

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

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We thank the referee for his/her suggestions. We have included most of the suggested references.

Page 2-line 5: papers associated with geomagnetic disturbances should be added.

Done, the text now appears in page 2 line 23, we added Eastwood et al., 2015, Archer et al., 2013

> Page 2-lines 8-9: maybe a review of collisionless shock should be added. Done, we added the references of Bale et al., 2005, and Burgess et al., 2005.

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>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].

We added Hao et al., 2017 on page 3 third paragraph, in relation to shock rippling, and Scholer et al. (1993) related to shock heating, structure, and processes. We added a reference to Hao et al., JGR 2016 about jets on page 11, line 34. The Hao 2016 ApJ paper is also an interesting treatise, but more focused on the response of specific ions to a reforming shock front - we will cite this in our similar studies of ion reflection at the bow shock.

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