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Application of the k-Filtering Technique to MMS Solar Wind Data LORRAINE ALLEN, United States Coast Guard Academy, XING LI, University of Wales, Aberythwyth — The k-filtering technique is applied to Magnetospheric Multiscale (MMS) satellite data of the solar wind. The MMS Mission consists of four satellites flying in tetrahedron formation to study Earth's magnetosphere; the spacecraft occasionally pass outside the magnetopause and into the solar wind for brief periods of time. The k-filtering technique allows for analysis of multiple linear waves modes present in the solar wind plasma. It has been applied to solar wind data from the Cluster II mission with interesting and varied results. In comparison to the Cluster mission, the data from MMS allow for significant improvement in resolution and increased frequency range in the analysis, as well as comparison with the previous Cluster findings.

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