al.

Anonymous Referee #2

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Investigation of sources of gravity waves observed in the Brazilian Equatorial region on 08 April 2005

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This paper deals with the studies of a strong gravity wave activity (more than 3 hours) observed in São João do Cariri (7.4° S, 36.5° W) on 08 April 2005. The study is

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based on OH airglow images from what wave parameters were extracted. The April 08, 2005 night was chosen because during this period 5 gravity waves episodes were observed. The authors apply well-known methods to calculate the wave parameters, methods already extensively reported in the literature, including by the same group at the same place. Nothing novel is reported and discussed. Indeed, the only difference appears to be the fact that the analysis is applied to a different night. Per se, the paper is adequate for the *Annales Geophysicae*, but many deficiencies exist that should be amended before acceptance. In this sense, my main concern is that the paper should not concentrate only in presenting the determined wave parameters, but the discussions should extend to the physics of the wave propagation. There are also some major and minor points the authors should address before acceptance. All of the emphasized words and sentences in the attached edited manuscript should be addressed.

Please also note the supplement to this comment:

<https://www.ann-geophys-discuss.net/angeo-2019-81/angeo-2019-81-RC2-supplement.pdf>

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