

Interactive comment on “Cavitons and spontaneous hot flow anomalies in a hybrid-Vlasov global magnetospheric simulation” by Xochitl Blanco-Cano et al.

Anonymous Referee #1

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This manuscript show us very detailed description of the foreshock cavitons and the formation of spontaneous hot flow anomalies (SHFAs), and stated their close relationship with a Vlasiator global magnetospheric hybrid-Vlasov simulation code. The simulation results are interesting, and will contribute to the study of quasi-parallel shocks. But, in this manuscript, some previous papers should be added into the references. Page 2-line 5: papers associated with geomagnetic disturbances should be added. Page 2-line 9: maybe a review of collisionless shock should be added. Page 3-2nd paragraph: you may refer to some simulation results from Scholer et al. [1993JGR] and recent simulations performed by Hao et al. [2016, JGR, doi:10.1002/2015JA021419; 2016, APJ, doi:10.3847/0004-637X/823/1/7; 2017, JGR, doi:10.1002/2017JA024234]. After

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the revision, I think the manuscript would be suitable for publication in ANGEО.

Interactive comment on Ann. Geophys. Discuss., <https://doi.org/10.5194/angeo-2018-22>, 2018.

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