

## ***Interactive comment on “The asymmetric geospace as displayed during the geomagnetic storm on August 17, 2001” by Nikolai Østgaard et al.***

### **Anonymous Referee #2**

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Comment on “The asymmetric geospace as displayed during the geomagnetic storm on August 17, 2001” by Nikolai Ostgaard et al.

The paper contains a thorough analysis of magnetospheric asymmetry, as it reveals in the auroral oval morphology. However, I would suggest some significant changes in presentation style

1. It is very hard (for a not fully motivated reader) to follow all presented details in aurora images, starting from Fig. 3 and 4 and later in explanations. I would suggest to mark and number all features, which are used to prove asymmetry, and summarize them in the table. All following discussion and figures should refer to those numbers.

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2. The paper is overloaded by description of caveats, complications, alternative explanations of observed features. However practically none of these details actually affects conclusions, which are based on very simple observation signatures. Probably these details are necessary to prove validity of analysis, but they should not distract readers from the main line.

3. Discussion of Fig 12 is very unclear. Are there any statistically significant changes of OCB in it ?

4. page 20 line 10. GREEN LINE is where?

5. line 20 and on page 21. Mark clearly all mentioned flows in Figure 14.

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Interactive comment on Ann. Geophys. Discuss., <https://doi.org/10.5194/angeo-2018-65>, 2018.

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