

## ***Interactive comment on “Non-linear Effects in Electromagnetic Wave Activity Observed in the RELEC Experiment on-board Vernov Mission” by Mikhail I. Panasyuk et al.***

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Received and published: 18 December 2018

Referee report on the paper, “Non-linear effects in electromagnetic wave activity observed in the RELEC experiment on board Vernov mission” by Panasyuk et al. submitted to *Angeo*.

I have read the above paper submitted to *ANGEO*, and I have found that the mission and its associated experiments seem to be attractive. However, I can recommend rejection of this paper for publication in *Angeo*. I can list below the reasons why I cannot recommend this paper for publication in *Angeo*.

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(1) English The English of this paper is too bad to understand, sometimes very difficult to understand. It seems that someone (probably the first author) has written this paper, but many other co-authors have never read and revised the text. Extensive revisions of the manuscript among the authors have to be made before submitting a paper to any international journal like *Angeo*. You need the help of a native English speaker.

(2) Construction (This is the major drawback) This paper is composed of two parts: One is the technical part describing the satellite payload, particle monitoring systems, and wave experiments, and the other, an example of scientific observation results. Both parts are not satisfactory for me and the possible readers. Introduction seems to emphasize the importance of this satellite mission, with the main topic being the precipitation of magnetospheric particles, but there have not been presented any results of particle precipitation in the text. If you want this paper as a technical paper, you have to provide us with the detailed description of the equipment of the satellite mission. Then, when you want to publish a purely scientific paper, you have to delete the technical part (just refer to your previous technical paper) and you have to concentrate yourselves on the results of particle precipitation and the associated wave effects. Instead if you want to give us a new VLF phenomenon, you are highly required to provide us the much more detailed and extensive discussion on the new wave phenomena. However, we cannot find any convincing evidence on the nonlinear wave activity (more detailed analyses on three-wave process). Further, an association of this new wave with seismic activity is not either convincing.

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Interactive comment on Ann. Geophys. Discuss., <https://doi.org/10.5194/angeo-2018-119>, 2018.

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