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Interactive comment on "Multisatellite observations of the magnetosphere response to changes in the solar wind and interplanetary magnetic field" *by* Galina Korotova et al.

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In the case study presented in this paper, the interplanetary shock of interest has a significant GSM z-component to its normal vector. However, the paper appears really to only consider the in-ecliptic effects. For example, it concludes the point of first impact is near the nose of the magnetosphere/bow shock, when in a 3D consideration the point of impact might be some distance further northward and duskward? How does this affect the analysis/results? In the statistical study, do these effects show in the results also (e.g. with observations of N-S moving fronts)?

The comparison of the observational results with the simulation also seems a little

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Discussion paper

weak. The observational 'box' in Figure 9 has limited overlap with the simulation box in Figure 10, and there do not appear to be strong flows in the simulation in the overlap region. Is there no way to extend the observational coverage (e.g. Themis, Cluster) to include the region which has the strongest (and reversing) flows in the simulation?

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