

## ***Interactive comment on “Earth’s radiation belts ions: Patterns of the spatial-energy structure and its solar-cyclic variations” by Alexander S. Kovtyukh***

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Reply to Interactive comment by Anonymous Referee #1 from December 2, 2019 on the manuscript “Earth’s radiation belts ions: patterns of the spatial-energy structure and its solar-cyclic variations” by Alexander S. Kovtyukh

The manuscript has a very good overall structure now, thank you. My final list of

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corrections is reported below. After that I think that the paper could be accepted without anymore interactions.

Line Comment

49 “The inner belt ( $L < 2.5$ ) of protons with  $E > 10$  MeV is formed mainly as a result of decay of neutrons knocked [...] AC: I agree. Text corrected.

49-50 “In the intermediate region ( $2.5 < L < 3.5$ ), the mechanism of a ion capture from the Solar Cosmic Rays takes place during strong magnetic storms ” AC: I agree. Text corrected.

59 I think that the word “models” is repeated too many times. I would substitute it here with “empirical representations” AC: I agree. Text corrected.

120 “the ion fluxes considered here (i.e. during quiet periods), usually have only one maximum in the functions [...] AC: I agree. Text corrected.

Deeply respected Referee #1, I am very grateful to you for such an exclusively generous and thorough review. All these comments are very helpful for me and it is taken into account in the manuscript.

With grand regard, Alexander S. Kovtyukh

Please also note the supplement to this comment:

<https://www.ann-geophys-discuss.net/angeo-2019-152/angeo-2019-152-AC3-supplement.pdf>

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