

DIFFUSE ION E-FOLDING DISTANCE AND DIFFUSION COEFFICIENT DEPENDENCE ON DIFFERENT SOLAR WIND PLASMA CONDITIONS: NEW RESULTS

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In our study we present multipoint observation of energetic (diffuse) ions in front of the Earth's Bow Shock based on Cluster CIS particle instrument data. We determine the e-folding distance for the 10-32 keV ions in each case under study and we analyze in detail the reason for the differences and similarities exhibited in the e-folding distance value during various solar wind conditions.

Bow shock, Energetic ions, Diffuse ions, diffuse transport, diffusive process

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