

## Global Climatology of Equatorial Plasma Bubbles based on GPS Radio Occultation from FormoSat-3/COSMIC by Kepkar et al

In general, I am happy with the content changes to this paper compared with the previous submission. The authors have provided an extended discussion in multiple places throughout the paper in order to discuss the results in the context of the literature. It is a dramatic improvement. At this point I still have some comments that should be addressed before the paper is published. Therefore, I recommend minor revisions.

One thing I must address in both the paper and the response to reviewers is the use of gendered pronouns. In the case of a response to an anonymous reviewer the authors should be aware that they don't know the gender of the reviewer and should therefore not use gendered pronouns. In the case of the paper, an example is noted on page 7, line 29 "wherein in his analysis" this is both applying the male gender to all co-authors on the paper and it is a singular term when the paper was authored by more than 1 person. Another example occurs on page 14 line 12 "through his comparative studies" which has the same problems of gender and singular.

I have 2 major comments and multiple minor comments listed below:

### Major comments

Firstly, I am concerned about the occurrence in some of the Figures. For example I would expect the solar maximum histogram in Figure 5 to have similar values to the occurrence observed in Figure 4. However, Figure 4 seems to have regions with 20% (or above) occurrence, while Figure 4 only goes to 8% and in general these occurrences seem rather small unless there is a bias towards soundings at the higher latitudes.

While the scientific results in the paper are interesting and the conclusion section focusses the reader on what is new and novel in the work, I still feel that the abstract has missed the key novel findings of the paper. The abstract still appears to focus on confirming what was already known in the literature and not what this paper shows. I think the authors should consider re-writing the abstract to align more with the focus in the conclusions section.

### Minor comments

The minor comments can be summed up as the grammar and style of the writing still needs a bit more work.

The authors regularly change the writing style, e.g. in some places it is passive past tense (as science writing should usually be) and then in other places they are using words like we, making it active; some places being active current tense "we know" and sometimes active past tense "In this paper, we" or even active future tense "we can witness". The entire paper should be edited for these style and grammar inconsistencies.

The authors have not defined the acronym GPS

There are some places where the authors have used plural or singular terms incorrectly (in addition to the cases of "his"), for example on page 10, line 9 "maximum occurrence during both equinoxes are observed in Africa and agrees well..." the author should have "agree" rather than "agrees"

In some places articles are missing e.g. page 11 line 16 "consequence of RTI" should be "consequence of the RTI"

The authors should ensure the correct adjectives are used throughout the paper. In particular, using strong/weak to refer to size should be avoided (particularly since there are places where strong/weak is appropriate to use). E.g. on page 14 line 7 “stronger magnitude” should be “larger magnitude”

There are a few places where the phrasing is odd or wrong e.g. “On hindsight”, the phrase is “in hindsight” and I don’t understand what the authors mean by “merely detected” on page 14 line 15 (e.g. does it mean detected but nothing else is done with it, detected but it has no effect etc (these are the normal uses of the phrase merely detected) if the authors mean “only just detected” then they should say that, and provide context about what they mean (e.g. only small dips in density observed))

There are also many “hanging” its. In other words, sentences where the “its” is ambiguous. For example, on page 14 line 10 “it justifies” I have no idea what is doing the justifying.

There are many places where changing “than” to “compared with” would make things smoother and add clarity.

The examples listed above are just examples, there are many more instances of these grammar and style problems throughout the paper and the authors should go through the paper and ensure the scientific writing is up to scratch.