

The abnormal increase of velocity of cme

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The abnormal increase of velocity of cme UNDER RISING

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Abstract. In coronal plasma, the velocity of a coronal mass ejection (CME) can again once be increased by accelerating of turbulence Alfvén waves. The change and the fluctuation of magnetic field as well as the anisotropy in ions' temperature can all excite the Alfvén wave turbulence. The turbulence may become one-dimensional turbulence under the influence of the magnetic field of corona. As the resonant condition of Alfvén wave interacting with ejected particle of CME is satisfied, the rising resonant particles can again once be accelerated by turbulence Alfvén wave. The turbulence further developing can turn into turbulence chaos. And when plasma pressure parameter β satisfies certain conditions may also form solitary kinetic Alfvén wave (SKAW). Under similar resonant condition, the resonant particles can more effectively be accelerated by SKAW. The part particles accelerated will drop out its phenomenon, thus the distributions of the CME in velocity and mass will be changed.

Key words: CME, turbulence Alfvén waves, again once accelerating.