

Ann. Geophys. Discuss., referee comment RC1 https://doi.org/10.5194/angeo-2021-18-RC1, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

## Comment on angeo-2021-18

Anonymous Referee #1

Referee comment on "Electromotive force in the solar wind" by Yasuhito Narita, Ann. Geophys. Discuss., https://doi.org/10.5194/angeo-2021-18-RC1, 2021

The review article by Yasuhito Narita is on "Emf in solar wind" an important topic of relevance to both the Astrophysical dynamo and MHD turbulence community. It is well written and well-presented. The author has published other papers on this topic, one of which is cited but its results are not presented in detail. In my view, the paper will benefit from more depth and the breadth, being a review article. It would be relevant to get a glimpse of the entire body of work done in the area and allied areas (unless there is a page limit). For e.g. the classical works or review articles by Paul Roberts on dynamo theory, Keith Moffatt on helicity, for example, are not cited. There are hardly 10 referenes!

A specific comment on one of the conclusions - why is it so that the emf can be reconstructed better by considering the beta and gamma terms. Which of these two is contributing more? The author being an expert in this area could shed some light on this interesting conclusion. If this is difficult to understand, then the author should say so along with the reasons.