



Do Mirror Mode Storms Exist in the Terrestrial Magnetosheath?

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Mirror mode waves are common structures observed in the solar wind and magnetospheric environments. The mirror mode storms in the solar wind were first defined by Russell et al. (2009) as trains of holes and peaks in the magnetic field magnitude that can last for hours. Using magnetic field data from the THEMIS mission we analyze mirror mode waves events in the terrestrial magnetosheath looking for the possible occurrence of mirror mode storms like those reported in the solar wind by Enriquez-Rivera et al. (2013). In this work we also study the ion distributions inside mirror mode structures in order to investigate the origin of the waves.