

The Accelerating and the Velocity of the CME Under Rising

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In coronal plasma, the instability of the magnetic field can lead to the destruction of equilibrium forces, and can cause a coronal transient or a coronal mass ejection (CME). The change and the fluctuation of magnetic field as well as the anisotropy in ions' temperature can all excite the Alfven wave turbulence. The turbulence may become one-dimensional under the influence of the magnetic field of corona. As the resonant condition of Alfven wave interacting with particle of CME is satisfied, the rising resonant particles can again be accelerated by Alfven wave turbulence. The turbulence further developing can turn into turbulence chaos and under certain conditions may also form solitary kinetic Alfven wave (SKAW). Under resonant condition, the resonant particles can more effectively be accelerated by SKAW. The part particles accelerated will drop out its noumenon, thus the distributions of the CME in velocity and mass will be changed.