

## ***Interactive comment on ““Earth-like” planetary magnetotails as non-linear oscillators” by Robert J. Burston***

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The paper by Dr Burston is definitely interesting and timely, as finally the community is considering complex dynamics and stochastic forcing as important elements of space plasma physics. I personally approve the manuscript as it is, being it clear and interesting, being the description of what Dr Burston claims to be doing well written and reader-stimulating. I just suggest Dr Burston to have a look at Chapter 14 of the recently published book "The Dynamical Ionosphere", by Elsevier, that I have worked for as an Editor: in that Chapter I introduce noise terms to describe ionospheric turbulence, and suggest "regular" path integral techniques to treat the consequent dynamics. For sure, applying the same things to the model of Dr Burston would be interesting in future research. In that Chapter 14, it is also considered how to alter the dynamics of

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a parcel of fluid in the presence of mass variability with time (over there, this is due to chemical reactions, as recombination or ionization creating different chemicals): one might suggest to alter equation (1) of Dr Burston's paper accordingly.

Best regards

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