

## ***Interactive comment on “Low frequency magnetic variations at high- $\beta$ Earth bow shocks” by Anatoli A. Petrukovich et al.***

**Anonymous Referee #1**

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The previous version of the paper did not reach any substantial conclusions. This version of the paper does not reach any substantial conclusions either. It seems that the authors do not realize that simple description of observations is not physics. It is necessary to extract new knowledge from these observations. I inclined to reject the paper. Yet, I would like to give one more chance. Please make sure to show how this study advances our understanding of shock physics beyond just presenting figures and stating that "Magnetic field and ion density jumps are smeared to a couple tens of seconds". Claiming that "High- $\beta$  ( $\beta > 10$ ) shocks are relatively rare and largely unexplored class of Earth bow shock" is inappropriate for Conclusions. What new physics is found ?

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Interactive comment on Ann. Geophys. Discuss., <https://doi.org/10.5194/angeo-2019-7>, 2019.