

# ***Interactive comment on “Ionospheric Total Electron Content responses to HILDCAAs intervals” by Regia Pereira Silva et al.***

**Anonymous Referee #2**

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This work deals with a topical issue, which is space weather and its effect on the ionosphere. However I cannot see which is the real message. If I am right, I understand that the authors want to show that HILDCAAs affect TEC at low and equatorial latitudes. But in my opinion, they need to show that what they find is not something at random, and to exclude any other source of disturbance. I think that the paper may become acceptable for publication after some revision.

My main comments are the following:

1) I would add some statistical analysis, or a qualitative analyses, to show that the TEC disturbances they observe are due to HILDCAAs, by showing that the variation they see is not at random and is not due to any other mechanism. Is it possible that it is due to geomagnetic storms, for example? Maybe I am not fully understanding HILDCAAs.

2) Line 165: "The HILDCAA intervals present the positive dTEC predominance" Can you quantify this ?

3) In Figures 2 and 3: what is the "y" axis?

4) In Figure 5, for H03 and H04 a clear daily variation can be noticed. This 24-hour oscillation is absent in the others. What does this mean?

Minor comments: 1) Line 53: "The", should be lower-case, that is "the", and also in the following "The" which appear after a semi colon.

2) Line 67: I thinkg that may be "differential" should be "different"

3) Line 97: "taking account" should be "taking into account"

3) Line 118: use dot for decimal of latitude and longitude instead of comma. That is "2,59" should be 2.59

4) Line 153: Why "to São Luís". Shoudn't it be "for São Luís" or at Sao Luis? The same in the case of Cachoeira Paulista

5) Line 154: What do you mean by "It was considered the same minimum and maximum values occurred to all intervals, for each station." That you used the same scale range ? If this is the case, then you should explain it properly.

6) Line 162: "...phases that over equatorial latitudes", may be you mean "...phases over equatorial latitudes" ?

7) Line 228: "There are considerable works whose show" should be "There are considerable works that show ...". That is, that instead of whose.

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Interactive comment

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Discussion paper

