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Interactive comment on "Turbulent Processes in the Earth's Magnetotail: Spectral and Statistical Research" *by* Liudmyla Kozak et al.

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Dear Kui Jiang,

In our work there are references to the works, and not only in the introduction, in which the features of the turbulent processes in the tail of the Earth's magnetosphere and their role in the physical processes that occur there are considered:

Lui, A. T. Y. and Najmi, A.-H.: Time-frequency decomposition of signals in a current disruption event, Geophysical Research Letters, 24, 3157–3160, https://doi.org/10.1029/97gl03229, 1997.

Consolini, G. and Lui, A. T. Y.: Sign-singularity analysis of current disruption, Geophysical Research Letters, 26, 1673–1676, https://doi.org/10.1029/1999gl900355, 1999.

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Discussion paper

Consolini, G. and Lui, A. T. Y.: Symmetry breaking and nonlinear wave-wave interaction in current disruption: Possible evidence for a phase transition, in: Magnetospheric Current Systems, pp. 395–401, American Geophysical Union, https://doi.org/10.1029/gm118p0395, 2000.

Lui, A.: Multiscale phenomena in the near-Earth magnetosphere, Journal of Atmospheric and Solar-Terrestrial Physics, 64, 125–143, https://doi.org/10.1016/s1364-6826(01)00079-7, 2002.

Consolini, G.: On the magnetic field fluctuations during magnetospheric tail current disruption: A statistical approach, Journal of Geophysical Research, 110, https://doi.org/10.1029/2004ja010947, 2005.

Lui, A. T. Y., Yoon, P. H., Mok, C., and Ryu, C.-M.: Inverse cascade feature in current disruption, Journal of Geophysical Research: Space Physics, 113, https://doi.org/10.1029/2008ja013521, 2008.

Yoon, P. H., Lui, A. T. Y., and Bonnell, J. W.: Identification of plasma instability from wavelet spectra in a current disruption event, Journal of Geophysical Research: Space Physics, 114, https://doi.org/10.1029/2008ja013816, 2009.

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Zhou, M., Ashour-Abdalla, M., Deng, X., Schriver, D., El-Alaoui, M., and Pang, Y.: THEMIS observation of multiple dipolarization fronts and associated wave characteristics in the near-Earth magnetotail, Geophysical Research Letters, 36, https://doi.org/10.1029/2009gl040663, 2009.

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Zimbardo, G., Greco, A., Sorriso-Valvo, L., Perri, S., Vörös, Z., Aburjania, G., Chargazia, K., and Alexandrova, O.: Magnetic Turbulence in the Geospace Environment, Space Science Reviews, 156, 89–134, https://doi.org/10.1007/s11214-010-9692-5, 2010.

Chen, C., Fazakerley, A., Khotyaintsev, Y., Lavraud, B., Marcucci, M. F., Narita, Y., Retinò, A., Soucek, J., Vainio, R., Vaivads, A., and Valentini, F.: THOR Exploring plasma energization in space turbulence, Assessment Study Report ESA/SRE, 2017.

Hwang, K.-J., Goldstein, M. L., Moore, T. E., Walsh, B. M., Baishev, D. G., Moiseyev, A. V., Shevtsov, B. M., and Yumoto, K.: A tailward moving current sheet normal magnetic field front followed by an earthward moving dipolarization front, Journal of Geophysical Research: Space Physics, 119, 5316–5327, https://doi.org/10.1002/2013ja019657, 2014.

Kan, J. R.: A globally integrated substorm model: Tail reconnection and magnetosphere-ionosphere coupling, Journal of Geophysical Research: Space Physics, 103, 11787–11795, https://doi.org/10.1029/98ja00361, 1998.

The analysis of the models is done because the analyzed events of the magnetic field dipolarization satisfy one of the models.

We understood that the symbol \div in LaTeX, is shown incorrectly for you. For us it's shown correctly. To avoid this inconsistency, we will replace it with a "from . . . to . . .". Thank you.

Best regards, Andrew.

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2018.